BOARD AGENDA FACT SHEET

CLERK USE ONLY
BOS ACTION
#_____

Planning & Development Services
Department /Agency

Rescheduled from November 4. 2025
Requested Board Date

1. Request:

Board Approval	**XX**	**Information Only/Presentation**	
Other (specify) _____		**Schedule Hearing Time: _____**	**2:00 p.m.**

2. Requested Action: *Type requested action below*

The Imperial County Planning & Development Services Department respectfully requests the Board of Supervisors to conduct a public hearing to consider the following actions as recommended by the Planning Commission regarding the Big Rock 2 Cluster Solar and Battery Storage Project:

A. Resolution to deny the Water Supply Assessment; and,
B. Resolution to deny certification of the Final Environmental Impact Report (SCH #2024090063); and,
C. Resolution to deny the Mitigation Monitoring and Reporting Program; and,
D. Resolution to deny General Plan Amendment #24-0002; and,
E. Resolution to deny Zone Change #24-0003; and,
F. Resolution to deny Conditional Use Permit #24-0006 (North); and,
G. Resolution to deny Variance #24-0002 (North); and,
H. Resolution to deny Conditional Use Permit #24-0007 (South); and,
I. Resolution to deny Variance #24-0003 (South); and,
J. Resolution to deny Conditional Use Permit #24-0008 (East); and,
K. Resolution to deny Variance #24-0004 (East); and,
L. Resolution to deny Conditional Use Permit #24-0009 (West); and,
M. Resolution to deny Variance #24-0005 (West).

3. Cost $ N/A **Source:** N/A

4. If approval of Contract, reviewed/approved by County Counsel on: NO

By: _____ **Action Request #** _____
Assigned by County Counsel's Office

5. If approval of position allocation change, approved by Human Resources on: N/A

By: N/A

6. Electronic copy submittal date: October 14, 2025 **By:** *Valerie Grijalva, Office Supervisor II*

Department Head/Agency Representative

INSTRUCTIONS: Back-up must be submitted 15 BUSINESS days prior to requested date (Please note a Holiday counts as a Business day.) Back-up submitted must contain an Original and 2 copies. Copies must be submitted to the County Executive Office double sided and three (3) hole punched. Back-up must be submitted in a PDF format to vanessasalcido@co.imperial.ca.us and gracielaalvarez@co.imperial.ca.us

CEO/CLERK USE ONLY:

DATE STAMP

BOARD DATE: _____

Action _____ **Filing** _____

Consent _____ **Presentation** _____

Hearing _____ **CEO Approval** _____

Other (specify) _____

_____ _____
CEO *Date*

Imperial County Planning & Development Services
Planning / Building

November 04, 2025

Jim Minnick
DIRECTOR

TO: Board of Supervisors

FROM: Jim Minnick, Director of Planning & Development Services M/O_____

SUBJECT: **Big Rock 2 Cluster Solar and Battery Energy Storage Project – Water Supply Assessment, Final Environmental Impact Report (SCH (#2024090063), Mitigation Monitoring and Reporting Program, General Plan Amendment #24-0002, Zone Change #24-0003, Conditional Use Permit #24-0006, Variance #24-0002, Conditional Use Permit #24-0007, Variance #24-0003, Conditional Use Permit #24-0008, Variance #24-0004 & Conditional Use Permit #24-0009, Variance #24-0005.**

Dear Board Members:

REQUESTED ACTION:

The Imperial County Planning & Development Services Department respectfully requests the Board of Supervisors to conduct a public hearing to consider the following actions as recommended by the Planning Commission regarding the Big Rock 2 Cluster Solar and Battery Storage Project:

A. Resolution to deny the Water Supply Assessment; and,
B. Resolution to deny certification of the Final Environmental Impact Report (SCH #2024090063); and,
C. Resolution to deny the Mitigation Monitoring and Reporting Program; and,
D. Resolution to deny General Plan Amendment #24-0002; and,
E. Resolution to deny Zone Change #24-0003; and,
F. Resolution to deny Conditional Use Permit #24-0006 (North); and,
G. Resolution to deny Variance #24-0002 (North); and,
H. Resolution to deny Conditional Use Permit #24-0007 (South); and,
I. Resolution to deny Variance #24-0003 (South); and,
J. Resolution to deny Conditional Use Permit #24-0008 (East); and,
K. Resolution to deny Variance #24-0004 (East); and,
L. Resolution to deny Conditional Use Permit #24-0009 (West); and,
M. Resolution to deny Variance #24-0005 (West).

BACKGROUND:

The project applicant, 90FI 8ME LLC, is seeking approval of a Water Supply Assessment (WSA), Certification of the Final Environmental Impact Report SCH #2024090063, Mitigation Monitoring and Reporting Program, General Plan amendment, Zone Change, four (4) Conditional Use Permits (CUPs) and four (4) Variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility. The project would generate up to a combined 500 megawatt (MW) of alternating current (AC) on a daily basis and up to 500 MW of battery storage.

The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 1,849 acres. The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project.

The four CUP applications are described below:

- Big Rock 2 Cluster North: **CUP #24-0006** (compromising 13 parcels approximately 1,030 AC, includes previously approved CUP#21-0014 Laurel 2 North)
- Big Rock 2 Cluster South: **CUP #24-0007** (compromising 5 parcels approximately 410 AC.)
- Big Rock 2 Cluster East **CUP #24-0008** (compromising 2 parcels approximately 160 AC, includes previously approved CUP#21-0013 Laurel 2 South)
- Big Rock 2 Cluster West: **CUP #24-0009** (compromising 5 parcels approximately 249 AC.)

The proposed project consists of three primary components:

1. Up to 500 MW of Solar energy generation equipment and associated facilities including a substation and access roads
2. Up to 500 MW of Battery Storage BESS; and,
3. Up to 200 in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard.

Implementation of the project would involve the following approvals by the County of Imperial:

WATER SUPPLY ASSESMSSMENT (WSA)

Water will be supplied by IID via the Westside Main canal and delivery gates 13 and 14A;

- Water needed during Construction: 700 acre-feet (AF) total. Assuming a 1.5 to 2-year construction period, this equates to approximately 350 acre-feet per year (AFY).
- Water needed during Operations: Up to 10 AFY of water over a 30-year operational period. This equates to a total of 300 AF of water over the project's operational life.

CERTIFICATION OF THE FINAL EIR

The County responded to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on the project.

MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP), once approved, this plan will be adopted as required by CEQA Guidelines Section 15097 to ensure that mitigation measures identified in the EIR are implemented as appropriate.

GENERAL PLAN AMENDMENT #24-0002

An amendment to the County's General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.

ZONE CHANGE #24-0003

The applicant is seeking a zone change to include the remaining twenty-one (21) parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE)

CONDITIONAL USE PERMIT's #24-0006 through #24-0009
Implementation of the project would require the approval of the four CUPs by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. The overall project buildout would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS.

VARIANCE #24-0002 through #24-0005
The applicant seeks a variance to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones; asking for a 80' height limit increase on private lands to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height.

ENVIRONMENTAL ANALYSIS:

On September 4, 2024, the Imperial County Planning Department sent a Notice of Preparation (NOP) to the California State Clearinghouse (SCH #2024090063) for a 30-day public and agency review period ending October 7, 2024, to announce the preparation of the Big Rock 2 Cluster Solar Energy and Battery Storage project Draft Environmental Impact Report (DEIR). A public scoping meeting was held on September 26, 2024.

On April 22, 2025, and then on May 1, 2025, a Notice of Availability (NOA) for Big Rock 2 Cluster Solar Energy and Battery Storage project Draft EIR was published for review in the local newspaper IV Press. A Notice of Completion with DEIR was sent to State Clearinghouse for agency review for 50 days ending on June 20, 2025. All significant impacts were addressed in the DEIR.

A Final Environmental Impact Report and the Response to Comments received on the DEIR were completed.

CERTIFICATION OF THE EIR:

The Final EIR will be reviewed and considered by the County. If the Final EIR is deemed "adequate and complete," the County may certify the EIR at a public hearing. In general, the rule of adequacy holds that the EIR can be certified if it demonstrates a good faith effort at full disclosure of environmental information and provides sufficient analysis to allow decisions to be made regarding the project in terms of its environmental consequences.

Following review and consideration of the Final EIR, the County may take action to approve, conditionally approve, revise, or reject the Project. Written findings would accompany a decision to approve or conditionally approve the project (CCR §15091). Likewise, a statement of overriding considerations would be prepared if necessary (CCR §15093). A Mitigation Monitoring and Reporting Program (MMRP), as described below, would also be adopted for mitigation measures that have been incorporated into or imposed upon the Project to reduce or avoid significant effects on the environment.

MITIGATION MONITORING AND REPORTING PROGRAM

The County must adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment (CCR §15097). This program will be designed to ensure that these measures are carried out during project construction and operation.

The specific reporting or monitoring program required by CEQA is not required to be included in the EIR. However, any mitigation measures adopted by the County as part of the certified Final

EIR will be considered as conditions of approval for the project and will be included in the MMRP to ensure and verify compliance.

SUMMARY:

Public hearing to consider the proposed, Water Supply Assessment, Final Environmental Impact Report SCH #2024090063, Mitigation Monitoring and Reporting Program (MMRP), General Plan Amendment #24-0002, Zone Change #24-0003, Conditional Use Permit #24-0006, Variance #24-0002, Conditional Use Permit #24-0007, Variance #24-0003, Conditional Use Permit #24-0008, Variance #24-0004 & Conditional Use Permit #24-0009, Variance #24-0005, also called the "Big Rock 2 Cluster Solar and Battery Energy Storage Project".

The project applicant, 90FI 8ME LLC, proposes to construct and operate a 500-MW utility-scale photovoltaic (PV) solar energy generation and 500-MW battery energy storage system (BESS) facility.

Thank you.

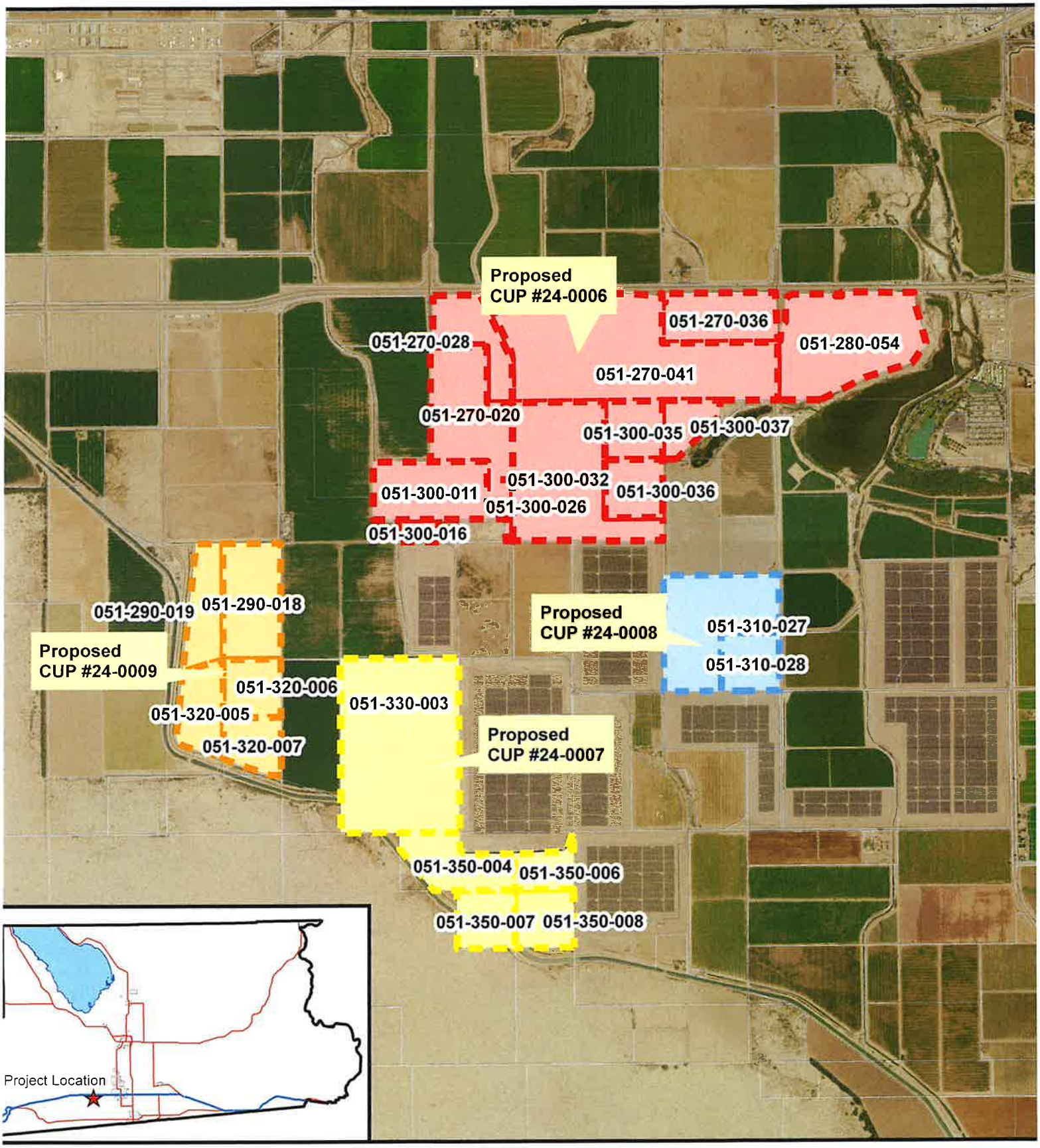
Attachment A.	Vicinity Map
Attachment B.	Site Plan
Attachment C.	Water Supply Assessment (WSA) Resolution
Attachment D.	FEIR Resolution and CEQA Findings
Attachment E.	MM&RP Resolution
Attachment F.	General Plan Amendment (GPA)24-0002
Attachment G.	Zone Change (ZC)24-0003 Resolution & Ordinance
Attachment H.	CUP 24-0006 Resolution & Conditions of Approval
Attachment I.	Variance (V)24-0002 Resolution
Attachment J.	CUP 24-0007 Resolution & Conditions of Approval
Attachment K.	Variance (V)24-0003 Resolution
Attachment L.	CUP 24-0008 Resolution & Conditions of Approval
Attachment M.	Variance (V)24-0004 Resolution
Attachment N.	CUP 24-0009 Resolution & Conditions of Approval
Attachment O.	Variance (V)24-0005 Resolution
Attachment P.	Economic Impact Analysis
Attachment Q.	PC Original Package on CD

cc: Dr. Kathleen Lang, CEO
Eric Havens, County Counsel
Jim Minnick, Director Planning and Development Services
Michael Abraham, AICP, ICPDS Assistant Director
Diana Robinson, Planning Department Manager
Rocio Yee, Planner II

RY/XX\S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BIG ROCK 2 CLUSTER PROJECT BOARD LETTER.docx

ATTACHMENT "A"
VICINITY MAP

PROJECT LOCATION MAP

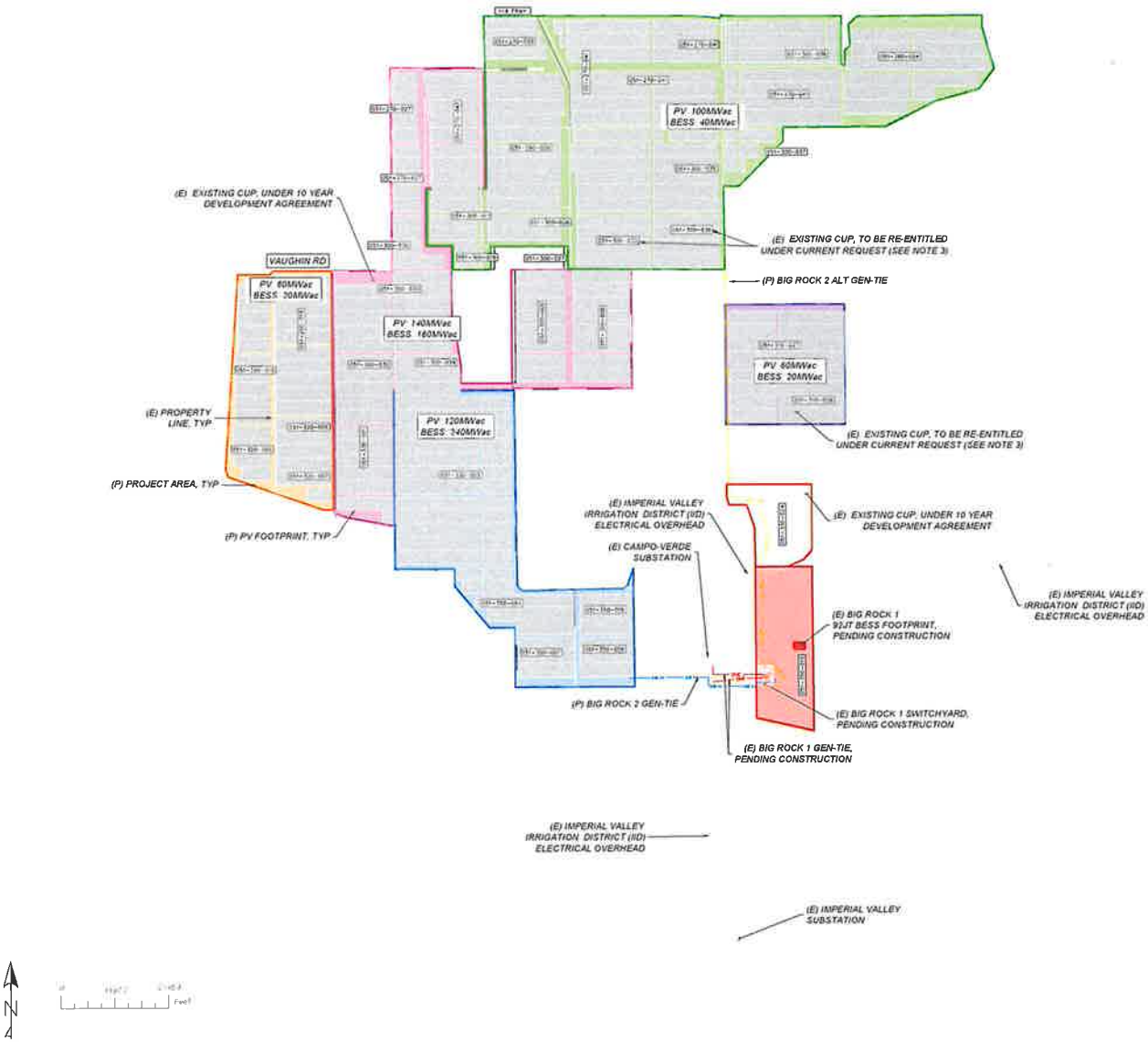


BIG ROCK CLUSTER 2
CUP #24-0006, CUP #24-0007, CUP #24-0008, CUP #24-0009, APN 051-300-036-000

Big Rock 2 Cluster West
Big Rock 2 Cluster East
Big Rock 2 Cluster South
Big Rock 2 Cluster North
Parcels

N

ATTACHMENT "B"
SITE PLAN





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

REVISIONS

1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]

NOTES.

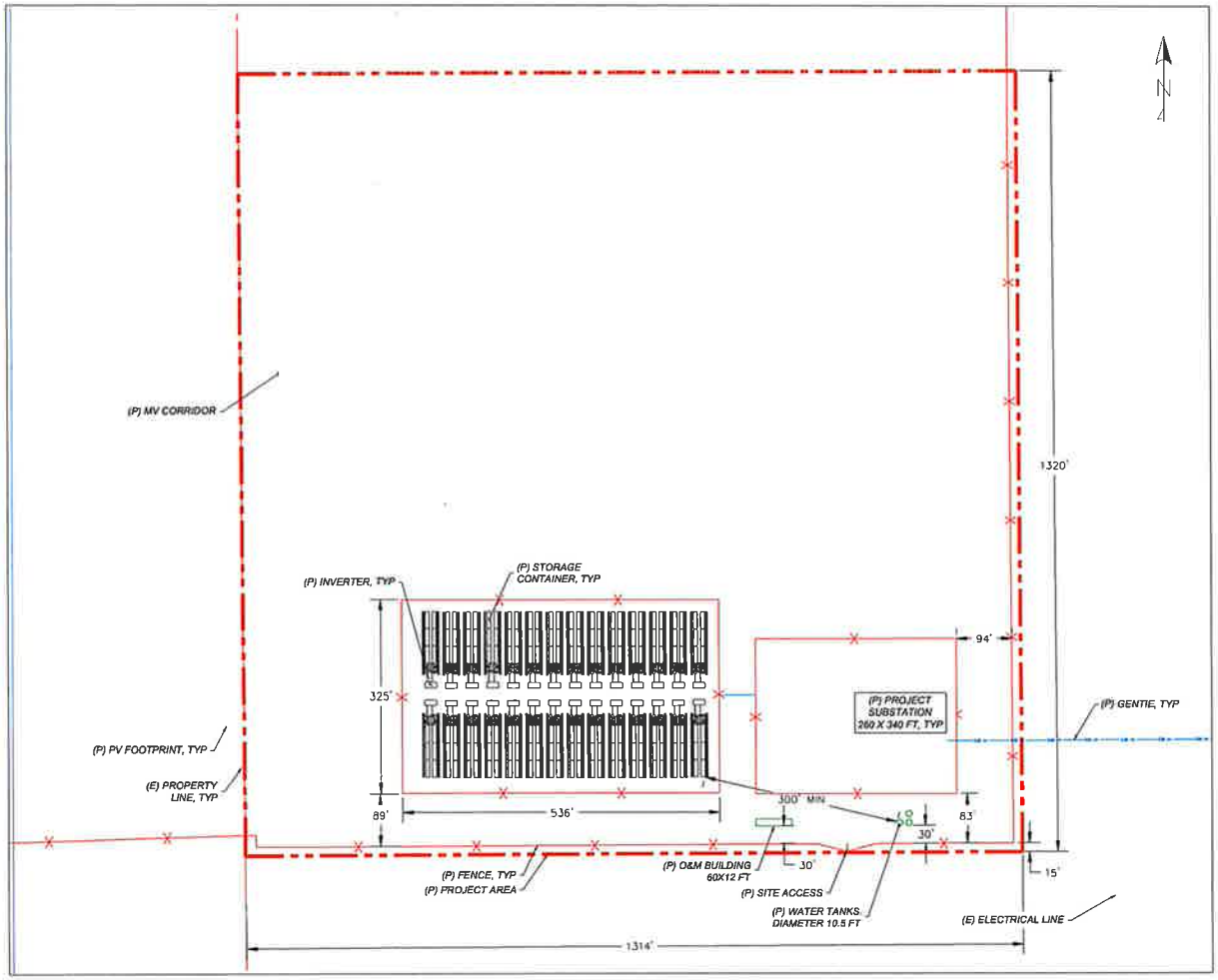
1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.
3. APNS TO BE RE-ENTITLED INCLUDE LAUREL 2 NORTH CUP # 21-0014 #051-300-032 (SOUTH) AND #051-300-036 LAUREL 2 SOUTH CUP #21-0013 #051-310-027 AND #051-310-028

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL SITE PLAN

DATE April 12, 2024

SHEET EX-1



AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

#	DATE	COMMENT
1	01/13/2023	PRELIMINARY LAYOUT
2	11/17/2023	PRELIMINARY LAYOUT UPDATE
3	12/01/2023	PRELIMINARY LAYOUT UPDATE
4	03/13/2024	PRELIMINARY LAYOUT UPDATE

NOTES:

1. *CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.*
2. *FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO VARIANCE AND BUILDING PERMIT APPROVALS.*

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL BESS LAYOUT

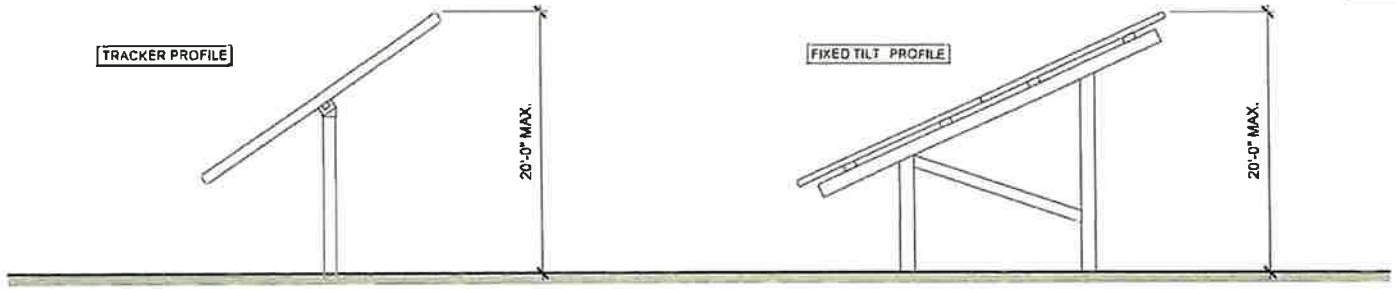
DATE: March 13, 2024

SHEET: EX-2

1 TYPICAL PANEL & MOUNTING STRUCTURE

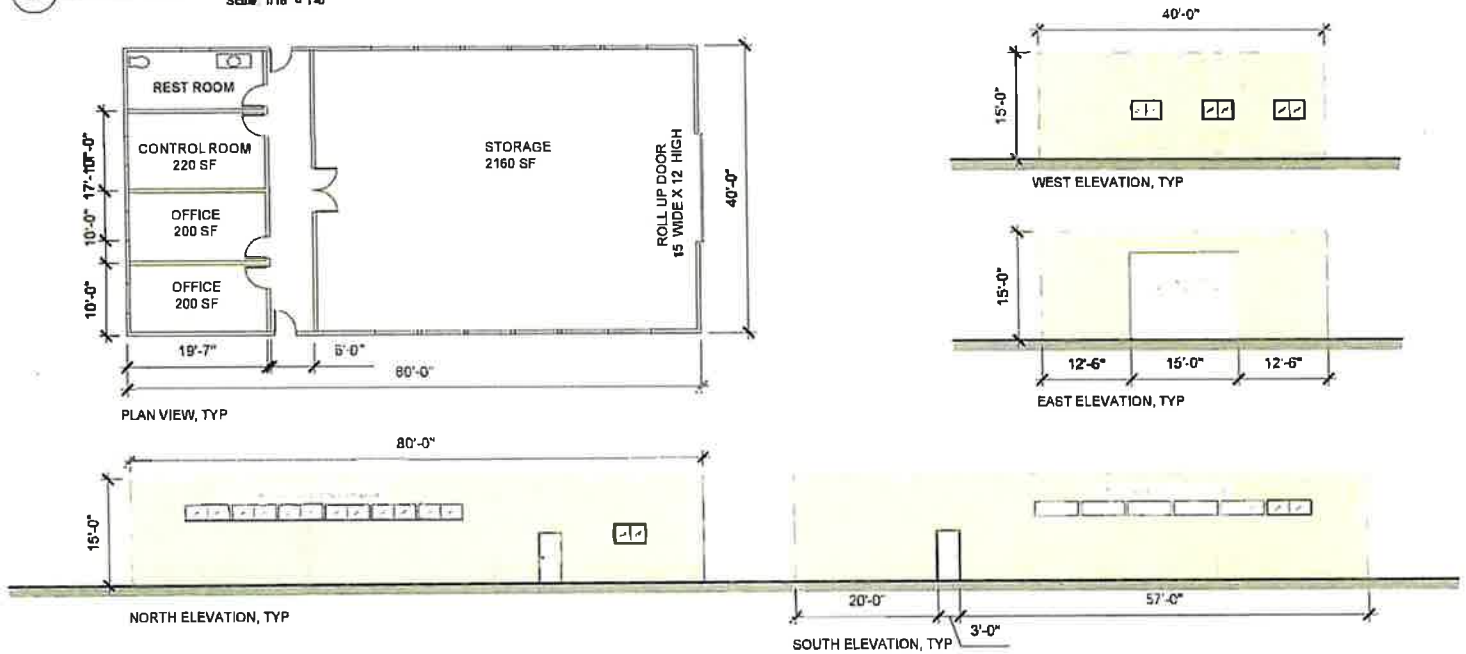
Scale: N T S

PRELIMINARY NOT FOR CONSTRUCTION



2 O&M BUILDING, TYP.

Scale 1/16" = 1'-0"



AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

TRACKER AND O&M BUILDING DETAILS, TYP.

DRAWN BY: CRYSTAL POINTE JONES

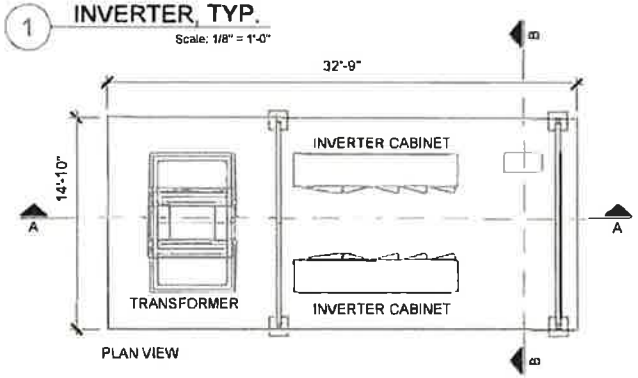
DATE:

SHEET: EX-3

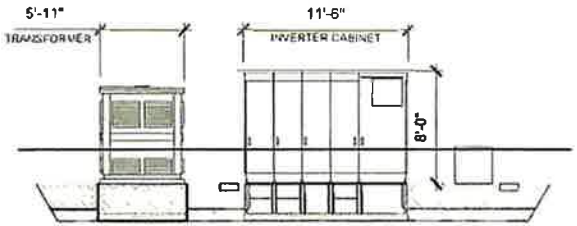
SCALE: AS NOTED

1 INVERTER, TYP.

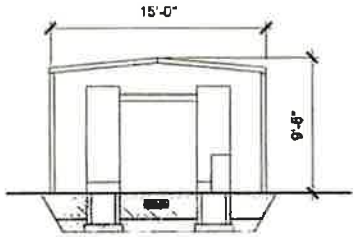
Scale: 1/8" = 1'-0"



PLAN VIEW



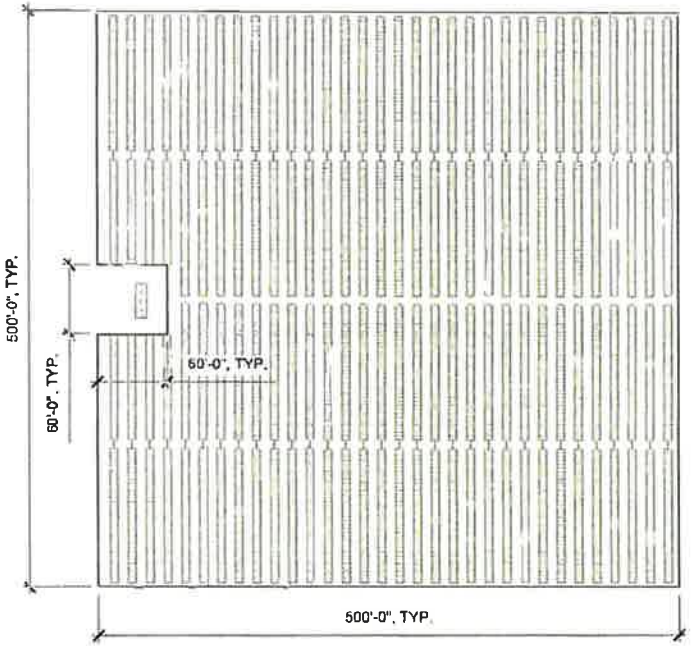
SECTION A-A



SECTION B-B

2 STANDARD SOLAR BLOCK

Scale: N.T.S.



MOUNTING STRUCTURE (BASE AREA)

INVERTER STATION

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS

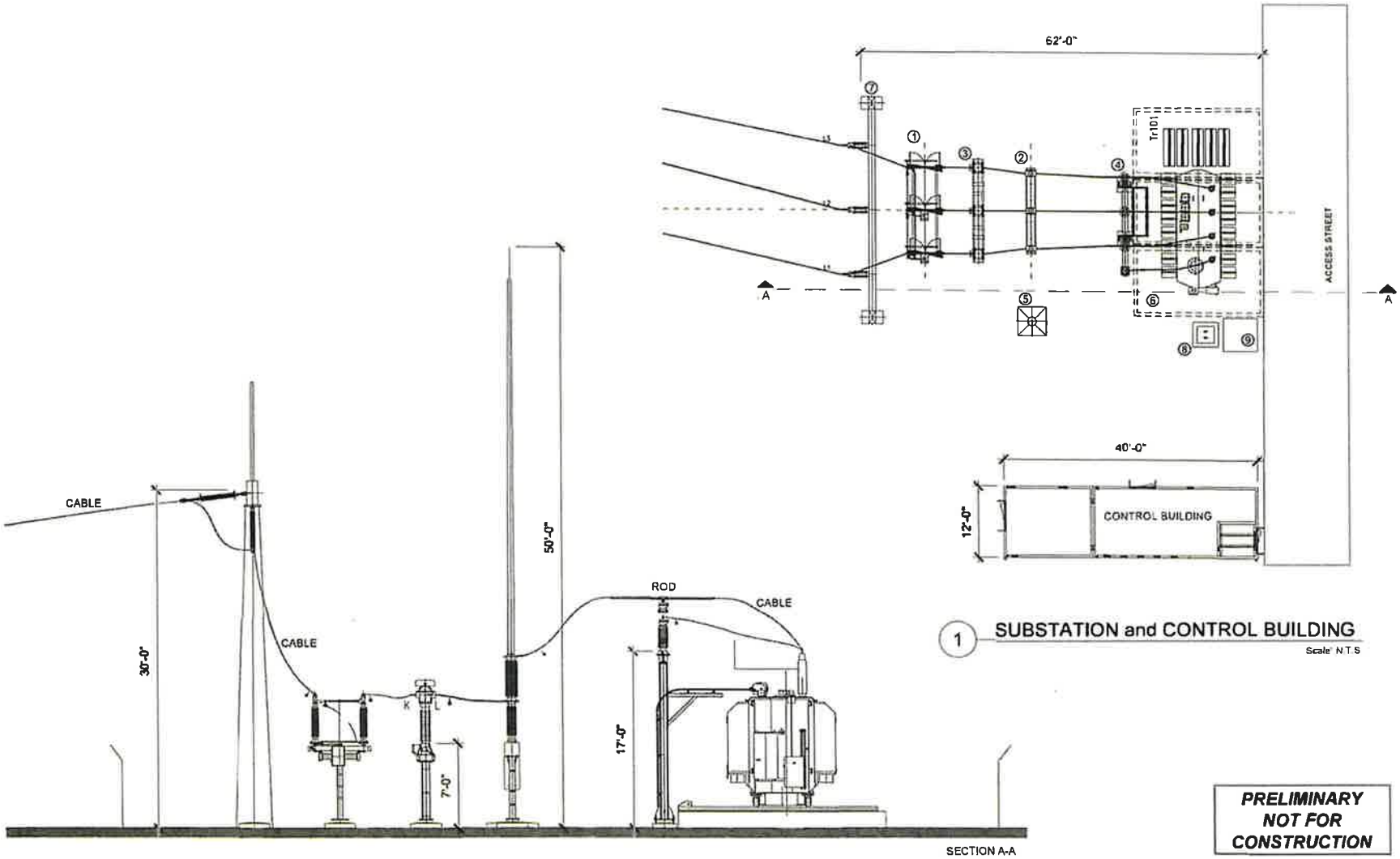
1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

INVERTER AND STANDARD BLOCK DETAILS, TYP.

EX-4

AS NOTED



1 SUBSTATION and CONTROL BUILDING

Scale: N.T.S

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

SUBSTATION DETAILS, TYP.

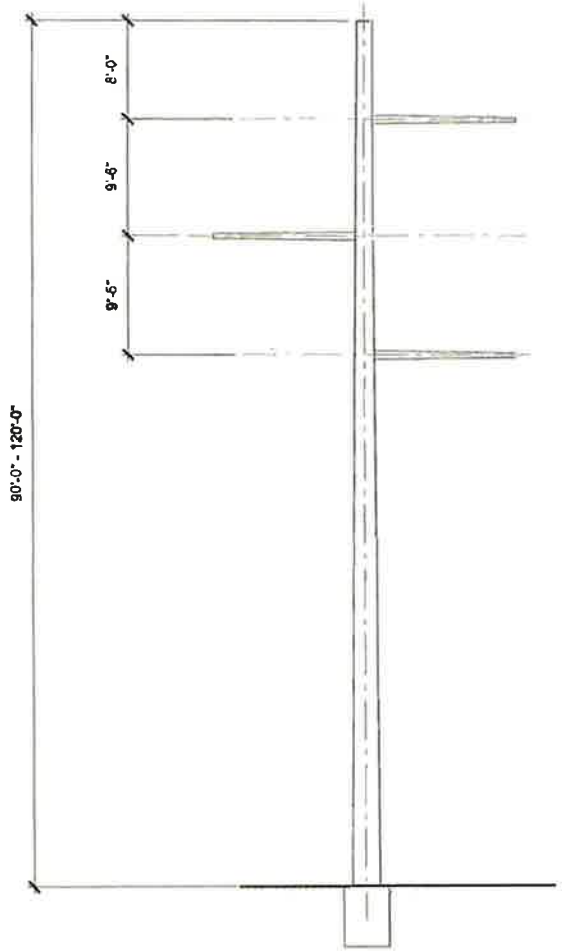
DRAWN BY CHRISTINE FOYSTER-MORLS

SHEET

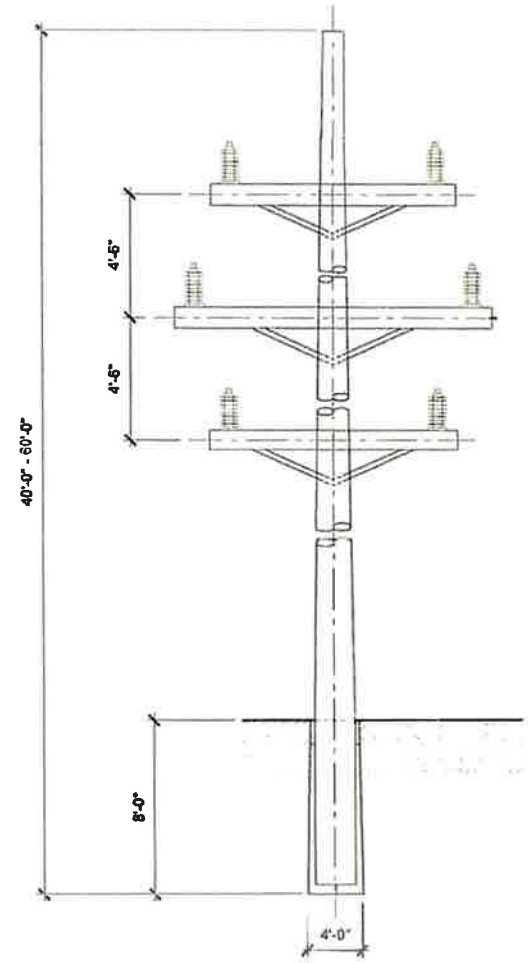
EX-5

SCALE

AS NOTED



1 230 kV MONOPOLE STRUCTURE, TYP.
Scale N.T.S



2 66 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

MONOPOL DETAILS, TYP.

EX-6

AS NOTED

ATTACHMENT "C"

WATER SUPPLY ASSESSMENT (WSA) RESOLUTION

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE WATER SUPPLY ASSESSEMENT FOR THE BIG ROCK 2 CLUSTER SOLAR ENERGY GENERATION AND BATTERY STORAGE PROJECT.

WHEREAS, the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project qualifies as a "project" under the Water Code triggering the need to prepare a Water Supply Assessment because the proposed project includes a demand of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project and/or because it is a proposed industrial use occupying more than 40 acres of land. The Water Supply Assessment (WSA) has been prepared in accordance with Water Code 10912(c) (4); and

WHEREAS, the Imperial County Board of Supervisors has the authority and responsibility for denying the Water Supply Assessment; and

WHEREAS, the duty to prepare a Water Supply Assessment falls to the County of Imperial ("County") because the Imperial Irrigation District (IID) is not a public water system within the meaning of the Water Code 10912(c); and,

WHEREAS, the County, in consultation with an expert engineering firm prepared the Water Supply Assessment, which includes any and all Water Supply Assessment addendums; and

WHEREAS, the County has independently reviewed and considered the Water Supply Assessment and the entire administrative record, and

WHEREAS, public notice of said application has been given, and the Board of Supervisors has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at a public hearing held with respect to this item on November 4, 2025; and

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY DENY BASED ON THE FOLLOWING FINDINGS FOR THE WSA** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project WSA prior to making a decision of denial. The Board of Supervisors finds and determines that the WSA is adequate and prepared in accordance with the requirements of Water Code, Section 10912(c)(4) and the analysis of the WSA demonstrates that the total projected water supplies, determined to be available by the County for the Project during normal, single dry, and multiple dry water years, will meet the projected water demand associated with the proposed project and based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law, the County Board of Supervisors makes the following findings for the Denial of the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project:

1. This Water Supply Assessment (WSA) has determined that the Imperial Irrigation District (IID) has adequate policies, programs and projects in place to ensure water is available for non-agricultural projects, both currently and during normal water years. Adequate agreements, plans and policies are in place that enable the Imperial Unit water supply to be considered reliable for 30 years.

2. IID serves as the regional water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, and industrial water users within its Service Area.

3. IID is a raw water retailer and a domestic raw water wholesaler and does not supply potable drinking water.

4. This WSA has shown that IID water supply is adequate for the operations of this Project. IID's Interim Water Supply Policy (IWSP) for non-agricultural projects dedicates 25,000 AFY of IID's annual water supply to serve new projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID.

5. As urban growth continues in Imperial County, agricultural water use may decline due to the transfer of water consumption to other land uses.

6. In the case of a Supply-Demand Imbalance (SDI), IID's Equitable Distribution Plan (EDP) gives water delivery priority to municipal and industrial users over agricultural users.

NOW, THEREFORE, based on the above findings, the Board of Supervisors of the County of Imperial **DOES HEREBY DENY** for the proposed Water Supply Assessment for the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

SB 610 – Draft Water Supply Assessment

For

Big Rock 2 Cluster Solar and Storage Project

April 2025 (Revised from November 2023)

Prepared For:

Imperial County
801 Main Street
El Centro, California 92243

(This page Intentionally left blank)

Big Rock 2 Solar Cluster and Storage Project

Contents

PURPOSE OF WATER SUPPLY ASSESSMENT 7
Project Determination According to SB 610 - Water Supply Assessment 7

EXECUTIVE SUMMARY 9

PROJECT DESCRIPTION 12
Water Use Efficiency Best Management Practice Incorporated Into Project 13
Additional Project Measures Under Potential Water Curtailment 13
Description of IID Service Area 17
Climate Factors 17
Imperial Valley Historic and Future Land and Water Uses 20
Imperial Integrated Regional Water Management Plan (October 2012) 21
IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009) 24
IID Temporary Land Conversion Fallowing Policy (May 2012) 25

IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS 26
California Law 26
Law of the River 26

IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND 36

WATER AVAILABILITY – NORMAL YEAR 36

EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS 39
Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP) 39
Equitable Distribution Plan (EDP) History 42
Projected Water Supplies 43

PROJECT WATER AVAILABILITY FOR A 20-YEAR PERIOD TO MEET PROJECTED DEMANDS 45

EXPECTED WATER DEMANDS FOR THE PROPOSED PROJECT 47

IID'S ABILITY TO MEET DEMANDS WITH WATER SUPPLY 51
Expanding Water Supply Portfolio 54
IID Near Term Water Supply Projections 57

COUNTY OF IMPERIAL FINDINGS 59

ASSESSMENT CONCLUSION 61

RESOURCES AND REFERENCES 62

ATTACHMENTS 64

Figures

Figure 1. Project Site Regional Location 14
Figure 2. Aerial Map of Project Vicinity 15
Figure 3. Project Layout/Site Plan 16
Figure 4. IID Imperial Unit Boundary and Canal Network 18
Figure 5. Major Colorado River Reservoir Storage Facilities and Basin Location Map 32
Figure 6. Lake Mead Water Elevation Levels 02.11.24 35
Figure 7. Lake Mead Schematic (June 15, 2022) 41

Tables

Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024 19
Table 2. IID Areawide Annual Precipitation (In). (1990-2024) 19
Table 3. Monthly Mean Temperature (°F)- Imperial, CA 10- Year, 30- Year & 100- Year (2015-2024,1995-2024,1925-2024) 19
Table 4. Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024) 20
Table 5. Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY) 22
Table 6 Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY) 23
Table 7. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2020 24
Table 8. Interim Water Supply Policy 2024 Annual Non-Agricultural Water Supply Development Fee Schedule 24
Table 9. CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY) 30
Table 10. Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2022 33
Table 11. IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B) 37
Table 12. IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024 40
Table 13. IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024 41
Table 14. Project Operational Water Uses (AFY) 47
Table 15. Ten-Year Historic Delivery (AFY), 2012-2021 48
Table 16. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024 51
Table 17. IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2025 52
Table 18. 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam 52
Table 19. IID Capital Project Alternatives and Cost (May 2009 price levels $) 57

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects
Attachment B: IID Equitable Distribution Plan

Acronyms

AF	Acre-Foot or Acre-Feet
AFY	Acre-Feet per Year
AOP	Annual Operations Plan
CAP	Central Arizona Project
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CDWR	California Department of Water Resources
CEQA	California Environmental Quality Act
CRWDA	Colorado River Water Delivery Agreement
CUP	Conditional Use Permit
CVWD	Coachella Valley Water District
EDP	IID Equitable Distribution Plan
EIS	Environmental Impact Statement
ICPDS	Imperial County Planning and Development Services
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IOPP	Inadvertent Overrun Payback Policy
ISG	Interim Surplus Guidelines
IRWMP	Integrated Regional Water Management Plan
IWSP	Interim Water Supply Policy
KAF	Thousand Acre Feet
LAFCO	Local Agency Formation Commission
LCR	Lower Colorado Region
MCI	Municipal, commercial, industrial
MGD	Million Gallons per Day
MW	Megawatt
MWD	Metropolitan Water District of Southern California
NAF	Naval Air Facility
PVID	Palo Verde Irrigation District
QSA/	Quantification Settlement Agreement and Related Agreements Transfer Agreements
SB	Senate Bill
SDCWA	San Diego County Water Authority
SNWA	Southern Nevada Water Authority
TLCFP	Temporary Land Conversion Fallowing Policy
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
WSA	Water Supply Assessment

PURPOSE OF WATER SUPPLY ASSESSMENT

This Water Supply Assessment (WSA) was prepared for the County of Imperial (Lead Agency) by Dudek, regarding the Big Rock 2 Cluster Solar and Storage Project (Big Rock 2 Solar or Project) proposed by 90 FL 8ME LLC (the "Applicant"). This study is a requirement of California law, specifically Senate Bill 610 (referred to as SB 610). SB 610 is an act that amended Section 21151.9 of the Public Resources Code, and Sections 10631, 10656, 10910, 10911, 10912, and 10915 of the Water Code. SB 221 is an act that amended Section 11010 of the Business and Professions Code, while amending Section 65867.5 and adding Sections 66455.3 and 66473.7 to the Government Code. SB 610 was approved by the Governor and filed with the Secretary of State on October 9, 2001, and became effective January 1, 2002.[1] SB 610 requires that a lead agency determine that a project (as defined in CWC Section 10912) that is subject to the California Environmental Quality Act (CEQA), to identify any public water system that may supply water for the project and to request the applicants to prepare a specified water supply assessment.

This study has been prepared pursuant to the requirements of CWC Section 10910, as amended by SB 610 (Costa, Chapter 643, Stats. 2001). The purpose of SB 610 is to advance water supply planning efforts in the State of California; therefore, SB 610 requires the Lead Agency, to identify any public water system or water purveyor that may supply water for the project and to prepare the WSA after a consultation. Once the water supply system is identified and water usage is established for construction and operations for the life of the project, the lead agency is then able to coordinate with the local water supplier and make informed land use decisions to help provide California's cities, farms and rural communities with adequate water supplies.

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in California Water Code (CWC) Section 10912 [a]) that are subject to the California Environmental Quality Act (CEQA). Due to increased water demands statewide, this water bill seeks to improve the link between information on water availability and certain land use decisions made by cities and counties. This bill takes a significant step toward managing the demand placed on California's water supply. It provides further regulations and incentives to preserve and protect future water needs. Ultimately, this bill will coordinate local water supply and land use decisions to help provide California's cities, farms, rural communities and industrial developments with adequate long-term water supplies. The WSA will allow the lead agency to determine whether water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Project Determination According to SB 610 - Water Supply Assessment

With the introduction of SB 610, any project under the California Environmental Quality Act (CEQA) shall provide a Water Supply Assessment if the project meets the definition of CWC Section 10912. Water Code

[1] SB 610 amended Section 21151.9 of the California Public Resources Code, and amended Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Section 10913, and added and amended Section 10657 of the Water Code. SB 610 was approved by California Governor Gray Davis and filed with the Secretary of State on October 9, 2001.

section 10911(c) requires that the lead agency "determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." Specifically, Water Code section 10910(c)(3) states that "If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses."

After review of CWC Section 10912a, and Section 10912 (a)(5)(B), it was determined that the proposed Big Rock 2 Solar is deemed a project as it is considered an industrial use that will occupy 1,849 acres of privately owned agricultural land.

EXECUTIVE SUMMARY

The County of Imperial in coordination with Imperial Irrigation District (IID) has requested a WSA as part of the environmental review for the proposed Big Rock 2 Solar Project ("Project"). This study is intended for use by Imperial County and Imperial Irrigation District in its evaluation of water supplies for existing and future land uses. The evaluation examines the following water elements:

- Water availability during a normal year
- Water availability during a single dry year, and multiple dry water years
- Water availability during a 30-year projection to meet existing demands
- Expected 30-year water demands of the Project
- Reasonably foreseeable planned future water demands to be served by the Imperial Irrigation District under Equitable Distribution Plan apportionment

The proposed Project site is located within unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. Existing land uses surrounding the Project site consist largely of agricultural parcels sparsely occupied by farm or rural residential uses. The Project site is located across multiple U.S. Geological Survey 7.5-minute quadrangles, including the Seeley, Plaster City, Mount Signal, and Yuha Basin quadrangles. The Project site is within IID's Imperial Unit and district boundary and as such is eligible to receive water service. Water infrastructure capacity is not a part of this assessment. 90FL 8ME LLC is responsible for contacting IID Water Engineering Department for an infrastructure capacity assessment. Any infrastructure improvements, costs and environmental compliance associated with improvements to accommodate the Project's water supply or for the conservation of the water supply needed for the Project is the sole responsibility of 90FL 8ME LLC.

IID adopted an Interim Water Supply Policy (IWSP) in 2009 for new Non-Agricultural Projects, under which water supplies may be contracted to serve new developments within IID's water service area. For applications processed under the IWSP, applicants shall be required to pay a processing fee and, after IID board approval of the corresponding water supply agreement, will be required to pay a reservation fee(s) and annual water supply development fees. The water supply development fees are collected for the development of water supply projects, such as water conservation projects, water storage projects and/or water augmentation projects.

Under the IWSP, IID may set aside up to 25,000 acre-feet annually (AFY) of IID's Colorado River water supply to serve new non-agricultural projects with water created from IID efficiency conservation projects and programs. As of March 2025, a balance of 18,620 AFY remains available under the IWSP for new non-agricultural projects, providing a mechanism for the development of reasonably sufficient water supplies for such projects. The proposed Project water demand of approximately 10 AFYrepresents 0.054 percent of the annual unallocated supply that may be created and set aside for new non-agricultural projects.

The County of Imperial anticipates non-agricultural project water supply demand within their jurisdiction, as the land use authority, is likely to exhaust the 18,620 AFY available under the IWSP within the

foreseeable 30-year planning period. Thus, the proposed Project's estimated water demand, combined with other development anticipated in the area is likely to adversely affect IID's ability to provide water to other users in IID's water service area unless mitigation is incorporated. This industrial water use project may need to enter into a water supply agreement with IID under which water conservation and augmentation commitments may be required of the Big Rock 2 Solar facility.

IID has a proven record of successful development and implementation of water conservation programs and projects in response to fully executed water supply agreements with public and private entities for water conservation efforts that are fully funded by the party requesting the conserved water supply. IID will continue to meet all existing and new water supply and conservation agreement obligations consistent with the terms and conditions set forth in those agreements, including any environmental requirements and cost provisions.

In efforts to address any potential water supply/demand imbalances, IID adopted a revised Equitable Distribution Plan for the apportionment of water to all water user categories including for commercial/industrial water uses such as the proposed Project. Implementation of the EDP initiates every January 1st and continues throughout the year unless the IID Board of Directors takes specific action. The latest revisions to the EDP were made in July of 2023 (IID EDP). Under the EDP, water supplies may be restricted to Big Rock 2 as described under the IID Water Supply & Demand Section, Equitable Distribution Plan sub-section of this WSA.

In June 2022, U.S. Bureau of Reclamation Commissioner Camille Touton testified before a congressional committee and called for the Basin states to develop a plan before the end of the year to reduce demands by 2-4 million acre-feet per year, through 2026, or the Secretary of the Interior would take regulatory action to force these reductions in order to protect the Colorado River system in light of the prolonged drought conditions.

In 2023, California submitted a voluntary conservation proposal to Reclamation to conserve up to 400,000 AFY through 2026 as their commitment to Lake Mead and the Colorado River System. Post 2026, new operating guidelines would come into effect, potentially affecting all River contractors. IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community while simultaneously ramping up water conservation programs in an effort to augment local water supplies, to some degree, should Basin-wide cuts be unavoidable. In the interim, IID has entered into a System Conservation Implementation Agreement (SCIA) with the U.S. Bureau of Reclamation for its share of the California proposal under a voluntary plan that would not exceed 250,000 AFY (through 2026) and result in compensation from Reclamation for local water conservation efforts.

IID's Lake Mead contributions for 2022 and 2023 were 25,000 AF and 56,111 AF, respectively, which were over and above IID's transfer obligation schedule. For 2024, IID conserved an estimated 195,000 AF for Lake Mead above its transfer obligation schedule. Provisional conservation numbers indicate IID saved a total of 661,000 AF in 2024 for all commitments combined. Consequently, California's 2024 water use, are the lowest in decades and IID's, in particular, is the lowest since 1941. Despite these historic contributions,

Lake Mead elevation had increased by only 17 feet by the end of 2024, and continues to operate under shortage conditions. It is unknown, as of April 2025, what post 2026 conservation measures may need to be considered by the district. Nonetheless, IID's conservation capacity remains reliable.

PROJECT DESCRIPTION

90FL 8ME LLC is proposing to construct and operate a 500-megawatt (MW) utility-scale photovoltaic solar energy generation and a 500 MW battery energy storage system (BESS) on approximately 1,849 acres of private lands in Imperial County. More specifically, the Project is located within unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The Project site is located across multiple U.S. Geological Survey 7.5-minute quadrangles, including the Seeley, Plaster City, Mount Signal, and Yuha Basin quadrangles. Existing land uses surrounding the Project site consist largely of agricultural parcels sparsely occupied by farm or rural residential uses. Affected parcels are noted as follows: 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-300-011, 051-300-016, 051-300-026, 051-300-035, 051-300-037, 051-300-032, 051-300-036, 051-330-003, 051-350-004, 051-350-006, 051-350-007, 051-350-008, 051-310-027, 051-310-28, 051-290-018, 051-290-019, 051-320-005, 051-320-006, and 051-320-007.

Please refer to **Figure 1** for the Project's Regional Location (**Figure 1.** Project Site Regional Location), and **Figure 2** for the Project Site and Vicinity (**Figure 2.** Aerial View of Project Site and Vicinity).

In general, the project can be described as follows: the Project's permanent facilities would include service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, energy storage system(s), and operations and maintenance (O&M) facilities, none of which is expected to adversely affect any of the existing IID laterals or drains. Power generated by the Project would be collected using up to 66-kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead gen-tie line would then link the Project substation to the planned Liebert Switchyard, which will be connected via an overhead 230-kilovolt gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation. Please refer to **Figure 3** for the conceptual project layout and tentative site plan. (**Figure 3.** Project Layout/Site Plan).

The solar facility involves seeking approval of a total of four Conditional Use Permits (CUPs) that will allow for 90FL 8ME LLC to secure the CUPs from the Lead Agency along with permits and approvals from other relevant agencies as required by law.

Water services for the Project will be provided by Imperial Irrigation District (IID). The Project is anticipated to require 700 AF of water to support construction over a 1.5 to 2-year period, and up to 10 AFY to support Project O&M over a 30-year operational period. The construction water demand, would primarily be for dust suppression, whereas operational demands would be for the operation and maintenance O&M building, fire flow storage, and periodic panel washing.

The Project's O&M water demand is conservatively assumed to be up to 10 AFY for long-term planning purposes. However, the actual O&M demand will likely be much lower, possibly as little as approximately 1 AFY. This estimate is based on the sanitary demands of 15 employees at 55 gallons per capita per day

(approximately 0.9 AFY)[2], a one-time demand to fill one or more water storage tanks totaling 100,000 gallons for fire supply (approximately 0.01 AFY over the life of the Project)[3], and annual panel washing requiring approximately 16,500 gallons per panel washing event (0.05 AFY)[4]. It is assumed that no water for dust control during operation will be necessary.

The proposed Project will need to contract with IID to deliver up to 350 AFY of untreated water for construction, and up to 10 AFY for O&M via the IID Westside Main Canal and delivery gates listed in Table 15..

Water Use Efficiency Best Management Practice Incorporated Into Project

The Project proposes to incorporate the following Best Management Practices for water use efficiency under the requested operational water supply amount of 10 AFY: 1) limit panel washing to the minimum frequency required to maintain output from solar facility, 2) install low flow fixtures in O&M building, and 3) repair water leaks immediately.

Additional Project Measures Under Potential Water Curtailment

Should reductions to IID's water supply be ordered or directed from a governmental authority having appropriate jurisdiction, Big Rock 2 Solar may be required to reduce its water supply demand by a proportionate reduction of the total volume of water available to IID. Additional, operational changes that may be implemented by the Project under these unpredictable conditions are as follows: 1) use portable toilets and 2) no panel washing

Incorporation of these additional measures is anticipated to conserve approximately 100 percent of overall water supply demand for the Project if operating under curtailment.

[2] 55 gpd/person * 15 persons = 825 gpd; 825 gpd * 365 days = 301,125 gallons per year.
[3] 100,000 gallons / 33 years = 3,030 gallons per year.
[4] 33 gal/MW * 500 MW = 16,500 gallons per annual panel washing event (Klise et al., 2013; Macknick et al., 2011).

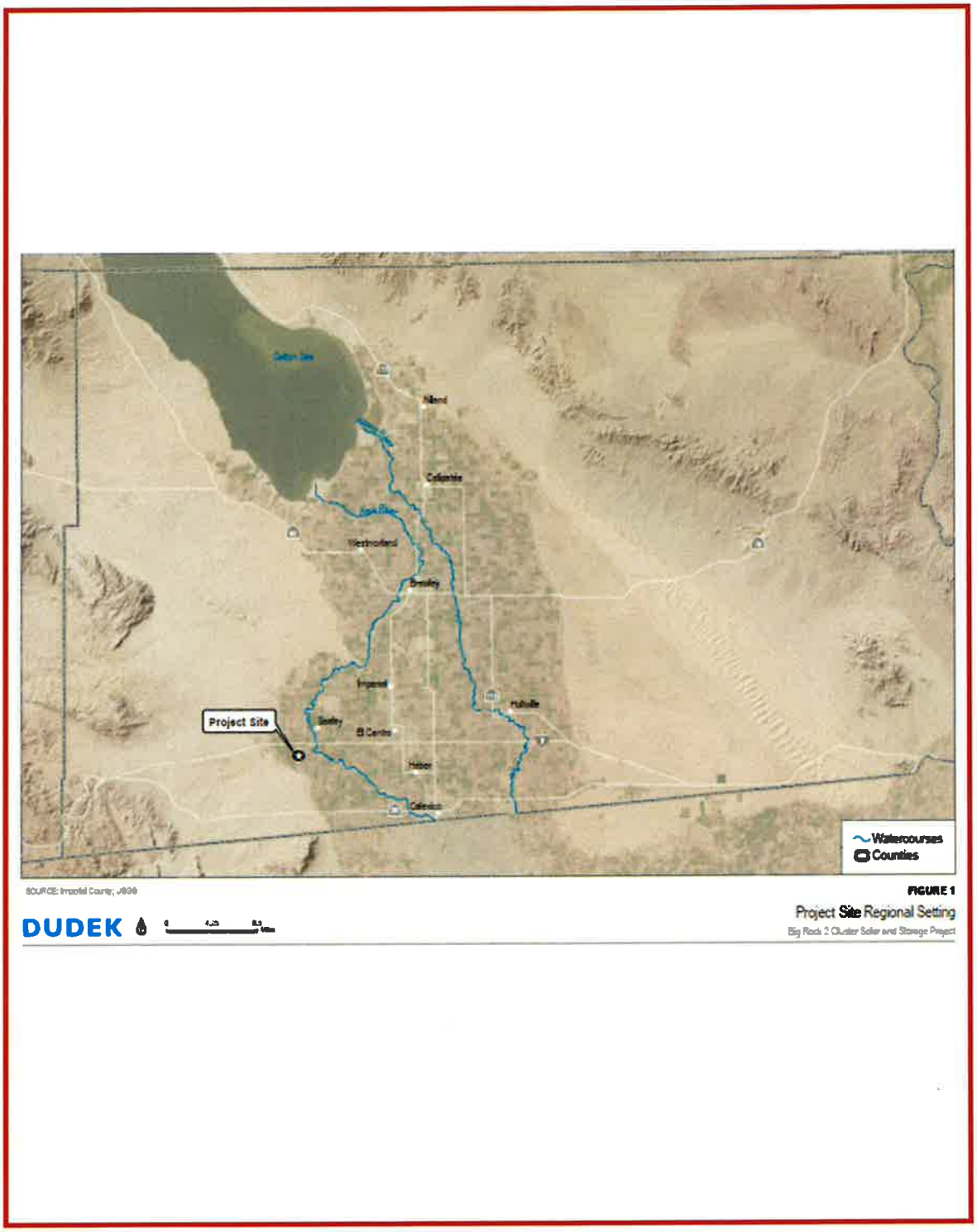


Figure 1. Project Site Regional Location

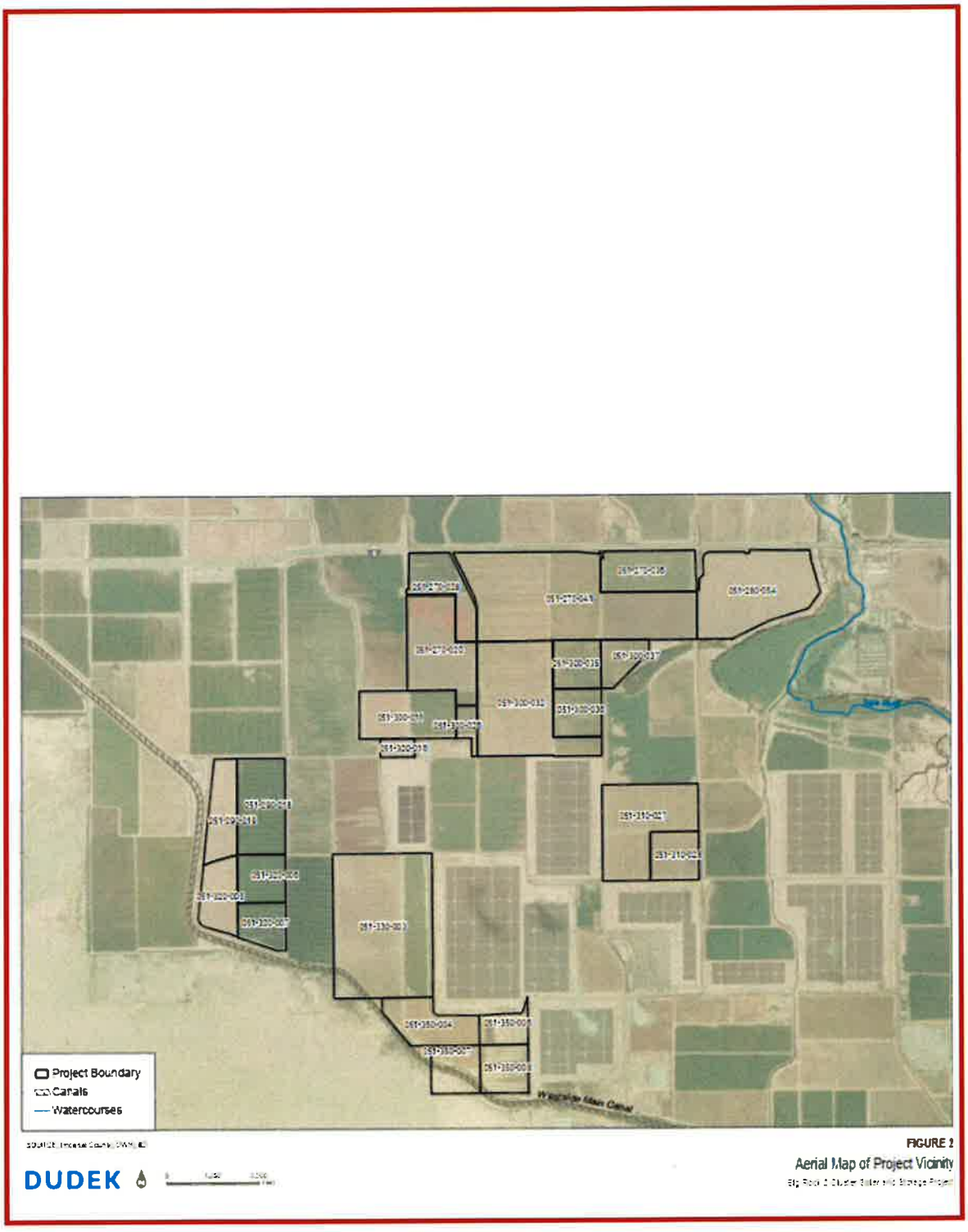


Figure 2. Aerial Map of Project Vicinity

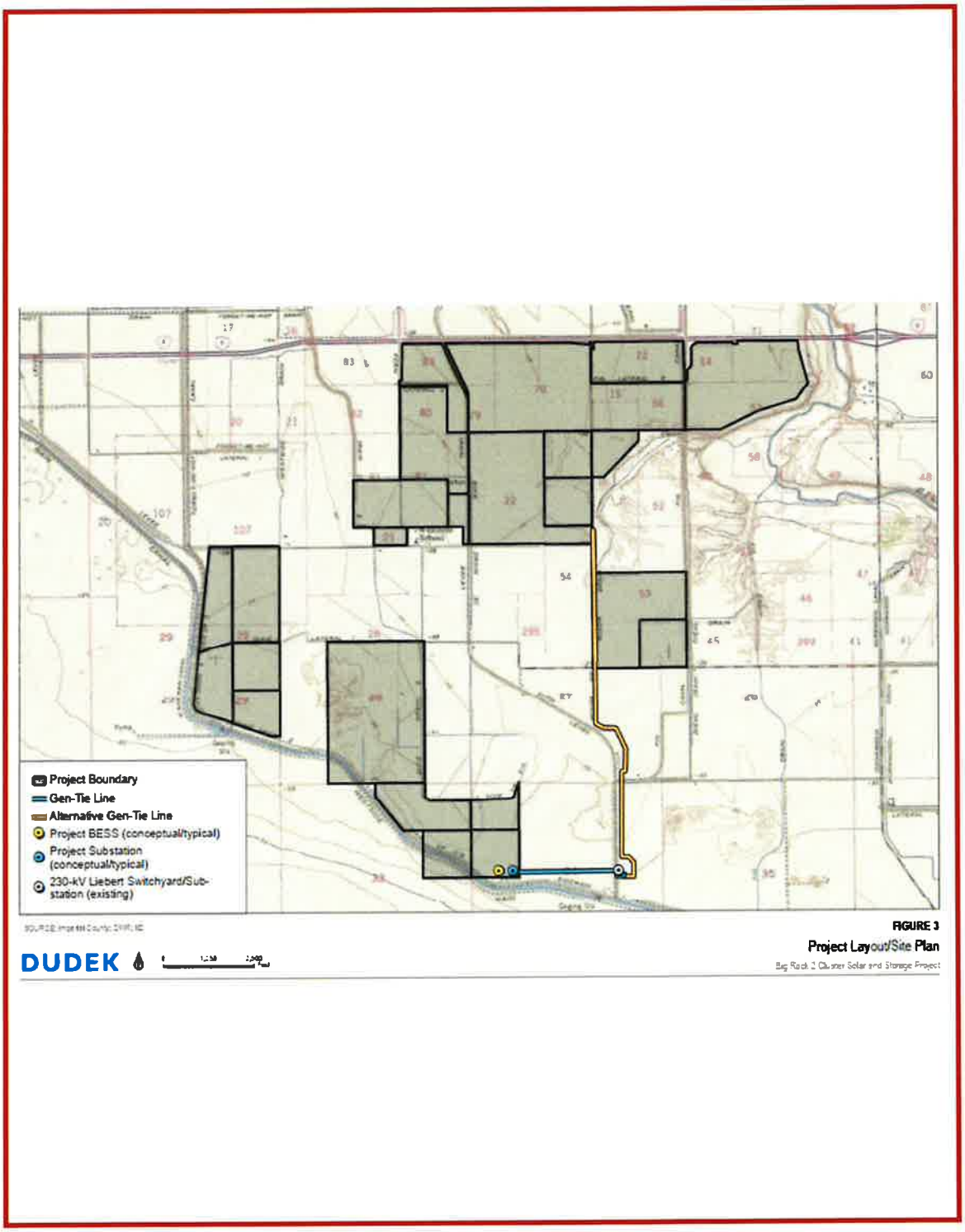


Figure 3. Project Layout/Site Plan

Description of IID Service Area

The proposed Project site is located in Imperial County in the southeastern corner of California. The County is comprised of approximately 4,597 square miles or 2,942,080 acres.[5] Imperial County is bordered by San Diego County to the west, Riverside County to the north, the Colorado River/Arizona boundary to the east, and 84 miles of International Boundary with the Republic of Mexico to the south. Approximately fifty percent of Imperial County is undeveloped land under federal ownership and jurisdiction. The Salton Sea accounts for approximately 11 percent of Imperial County's surface area. In 2024, 16 percent of the area was in irrigated agriculture (468,530 acres), including 14,676 acres of the Yuma Project, some 35 sections or 5,5568 acres served by Palo Verde Irrigation District (PVID), and 448,286 net acres served by IID.[6, 7]

The area primarily served by IID is located in the Imperial Valley, which is generally contiguous with IID's Imperial Unit, lies south of the Salton Sea, north of the U.S./Mexico International Border, and generally in the 699,132 acre area between IID's Westside Main and East Highline Canals. In 2024, IID delivered untreated water to 497,241 acres, predominantly in the Imperial Valley, along with small areas of East and West Mesa land, including non-agricultural use, but excluding temporarily fallowed land.

The developed area consists of seven incorporated cities (Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland), three unincorporated communities (Heber, Niland and Seeley), and three institutions (Naval Air Facility [NAF] El Centro, Calipatria CDCR, and Centinela CDCR) and supporting facilities. **Figure 4** provides a map of the IID canal network, as well as cities, communities and main canals.

Climate Factors

Imperial Valley, located in the Northern Sonoran Desert, which has a subtropical desert climate is characterized by hot, dry summers and mild winters. Clear and sunny conditions typically prevail, and frost is rare. The region receives 85 to 90 percent of possible sunshine each year, the highest in the United States. Winter temperatures are mild rarely dropping below 32°F, but summer temperatures are very hot, with more than 100 days over 100°F each year. The remainder of the year has a relatively mild climate with temperatures averaging in the mid-70s.

The 100-year average climate characteristics are provided in Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024. Rainfall contributes around 50,000 AF of effective agricultural water per inch of rain. Most rainfall occurs from November through March; however, summer storms can be significant in some years. Annual areawide rainfall is shown in Table 2. IID Areawide Annual Precipitation (In). (1990-2024). The thirty-year, 1995-2024, average annual air temperature was 74.13°F, and average annual rainfall was 2.40 inches, see Tables 3 and 4. This record shows that while average annual rainfall has fluctuated, the 10-year average temperatures have slightly increased over the 30-year averages.

---

[5] *Imperial County General Plan*, Land Use Element 2008 Update

[6] *USBR website: Yuma Project. PVID contacted Chris Parrish for acreage April 2025.*

[7] IID Annual Inventory of Areas Receiving Water Years 2023, 2022, 2021.

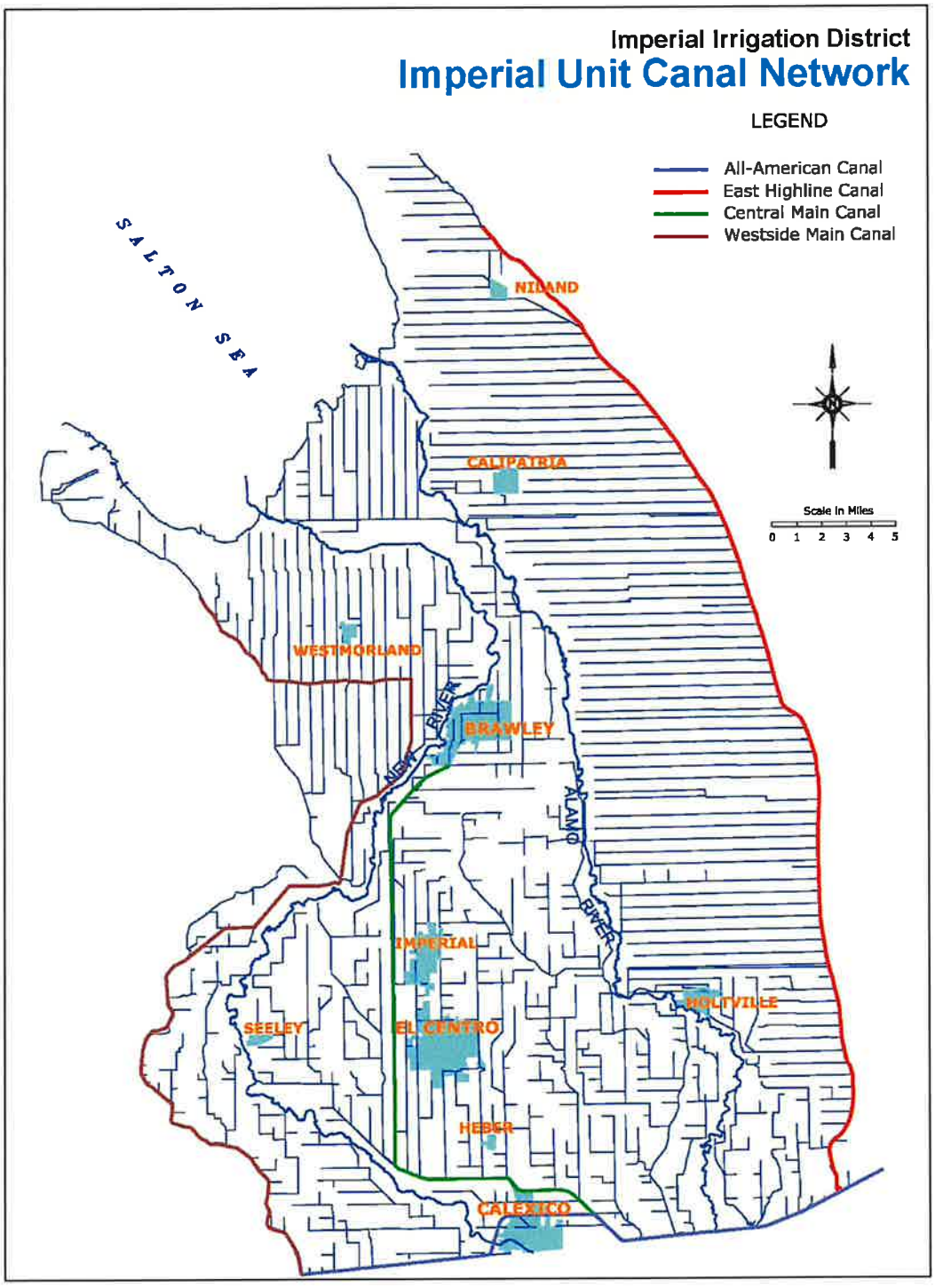


Figure 4. IID Imperial Unit Boundary and Canal Network

Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024

Climate Characteristic	Annual Value
Average Precipitation (100-year record, 1925-2024)	2.75 inches (in)
Minimum Temperature, Jan 1937	16 °F
Maximum Temperature, July 1995	121 °F
Average Minimum Temperature, 1925-2024	48.5 °F
Average Maximum Temperature, 1925-2024	98.4 °F
Average Temperature, 1925-2024	73.2 °F

Source: IID Imperial Weather Station Record

Table 2. IID Areawide Annual Precipitation (In). (1990-2024)

1990	1991	1992	1993	1994	1995	1996
1.646	3.347	4.939	2.784	1.775	1.251	0.685
1997	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1.328	2.604	1.399	0.612	0.516	0.266	2.402
2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
4.116	4.140	0.410	1.331	1.301	0.619	3.907
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
2.261	2.752	2.772	1.103	2.000	1.867	2.183
2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
1.305	3.017	2.685	1.688	1.265	1.40	TBD

Source: Computation based on polygon average of CIMIS as station came online in the WISKI.[8]

Notable from Table 2 (above) and Table 3(below) is that while average annual rainfall measured at IID Headquarters in Imperial, California, has been decreasing, monthly average temperatures are remarkably consistent.

Table 3. Monthly Mean Temperature (°F)- Imperial, CA 10- Year, 30- Year & 100- Year (2015-2024,1995-2024,1925-2024)

	Jan			Feb			Mar			Apr		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	81	34	**58**	85	36	**51**	92	42	**67**	101	49	**74**
30-year	81	34	**57**	84	36	**60**	93	41	**66**	100	47	**72**
100-year	80	32	**56**	84	35	**59**	91	40	**65**	99	46	**71**
	May			**Jun**			**Jul**			**Aug**		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	104	54	**77**	115	62	**89**	116	72	**95**	115	73	**94**
30-year	106	54	**78**	113	60	**87**	115	69	**93**	114	70	**93**
100-year	105	53	**78**	113	59	**86**	114	68	**92**	113	68	**91**
	Sep			**Oct**			**Nov**			**Dec**		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	112	65	**88**	103	53	**78**	90	40	**65**	82	36	**58**
30-year	111	63	**88**	102	51	**76**	90	39	**64**	81	33	**56**
100-year	111	61	**86**	102	49	**75**	89	38	**63**	80	32	**56**

Source: IID Imperial Headquarters Station Record (Data provided by IID staff)

[8] From 1/1/1990-3/23/2004, 3 CIMIS stations: Seeley, Calipatria/Mulberry, Meloland; 3/24/2004-7/5/2009, 4 CIMIS stations (added Westmorland N.); 7/6/2009-12/1/2009, 3 CIMIS stations: Westmorland N. offline; 12/2/2009-2/31/2009, 4 CIMIS stations, Westmorland N. back online; 1/1/2010-9/20/2010.

Table 4. Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
10-year	0.58	0.17	0.27	0.11	0.08	0.01	0.07	0.16	0.34	0.12	0.17	0.32	**2.38**
30-year	0.43	0.35	0.23	0.09	0.05	0.00	0.13	0.23	0.31	0.16	0.19	0.31	**2.40**
100-year	0.38	0.36	0.24	0.10	0.03	0.00	0.10	0.30	0.35	0.24	0.19	0.47	**2.75**

Source: IID WIS: CIMIS stations polygon calculation (Data provided by IID staff).

Imperial Valley depends on the Colorado River for its water, which IID transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Golden State Water (which includes all or portions Calipatria, Niland, and some land adjacent within Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. Industries outside the municipal areas treat the water to the required standards of their industry. To comply with U.S. Environmental Protection Agency (USEPA) requirements and avoid termination of canal water service, residents in the IID water service area who do not receive treated water service must obtain alternative water service for drinking and cooking from a state-approved provider. To avoid penalties that could exceed $25,000 a day, IID strictly enforces this rule. The IID Water Department tracks nearly 3,200 raw water service accounts required by the State Water Resources Control Board's Department of Drinking Water to have alternate state approved drinking water service. IID maintains a small-acreage pipe and drinking water database and provides an annual compliance update to the Department of Drinking Water.

Imperial Valley Historic and Future Land and Water Uses

Agricultural development in the Imperial Valley began at the turn of the twentieth century. In 2023, gross agricultural production for Imperial County was valued at $2,692,716,000, of which approximately $2.6 billion was produced in the IID water service area.[9] While the agriculture-based economy is expected to continue, land use is projected to change somewhat over the years as industrial and/or alternative energy development and urbanization occur in rural areas and in areas adjacent to existing urban centers, respectively.

Imperial Valley's economy is gradually diversifying. Agriculture will likely continue to be the primary industry within the valley; however, two principal factors anticipated to reduce crop acreage are renewable energy (geothermal and solar) and urban development. Over the next twenty years, urbanization is expected to slightly decrease agriculture land use to provide space for an increase in residential, commercial and industrial uses. The transition from agricultural land use typically results in a net decrease in water demand for municipal, commercial, and solar energy development; and a net increase in water demand for geothermal energy development. Local energy resources include geothermal, wind, biomass and solar. The County General Plan provides for development of energy production centers or energy parks within Imperial County. Alternative energy facilities will help California

[9] 2023 Imperial County Crop and Livestock Report

meet its statutory and regulatory goals for increasing renewable power generation and use and decrease water demands in Imperial County. As a solar project, the Big Rock 2 project would provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.

The IID Board has adopted the following policies and programs to address how to accommodate water demands under the terms of the QSA/ Transfer Agreements and minimize potential negative impacts on agricultural water uses:

Imperial Integrated Regional Water Management Plan (IRWMP): adopted by the board on December 18, 2012, and by the County of Imperial, to meet the basic requirement of California Department of Water Resources (CDWR) for an IRWM plan. In all, 14 local agencies adopted the 2012 Imperial IRWMP.

Interim Water Supply Policy for Non-Agricultural Projects: adopted by the board on September 29, 2009, to ensure sufficient water will be available for new development, in particular, anticipated renewable energy projects until the board selects and implements capital development projects such as those considered in the Imperial IRWMP.

Temporary Land Conversion Fallowing Policy: adopted by the board on May 8, 2012, and revised on March 29, 2016, to provide a framework for a temporary, long-term fallowing program to work in concert with the IWSP and IID's coordinated land use/water supply strategy.

Equitable Distribution Plan: final adoption by the board on July 26, 2023, to provide a mechanism for IID to administer apportionment of the district's quantified annual supply of Colorado River water.

In addition, water users within the IID service area are subject to the statewide requirement of reasonable and beneficial use of water under the California Constitution, Article X, section 2.

Imperial Integrated Regional Water Management Plan (October 2012)

The Imperial IRWMP serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the IID Board of Directors approved it in December 2012. Approval by these three (3) stakeholders met the basic requirement of California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.[10] As discussed herein, long term water supply augmentation is not anticipated to be necessary to meet proposed Project demands.

[10] October 2012 Imperial Integrated Regional Water Management Plan, Chapter 12.

Chapter 5 of the 2012 Imperial IRWMP addresses water supplies (Colorado River and groundwater), demand, baseline and forecasted through 2050; and IID water budget. Chapter 12 addresses projects, programs and policies, and funding alternatives. Chapter 12 of the IRMWP lists, and Appendix N details, a set of capital projects that IID might pursue, including the amount of water that might result (AFY) and cost ($/AF) if necessary. These also highlight potential capital improvement projects that could be implemented in the future.

Imperial Valley historic 2015 and 2020 and the forecasted future for 2025 to 2055 non-agricultural water demand, are provided in **Table 5** in five-year increments. Total water demand for non-agricultural uses is projected to be 201.4 KAF in the year 2055. This is a forecasted increase in the use of non-agricultural water of 94 KAF from 107.4 KAF for the period of 2015 to 2055. These values were modified from Chapter 5 of the Imperial IRWMP to reflect updated conditions from the IID Provisional Water Balance for calendar year 2015 and 2020. Due to the recession in 2009, state policies affecting municipal water use in relation to the drought and other factors, non-agricultural growth projections have lessened since the 2012 Imperial IRWMP. Projections in **Table 5** have been adjusted (reduced by 3 percent for Municipal and Industrial uses and applied a flat 0.5 AF increase for Recreation use) to reflect IID 2015 and 2020 delivery data adjustments. Even with these adjustments, the Table 5 projections for non-agricultural water demand within the IID water service area continue to reflect an unlikely aggressive growth.

Table 5. Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Municipal	30.0	30.9	36.8	39.8	41.5	46.3	51.7	57.8	61.9
Industrial	26.4	28.7	39.8	46.5	53.2	59.9	66.6	73.3	80.0
Other	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Feedlots/Dairies	17.8	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Envr Resources	8.3	9.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Recreation	7.4	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Service Pipes	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Non Ag	**107.4**	**115.1**	**136.1**	**145.8**	**154.2**	**165.7**	**177.8**	**190.6**	**201.4**

Notes: 2015 non-agricultural water demands are from IID 2015 Provisional Water Balance rerun 01/25/2021; 2020-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2015 Provisional Water Balance; 2020 non-agricultural water demands are from IID 2020 Provisional Water Balance rerun on 01/31/2022; 2025-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2020 Provisional Water Balance. Industrial Demand includes geothermal, but not solar, energy production.

Agricultural evapotranspiration (ET) demand of approximately 1,476.4 KAF in 2015, decreased in 2020 to approximately 1,442.2 KAF. The termination of fallowing programs provided 103.5 KAF of water for Salton Sea mitigation in 2017. Forecasted agricultural ET remains constant, as reductions in water use are to come from efficiency conservation not reduction in agricultural production. Market forces and other factors may impact forecasted future water demand.

Table 6 provides the 2015 and 2020 historic and 2025-2055 forecasted agricultural consumptive use and delivery demand within the IID water service area. When accounting for agriculture ET, tailwater and tilewater, total agricultural consumptive use (CU) demand ranges from 2,157.9 KAF in 2015 to 2,208.5

KAF in 2055. Forecasted total agricultural delivery demand is around 1 KAFY higher than the CU demand, ranging from 2,158.9 KAF in 2015 to 2,209.5 KAF in 2055.

Table 6 Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Ag ET from Delivered & Stored Soil Water	1,476.4	1,442.2	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5
Ag Tailwater to Salton Sea	282.9	312.9	268.0	218.0	218.0	218.0	218.0	218.0	218.0
Ag Tilewater to Salton Sea	398.6	410.2	423.0	423.0	423.0	423.0	423.0	423.0	423.0
Total Ag CU Demand	**2,157.9**	**2,165.4**	**2,258.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**
Subsurface Flow to Salton Sea	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
Total Ag Delivery Demand	**2,158.9**	**2,166.4**	**2,259.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**

Notes: 2015 record from IID 2015 Provisional Water Balance rerun 06/28/2019; 2020 record from IID 2020 Provisional Water Balance rerun 01/25/2021; 2020-2055 forecasts from spreadsheet used to develop Figure 19, et seq. in Imperial IRWMP Chapter 5 (Data provided by IID staff).

In addition to agricultural and non-agricultural water demands, system operation demand must be included to account for operational discharge, main and lateral canal seepage, including seepage along the All-American Canal (AAC); and for AAC seepage, river evaporation and phreatophyte ET from Imperial Dam to IID's measurement site at AAC Mesa Lateral 5. These system operation demands are shown in **Table 7** for 2020. IID measures system operational uses at All-American Canal Station 2900 just upstream of Mesa Lateral 5 Heading. Total system operational use for 2020 was 167.8 KAF, including 10 KAF of LCWSP input, 39 KAF of seepage interception input, and 40 KAF of unaccounted canal water input.

Table 7. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2020

Delivery System Evaporation	24.4
Canal Seepage	90.8
Main Canal Spill	10.1
Lateral Spill	121.5
QSA & IID Seepage Interception	-39.0
Unaccounted Canal Water	-40.0
Total System Operational Use, In valley	167.8
Imperial Dam to AAC @ Mesa Lat 5 *(Dam-Mesa Lat 5)(2,552,674-2,546,152)*	9.2
LCWSP	-10.0
Total System Operational Use in 2020	167.0
Source: 2020 IID Water Balance rerun 01/25/2021	

IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009)

The IID IWSP provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP designates up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects. The IWSP provides a mechanism and process to develop a water supply agreement for any appropriately permitted project, and establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed to offset the new demand. [11]

The environmental impacts of conserving up to the 25,000 acre-feet of IWSP water were analyzed in the *Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects* Negative Declaration, State Clearinghouse No. 2009061103 dated June 25, 2009. The IID Board adopted this Negative Declaration on September 29, 2009.

Depending on the nature, complexity and water demands of the proposed project, new projects may be charged a one-time Reservation Fee and annual Water Supply Development Fees for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project. The 2025 IWSP fee schedule is shown in **Table 8.**

Table 8. Interim Water Supply Policy 2025 Annual Non-Agricultural Water Supply Development Fee Schedule

Annual Demand (AF)	Reservation Fee ($/AF)*	Development Fee ($/AF)*
0-500	$91.39	$365.54
501-1000	$128.67	$514.68
1001-2500	$161.57	$646.28
2501-5000	$199.59	$798.34

Adjusted annually in accordance with the Consumer Price Index (CPI).

[11] *IID website: Municipal, Industrial and Commercial Customers.*

IID customers with new projects receiving water under the IWSP will be charged the appropriate water delivery rate based on measured deliveries, see IID Water Rate Schedules. As of March 2025, IID has issued two water supply agreement and one "Will-Serve Letter" under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP.

IID Temporary Land Conversion Fallowing Policy (May 2012)

Imperial County planning officials determined that renewable energy facilities were consistent with the county's agricultural zoning designation and began issuing conditional use permits (CUPs) for these projects with 30-year terms with a 10-year extension (40 years in total). These longer-term, but temporary, land use designations were not conducive to a coordinated land use/water supply policy as envisioned in the Imperial IRWMP, because temporary water supply assignments during a CUP term were not sufficient to meet the water supply verification requirements for new project approvals. Agricultural landowners also sought long-term assurances from IID that, at project termination, irrigation services would be available for them to resume their farming operations.

Based on these conditions, IID determined it had to develop a water supply policy that conformed to the local land use decision-making in order to facilitate new development and economic diversity in Imperial County which resulted in the IID Temporary Land Conversion Fallowing Policy (TLCFP).[12] IID concluded that certain lower water use projects could still provide benefits to local water users. The resulting benefits; however, may not be to the same categories of use (e.g., municipal, commercial and industrial) but to the district as a whole.

Water demands for certain non-agricultural projects are typically less than that required for agricultural production; this reduced demand allows conserved water to be made available for other users under IID's annual consumptive use cap. This allows the district to avail itself of the ability during the term of the QSA/Transfer Agreements under CWC Section 1013 to create conserved water through projects such as temporary land fallowing conservation measures. This conserved water can then be used to satisfy the district's conserved water transfer obligation and for environmental mitigation purposes.

Under the terms of the legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the TLCFP was adopted by the IID board on May 8, 2012 and revised on March 29, 2016 to update the fee schedule for 2016. This policy provides a framework for a temporary, long-term fallowing program to work in concert with the IWSP. While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce efficiency conservation and water use reduction demands on IID water users, thus providing district wide benefits.

[12] *IID website: Temporary Land Conversion Fallowing Policy (TLCFP), and The TLCFP are the sources of the text for this section.*

IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS

The laws and regulations that influence IID's water supply are noted in this section. The Law of the River (as described below), along with the 2003 Quantification Settlement Agreement and Related Agreements serve as the laws, regulations and agreements that primarily influence the findings of this WSA. These agreements grant California the most senior water rights along the Colorado River and specify that IID has access to 3.1 MAF per year. These two components will influence future decisions in terms of water supply availability during periods of shortages.

California Law

IID has a longstanding right to divert Colorado River water, and IID holds legal titles to all of its water and water rights in trust for landowners within the district (CWC Sections 20529 and 22437; *Bryant v. Yellen*, 447 U.S. 352, 371 (1980), fn.23.). Beginning in 1885, a number of individuals, as well as the California Development Company, made a series of appropriations of Colorado River water under California law for use in the Imperial Valley. The rights to these appropriations were among the properties acquired by IID from the California Development Company.

Law of the River

Colorado River water rights are governed by numerous compacts, state and federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the "Law of the River." Together, these documents form the basis for allocation of the water, regulation of land use, and management of the Colorado River water supply among the seven basin states and Mexico.

Of all regulatory literature that governs Colorado River water rights, the following are the specifics that impact IID:

- Colorado River Compact (1922)
- Boulder Canyon Project Act (1928)
- California Seven-Party Agreement (1931)
- Arizona v. California US Supreme Court Decision (1964, 1979)
- Colorado River Basin Project Act (1968)
- Quantification Settlement Agreement and Related Agreements (2003)
- 2003 Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA)
- 1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs
- Annual Operating Plan (AOP) for Colorado River Reservoirs
- 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead (2007 Interim Guidelines)

Colorado River Compact (1922)

With authorization of their legislatures and urging of the federal government, representatives from the seven Colorado River basin states began negotiations regarding distribution of water from the Colorado River in 1921. In November 1922, an interstate agreement called the "Colorado River Compact" was signed by the representatives giving the Lower Basin perpetual rights to annual apportionments of 7.5 million acre-feet (MAF) of Colorado River water (75 MAF over ten years). The Upper Basin was to receive the remainder, which based on the available hydrological record was also expected to be 7.5 MAF annually, with enough left over to provide 1.5 MAF annually to Mexico.

Boulder Canyon Project Act (1928)

Provisions in the 1928 Boulder Canyon Project Act made the compact effective and authorized construction of Hoover Dam and the All-American Canal, and served as the United States' consent to accept the Compact. Through a Presidential Proclamation on June 25, 1929, this act resulted in ratification of the Compact by six of the basin states and required California to limit its annual consumptive use to 4.4 MAF of the lower basin's apportionment plus not less than half of any excess or surplus water unportioned by the Compact. A lawsuit was filed by the State of Arizona after its refusal to sign. Through the implementation of its 1929 Limitation Act, California abided by this federal mandate. The Boulder Canyon Act authorized the Secretary of the Interior (Secretary) to "contract for the storage of water... and for the delivery thereof... for irrigation and domestic uses," and additionally defined the lower basin's 7.5 MAF apportionment split, with an annual allocation 0.3 MAF to Nevada, 2.8 MAF to Arizona, and 4.4 MAF to California. Even though the three states never formally settled or agreed to these terms, a 1964 Supreme Court decision (*Arizona v. California*, 373 U.S. 546) declared the three states' consent to be insignificant since the Boulder Canyon Project Act was authorized by the Secretary.

California Seven-Party-Agreement (1931)

Following implementation of the Boulder Canyon Project Act, the Secretary requested that California make recommendations regarding distribution of its apportionment of Colorado River water. In August 1931, under chairmanship of the State Engineer, the California Seven-Party Agreement was developed and authorized by the affected parties to prioritize California water rights. The Secretary accepted this agreement and established these priorities through General Regulations issued in September of 1931. The first four (4) priority allocations account for California's annual apportionment of 4.4 MAF, with agricultural entities using 3.85 MAF of that total. Additional priorities are defined for years in which the Secretary declares that excess waters are available.

Arizona v. California U.S. Supreme Court Decision (1964, 1979)

The 1964 Supreme Court decision settled a 25-year disagreement between Arizona and California that stemmed from Arizona's desire to build the Central Arizona Project to enable use of its full apportionment. California's argument was that as Arizona used water from the Gila River, which is a Colorado River tributary, it was using a portion of its annual Colorado River apportionment. An additional argument from California was that it had developed a historical use of some of Arizona's apportionment, which, under the

doctrine of prior appropriation, precluded Arizona from developing the project. California's arguments were rejected by the U.S. Supreme Court. Under direction of the Supreme Court, the Secretary was restricted from delivering water outside of the framework of apportionments defined by law. Preparation of annual reports documenting consumptive use of water in the three lower basin states was also mandated by the Supreme Court. In 1979, present perfected water rights (PPRs) referred to in the Colorado River Compact and in the Boulder Canyon Project Act were addressed by the Supreme Court in the form of a Supplemental Decree.

In March of 2006, a Consolidated Decree was issued by the Supreme Court to provide a single reference to the conditions of the original 1964 decrees and several additional decrees in 1966, 1979, 1984 and 2000 that stemmed from the original ruling. The Consolidated Decree also reflects the settlements of the federal reserved water rights claim for the Fort Yuma Indian Reservation.

Colorado River Basin Project Act (1968)

In 1968, various water development projects in both the upper and lower basins, including the Central Arizona Project (CAP) were authorized by Congress. Under the Colorado River Basin Project Act, priority was given to California's apportionment over (before) the CAP water supply in times of shortage. Also under the act, the Secretary was directed to prepare long-range criteria for the Colorado River reservoir system in consultation with the Colorado River Basin States.

Quantification Settlement Agreement and Related Agreements (2003)

With completion of a large portion of the CAP infrastructure in 1994, creation of the Arizona Water Banking Authority in 1995, and the growth of Las Vegas in the 1990s, California encountered increasing pressure to live within its rights under the Law of the River. After years of negotiating among Colorado River Compact States and affected California water delivery agencies, a Quantification Settlement Agreement and Related Agreements and documents were signed on October 10, 2003, by the Secretary of Interior, IID, Coachella Valley Water District (CVWD), Metropolitan Water District of Southern California (MWD), San Diego County Water Authority (SDCWA), and other affected parties.

The Quantification Settlement Agreement and Related Agreements (QSA/Transfer Agreements) are a set of interrelated contracts that resolve certain disputes among the United States, the State of California, IID, MWD, CVWD and SDCWA, for a period of 35 to 75 years, regarding the reasonable and beneficial use of Colorado River water; the ability to conserve, transfer and acquire conserved Colorado River water; the quantification and priority of Priorities 3(a) and 6(a)[13] within California for use of Colorado River water; and the obligation to implement and fund environmental impact mitigation.

[13] Priorities 1, 2, 3(b), 6(b), and 7 of current Section 5 Contracts for the delivery of Colorado River water in the State of California and Indian and miscellaneous Present Perfected Rights within the State of California and other existing surplus water contracts are not affected by the QSA Agreement.

Conserved water transfer agreements between IID and SDCWA, IID and CVWD, and IID and MWD are all part of the QSA/Transfer Agreements. For IID, these contracts identify conserved water volumes and establish transfer schedules along with price and payment terms. As specified in the agreements, IID will transfer nearly 415,000 AF annually over a 35-year period (or longer), as follows:

- to MWD 110,000 AF [modified to 105,000 AF in 2007],
- to SDCWA 205,000 AF,
- to CVWD and MWD combined 103,000 AF, and
- to certain San Luis Rey Indian Tribes up to 11,500 AFY of water.

All of the conserved water will ultimately come from IID system and on-farm efficiency conservation improvements. In the interim, IID has implemented a Fallowing Program to generate water associated with Salton Sea mitigation related to the impacts of the IID/SDCWA water transfer, as required by the State Water Resources Control Board, which is to run from 2003 through 2017. In return for its QSA/Transfer Agreements programs and deliveries, IID will receive payments totaling billions of dollars to fund needed efficiency conservation measures and to pay growers for conserved on-farm water, so IID can transfer nearly 14.5 MAF of water without impacting local productivity. In addition, IID will transfer to SDCWA 67,700 AFY annually of water conserved from the lining of the AAC in exchange for payment of lining project costs and a grant to IID of certain rights to use the conserved water. In addition to the 105,000 acre-feet of water currently being conserved under the 1988 IID/MWD Conservation Program, these more recent agreements define an additional 303,000 AFY to be conserved by IID from on-farm and distribution system conservation projects for transferred to SDCWA, CVWD, and MWD.

Colorado River Water Delivery Agreement (2003)[14]

As part of QSA/Transfer Agreements among California and federal agencies, the Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA) was entered into by the Secretary of the Interior, IID, CVWD, MWD and SDCWA. This agreement involves the federal government because of the change in place of diversion from Imperial Dam into the All-American Canal to Parker Dam into MWD's Colorado River Aqueduct.

The CRWDA assists California to meet its "4.4 Plan" goals by quantifying deliveries for a specific number of years for certain Colorado River entitlements so transfers may occur. In particular, for the term of the CRWDA, quantification of Priority 3(a) was effected through caps on water deliveries to IID (consumptive use of 3.1 MAF per year) and CVWD (consumptive use of 330 KAF per year). In addition, California's Priority 3(a) apportionment between IID and CVWD, with provisions for transfer of supplies involving IID, CVWD, MWD and SDCWA are quantified in the CRWDA for a period of 35 years or 45 years (assumes SDCWA does not terminate in year 35) or 75 years (assumes SDCWA and IID mutually consent to renewal term of 30 years).

Allocations for consumptive use of Colorado River water by IID, CVWD and MWD that will enable California to stay within its basic annual apportionment (4.4 MAF plus not less than half of any declared surplus) are

[14] *CRWDA: Federal QSA accessed 7 June 2017.*

defined by the terms of the QSA/Transfer Agreements (**Table 9**). As specified in the QSA/Transfer Agreements, by 2026, IID's annual use within (Imperial Valley) is to be reduced to just over 2.6 MAF of its 3.1 MAF quantified annual apportionment. The remaining nearly 500,000 AF (which includes the 67,000 AF from AAC lining) are to be transferred annually to urban water users outside of the Imperial Valley.

Table 9. CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY)

User	Apportionment (AFY)
Palo Verde Irrigation District and Yuma Project*	420,000
Imperial Irrigation District	3,100,000
Coachella Valley Water District	330,000
Metropolitan Water District of Southern California*	550,000
Total:	**4,400,000**

* PVID and Yuma Project did not agree to a cap; value represents a contractual obligation by MWD to assume responsibility for any overages or be credited with any volume below this value.

Notes: All values are consumptive use at point of Colorado River diversion: Palo Verde Diversion Dam (PVID), Imperial Dam (IID and CVWD), and Parker Dam (MWD). Source: IID Annual Water Report

Quantification of Priority 6(a) was effected through quantifying annual consumptive use amounts to be made available in order of priority to MWD (38 KAF), IID (63 KAF), and CVWD (119 KAF) with the provision that any additional water available to Priority 6(a) be delivered under IID's and CVWD's existing water delivery contract with the Secretary.[15] The CRWDA provides that the underlying water delivery contract with the Secretary remain in full force and effect. (*Colorado River Documents 2008*, Chapter 6, pages 6-12 and 6-13). The CRWDA also provides a source of water to effect a San Luis Rey Indian Water Rights settlement. Additionally, the CRWDA satisfies the requirement of the 2001 Interim Surplus Guidelines (ISG) that a QSA be adopted as a prerequisite to the interim surplus determination by the Secretary in the ISG.

Inadvertent Overrun Payback Policy (2003)

The CRWDA Inadvertent Overrun Payback Policy (IOPP), adopted by the Secretary contemporaneously with the execution of the CRWDA, provides additional flexibility to Colorado River management and applies to entitlement holders in the Lower Division States (Arizona, California and Nevada).[16] The IOPP defines inadvertent overruns as "Colorado River water diverted, pumped, or received by an entitlement holder of the Lower Division States that is in excess of the water users' entitlement for the year." An entitlement holder is allowed a maximum overrun of 10 percent of its Colorado River water entitlement when operating under normal conditions.

In the event of an overrun, the IOPP provides a mechanism to payback the overrun. When the Secretary has declared a normal year for Colorado River diversions, a contractor has from one to three years to pay back its obligation, with a minimum annual payback equal to 20 percent of the entitlement holder's maximum allowable cumulative overrun account or 33.3 percent of the total account balance, whichever is greater. However, when Lake Mead is below 1125 feet on January 1, the terms of the IOPP require that the payment of the inadvertent overrun obligation be made in the calendar year after the overrun is

[15] When water levels in the Colorado River reservoirs are low, Priority 5, 6 and 7 apportionments are not available for diversion.

[16] *USBR, 2003 CRWDA ROD Implementation Agreement, IOPP and Related Federal Actions Final EIS. Section IX. Implementing the Decision A. Inadvertent Overrun and Payback Policy. Pages 16-19 of 34.*

reported in the USBR Lower Colorado Region Colorado River Accounting and Water Use Report [for] Arizona, California, and Nevada (Decree Accounting Report).[17]

1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs

The 1970 Operating Criteria control operation of the Colorado River reservoirs in compliance with requirements set forth in the Colorado River Compact of 1922, the United States-Mexico Water Treaty of 1944, the Colorado River Storage Project Act of 1956, the Boulder Canyon Projects Act (Lake Mead) and the Colorado River Basin Project Act (Upper Basin Reservoirs) of 1968, and other applicable federal laws. Under these Operating Criteria, the Secretary makes annual determinations published in the USBR Annual Operating Plan for Colorado River Reservoirs (discussed below) regarding the release of Colorado River water for deliveries to the lower basin states. A requirement to equalize active storage between Lake Powell and Lake Mead when there is sufficient storage in the Upper Basin is included in these operating criteria. **Figure 5** identifies the major storage facilities at the upper and lower basin boundaries.

[17] *2003 CRWDA ROD. Section IX. A.6.c,, page 18 of 34.*

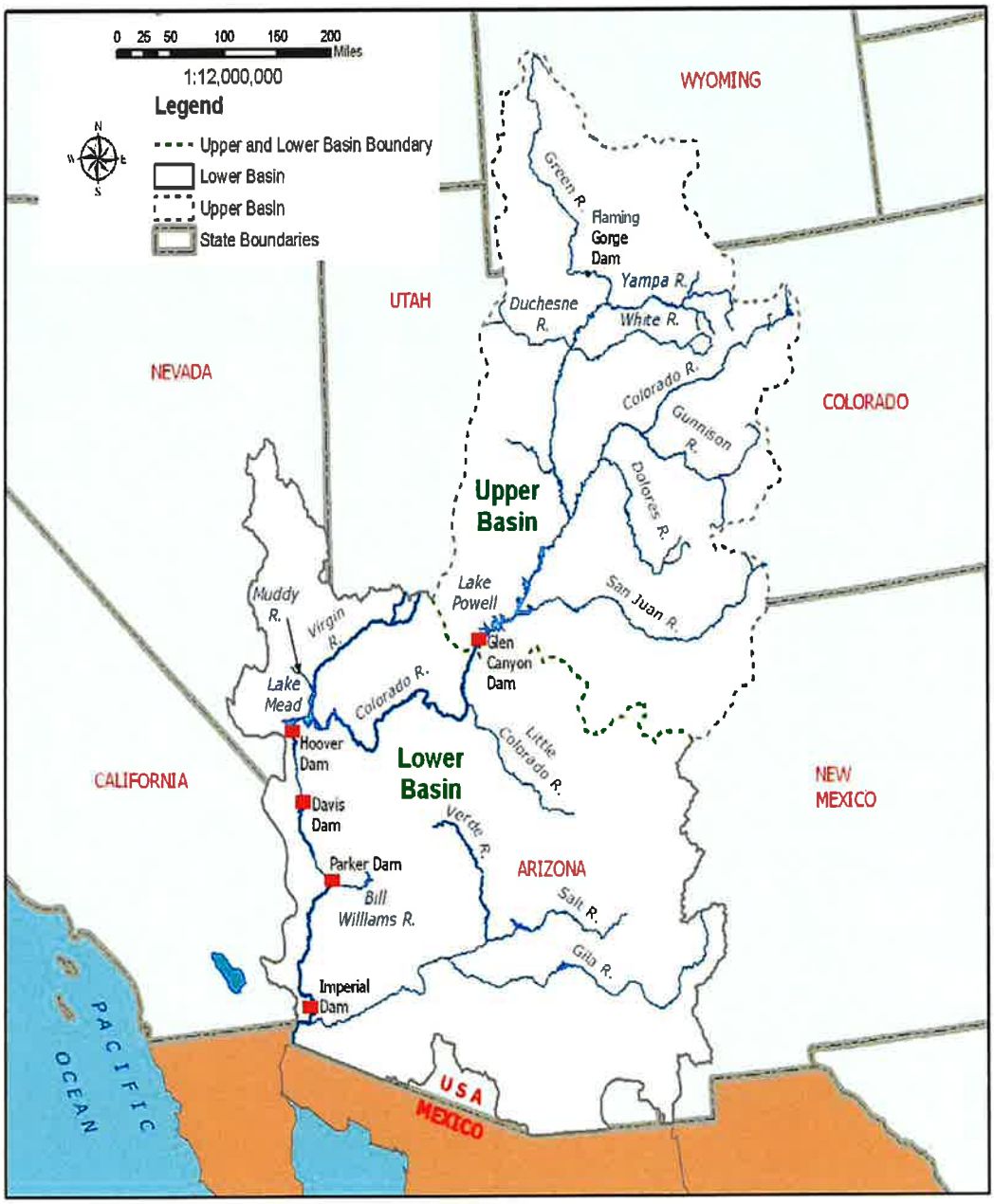


Figure 5. Major Colorado River Reservoir Storage Facilities and Basin Location Map
Source: **Final EIS – Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Volume 1 Chapter 1 Purpose and Need**, p I-10.

***Annual Operating Plan for Colorado River Reservoirs** (Applicable when Lake Mead Surplus/Shortage)*

The AOP is developed in accordance with Section 602 of the Colorado River Basin Project Act (Public Law 90-537); the Criteria for Coordinated Long-Range Operations of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of 1968, as amended, promulgated by the Secretary of the Interior; and Section 1804(c)(3) of the Grand Canyon Protection Act (Public Law 102-575). As part of the AOP process, the Secretary makes determinations regarding the availability of Colorado River water for deliveries to the lower basin states, including whether normal, surplus, and shortage conditions are in effect on the lower portion of the Colorado River.

2007 Colorado River Interim Guidelines for Lower Basin Shortages (2007 Interim Guidelines)

A multi-year drought in the Colorado River Upper Basin triggered the need for the 2007 Interim Shortage Guidelines. In the summer of 1999, Lake Powell was essentially full with reservoir storage at 97 percent of capacity. However, precipitation fell off starting in October 1999 and 2002 inflow was the lowest recorded since Lake Powell began filling in 1963.[18] By August 2011, inflow was 279 percent of average; however, drought resumed in 2012 and continued through calendar year 2022. Although 2023 experienced hydrological improvements, it was not sufficient to make a significant difference in lake elevation. Using the record in **Table 10,** average unregulated inflow to Lake Powell for water years 2000-2024 is 68 percent; or if 2011 is excluded, 64 percent of the historic average.

Table 10. Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2024

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
62%	59%	25%	51%	49%	105%	73%	68%	102%	88%	73%
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
136%	35%	49%	90%	83%	80%	101%	36%	111%	45%	33%
2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
52%	112%	66%	–	–	–	–	–	–	–	–

Source: UCR Water Operations: Historic Data (2000-2024)

In the midst of the drought period, USBR developed 2007 Interim Guidelines with consensus from the seven basin states, which selected the Draft EIS Preferred Alternative as the basis for USBR's final determination. The basin states found the Preferred Alternative best met all aspects of the purpose and need for the federal action. [19]

The 2007 Interim Guidelines Preferred Alternative highlights the following:

1. The need for the Interim Guidelines to remain in place for an extended period of time.
2. The desirability of the Preferred Alternative based on the facilitated consensus recommendation from the basin states.
3. The likely durability of the mechanisms adopted in the Preferred Alternative in light of the extraordinary efforts that the basin states and water users have undertaken to develop

[18] Water Year: October 1 through September 30 of following year, so water year ending September 30, 1999

[19] USBR *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* <http://www.usbr.gov/lc/region/programs/strategies.html>

implementing agreements that will facilitate the water management tools (shortage sharing, forbearance, and conservation efforts) identified in the Preferred Alternative.

4. That the range of elements in the Preferred Alternative will enhance the Secretary's ability to manage the Colorado River reservoirs in a manner that recognizes the inherent tradeoffs between water delivery and water storage.

In June 2007, USBR announced that a preferred alternative for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead (Final Preferred Alternative) had been determined. The Final Preferred Alternative, based on the basin states' consensus alternative and an alternative submitted by the environmental interests called "Conservation Before Shortage," is comprised of four key operational elements which are to guide operations of Lake Powell and Lake Mead through 2026. These four operational elements are:

1. Shortage strategy for Lake Mead and Lower Division states: The Preferred Alternative proposed discrete levels of shortage volumes associated with Lake Mead elevations to conserve reservoir storage and provide water users and managers in the Lower Basin with greater certainty to know when, and by how much, water deliveries will be reduced during low reservoir conditions.
2. Coordinated operations of Lake Powell and Lake Mead: The Preferred Alternative proposed a fully coordinated operation of the reservoirs to minimize shortages in the Lower Basin and to avoid risk of curtailments of water use in the Upper Basin.
3. Mechanism for storage and delivery of conserved water in Lake Mead: The Preferred Alternative proposed the Intentionally Created Surplus (ICS) mechanism to provide for the creation, accounting, and delivery of conserved system and non-system water thereby promoting water conservation in the Lower Basin. Credits for Colorado River or non-Colorado River water that has been conserved by users in the Lower Basin creating an ICS would be made available for release from Lake Mead at a later time. The total amount of credits would be 2.1 MAF, but this amount could be increased up to 4.2 MAF in future years.
4. Modifying and extending elements of the Interim Surplus Guidelines (ISG). The ISG determines conditions under which surplus water is made available for use within the Lower Division states. These modifications eliminate the most liberal surplus conditions thereby leaving more water in storage to reduce the severity of future shortages.

With respect to the various interests, positions and views of the seven basin states, this provision adds an important element to the evolution of the legal framework for prudent management of the Colorado River. Furthermore, the coordinated operation element allows for adjustment of Lake Powell releases to respond to low reservoir storage conditions in either Lake Powell or Lake Mead. States found the Preferred Alternative best met all aspects of the purpose and need for the federal action.[20] The 2007

[20] *USBR Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.*

Interim Guidelines are in place from 2008 through December 31, 2025 (through preparation of the 2026 Annual Operating Plan).

Lower Colorado Region Water Shortage Operations

The Colorado River Basin is experiencing a prolonged period of drought and record-low runoff conditions that have resulted in historically low reservoir levels in both Lake Powell (upper Basin) and Lake Mead (lower Basin). The period from 2000 through 2024 was the lowest 25-year inflow into Lake Powell in the historical record and has strained the Colorado River system, despite an increase in observed runoff in August 2011 when unregulated inflow to Lake Powell was 279 percent of the average. Since 2000, Lake Mead has been below the "average" level of lake elevations (see **Figure 6**). Such conditions have caused the activation of shortage plans for waters users in Arizona and Nevada, and in Mexico. By May of 2022 Lake Meads elevation had declined to 1,048 feet. These conditions resulted in the U.S. Secretary of the Interior declaring the first-ever Tier 2a Shortage on the Colorado River. The drought in the Colorado River watershed had lessened by mid 2023 after a winter of record-breaking rain and snow but not enough to take the Lower Basin out of a Tier 1 Shortage for 2024 operations.

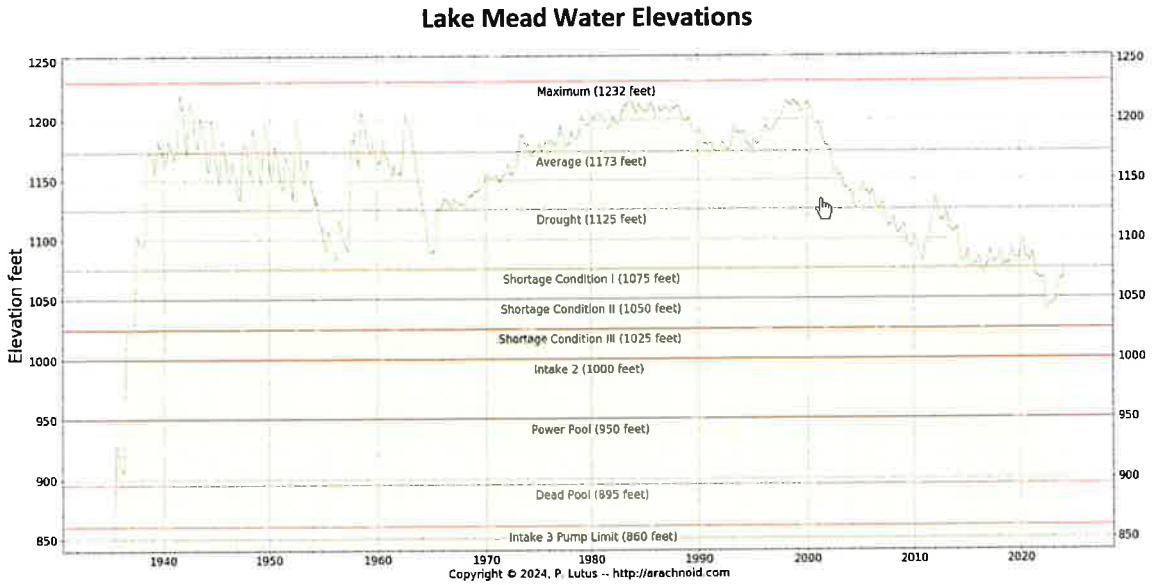


Figure 6. Lake Mead Water Elevation Levels 02.11.24.

According to guidelines put in place in 2007, Arizona and Nevada begin to take shortages when the water elevation in Lake Mead falls below 1,075 feet. The volumes of shortages increase as water levels fall to 1,050 feet and again at 1,025 feet. In 2012, Mexico agreed to participate in a 5-year pilot agreement to share specific volumes of shortages at the same elevations. The 2007 interim shortage guidelines contain no reductions for California, which has senior water rights to the Central Arizona Project water supply, through 2025 when the guidelines expire. If Lake Mead's elevation drops to 1,025 feet, a re-consultation process would be triggered among the basin states to address next steps. Consultation would start out within each state, then move to the three lower basin states, followed by all seven states and the USBR.

Mexico will then be brought into the process unless they choose to participate earlier. In total, 721,000 acre-feet of reductions were implemented in the Lower Basin and Mexico in 2023 consistent with various agreements that dictate the operation of the Colorado River.

California has no stipulated reduction to its water supplies under a Tier 2a Shortage declaration. While not directly affected by the shortage reductions announced by Reclamation, the Shortage condition does prevent IID from overrunning its approved water order and, as stated earlier, contributions to address Lake Mead water elevation are anticipated by IID. IID has entered into a voluntary water conservation agreement for the benefit of Lake Mead, up to 250,000 AFY, through 2026.

IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND

SB 610 requires an analysis of a normal, single dry, and multiple dry water years to show that adequate water is available for the proposed Project in various climate scenarios. Water availability for this Project in a normal year is no different from water availability during a single-dry and multiple-dry year scenarios. This is due to the small effect rainfall has on water availability in IID's arid environment along with IID's strong entitlements to the Colorado River water supply. Local rainfall does have some impact on how much water is consumed (i.e. if rain falls on agricultural lands, those lands will not demand as much irrigation), but does not impact the definition of a normal year, a single-dry year or a multiple-dry year scenario.

WATER AVAILABILITY – NORMAL YEAR

IID is entitled to annual net consumptive use of 3.1 MAF of Colorado River, less its QSA/Transfer Agreement obligations. Imperial Dam, located north of Yuma, Arizona, serves as a diversion structure for water deliveries throughout southeastern California, Arizona and Mexico. Water is transported to the IID water service area through the AAC for use throughout the Imperial Valley. IID historic and forecast net consumptive use volumes at Imperial Dam from CRWDA Exhibit B are shown in **Table 11**. Volumes 2003-2024 are adjusted for USBR Decree Accounting historic records. Volumes for 2025-2077 are from CRWDA Exhibit B modified to reflect 2014 Letter Agreement changes to the 1988 IID/MWD Water Conservation Agreement.[21]

Due to limits on annual consumptive use of Colorado River water under the QSA/Transfer Agreements, IID's water supply during a normal year is best represented by the CRWDA Exhibit B Net Available for Consumptive Use **(Table 11**, Column 11). The annual volume is IID Priority 3(a) Quantified Amount of 3.1 million acre-feet (MAF) (**Table 11**, Column 2) less the IID transfer program reductions for each year (**Table**

[21] 2014 Imperial Irrigation District Letter Agreement for Substitution and Conservation Modifications to the IID/MWD Water Conservation Agreement - December 17, 2014.

11, Columns 3-9). IID suggests **Table 11**, which assumes full use of IID's quantified water supply, be used in determining base normal year water availability.

Table 11. IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B)

IID Quantification and Transfers, Volumes in KAF at Imperial Dam [1]										
Col 1	2	3	4	5	6	7	8	9	10	11
	IID Priority 3(a)									
		IID Reductions								**IID Net [Available for] Consumptive Use (Col 2 - 10)**
Year	**IID 3(a) Quantified Amount**	**1988 MWD Transfer[2]**	**SDCWA Transfer**	**AAC Lining**	**Salton Sea Mitigation SDCWA Transfer[3]**	**Intra-Priority 3 CVWD Transfer**	**MWD Transfer w\ Salton Sea Restoration[4]**	**Misc. PPRs**	**IID Total Reduction (Σ Cols 3-9)[5]**	
2003	3,100	105.1	10.0	0.0	0.0	0.0	0.0	11.5	126.6	2978.2
2004	3,100	101.9	20.0	0.0	15.0	0.0	0.0	11.5	148.4	2743.9
2005	3,100	101.9	30.0	0.0	15.0	0.0	0.0	11.5	158.4	2756.8
2006	3,100	101.2	40.0	0.0	20.0	0.0	0.0	11.5	172.7	2909.7
2007	3,100	105.0	50.0	0.0	25.0	0.0	0.0	11.5	191.5	2872.8
2008	3,100	105.0	50.0	8.9	26.0	4.0	0.0	11.5	205.4	2825.1
2009	3,100	105.0	60.0	65.5	30.1	8.0	0.0	11.5	280.1	2566.7
2010	3,100	105.0	70.0	67.7	33.8	12.0	0.0	11.5	294.8	2540.5
2011	3,100	103.9	63.3	67.7	0.0	16.0	0.0	11.5	262.4	2915.8
2012	3,100	104.1	106.7	67.7	15.2	21.0	0.0	11.5	326.2	2,903.2
2013	3,100	105.0	100.0	67.7	71.4	26.0	0.0	11.5	381.6	2,554.9
2014	3,100	104.1	100.0	67.7	89.2	31.0	0.0	11.5	403.5	2,533.4
2015	3,100	107.82	100.0	67.7	153.3	36.0	0.0	11.5	476.3	2,480.9
2016	3,100	105.0	100.0	67.7	130.8	41.0	0.0	11.5	456.0	2,504.3
2017	3,100	105.0	100.0	67.7	105.3	45.0	0.0	9.9	432.9	2,667.1
2018	3,100	105	130.0	67.7	0.1	63	0.0	9.7	375.5	2,724.5
2019[6]	3,100	105	160.0	67.7	46.55	68	0.0	6.9	454.2	2,645.8
2020	3,100	105	192.5	67.7	0.0	73	0.0	9.1	448.0	2,652.0
2021	3,100	105	205.0	67.7	0.0	78	0.0	9.3	465.0	2,635.0
2022	3,100	105	202.5	67.7	0	83	0.0	9.8	468.0	2,632.0
2023[7]	3,100	105	150.0	67.7	0	88	0.0	11.5	420.6	2,679.4
2024	3,100	105	150	67.7	0	93	0.0	11.5	427.2	2672.8
2025	3,100	105	200	67.7	0	98	0.0	11.5	482.2	2,617.8
2026	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2027	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2028	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2029-37	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2038-47[8]	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2048-77[9]	3,100	105	200	67.7	0	50	0.0	11.5	434.2	2,665.8

1. 2003 through 2024, volumes are adjusted for actual USBR Decree Accounting values; IID Total Reduction and Net Available for Consumptive Use may not equal Col 2 minus Col 10, if IID conservation/use was not included in Exhibit B.
2. 2014 Letter of Agreement provides that, effective January 2016 total amount of conserved water available is 105 KAFY
3. Salton Sea Mitigation volumes may vary based on conservation volumes and method of conservation.
4. *This transfer is not likely given lack of progress on Salton Sea restoration as of 2018; shaded entries represents volumes that may vary..*
5. Reductions include conservation for 1988 IID/MWD Transfer, IID/SDCWA Transfer, AAC Lining; SDCWA Transfer Mitigation, MWD Transfer w/Salton Sea Restoration (if any); Misc. PPRs. Amounts are independent of increases and reductions as allowed by the IOPP. *Reductions do not reflect additional reduced volumes for temporary SCIA commitments to Lake Mead which initiated in 2023 with a sunset schedule of 2026.*
6. In order to resolve the outstanding 2010 Salton Sea mitigation water pre-delivery issue, IID left 46,546 AF of extraordinary conservation in Lake Mead. See IID's December 19, 2019 revised 2019 water order and Reclamation's March 10, 2020 approval letter.
7. In 2023 and 2024, 50 KAF of ICS was foregone by SDCWA for the benefit of Lake Mead under the Drought Response Plan by Reclamation.
8. Assumes SDCWA does not elect termination in year 35.
9. Assumes SDCWA and IID mutually consent to renewal term of 30 years.
10. Modified from 100 KAFY in CRWDA Exhibit B; stating in 2018 MWD will provide CVWD 50 KAFY of the 100 KAFY.

Source: CRWDA: Federal QSA Exhibit B, p 13; updated values from 2023 Annual Water & QSA Implementation Report

CRWDA Exhibit B Net Available for Consumptive Use volumes less system operation demand represents the amount of water available for delivery by IID Water Department to its customers each year. In a normal year, perhaps 50,000 to 100,000 AF of effective rainfall would fall in the IID water service area. However, rainfall is not evenly distributed throughout the IID water service area and is not taken into account by IID in the submittal of its Estimate of Diversion (annual water order) to the USBR.

EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS

Historically, when drought conditions exist within the IID water service area, as has been the case for the past two decades, the water supply available to meet agricultural and non-agricultural water demands remains the same as normal year water supply because IID historically relied solely on its entitlement for Colorado River water. Due to the priority of IID water rights and other agreements, drought conditions affecting Colorado River water supplies cause shortages for Arizona, Nevada and Mexico, before impacting California and IID. Accordingly, the Net Available for Consumptive Use volumes in **Table 11**, Column 11 represents the water supply at Imperial Dam available for diversion by IID in single-dry year and multiple-dry year scenarios, consistent with IID's senior water rights. The runoff declines in the upper basin and prolonged drought conditions throughout the west have resulted, for the first time, in the Colorado River operating under a Tier 2a Shortage Condition in 2023, creating long-term water supply uncertainties throughout the Basin states. The expiration of the 2007 Guidelines add to the uncertainty of operations post 2026.

Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP)

Under normal operating conditions, the CRWDA Inadvertent Overrun Payback Policy (IOPP), provided IID with some flexibility to manage its water use. When the water level in Lake Mead is above 1,125 feet, an overrun of its USBR approved annual water order was permissible, and IID had up to three years to pay water use above the annual water order. When Lake Mead's water level is at or below 1,125 feet on January 1 in the calendar year after the overrun is reported in the USBR Lower Colorado Region Decree Accounting Report, the IOPP prohibits additional overruns and requires that outstanding overruns be paid back in the subsequent calendar year rather than in three years as allowed under normal conditions; that is, the payback is to be made in the calendar year following publication of the overrun in the USBR Decree Accounting Report. The IOPP is suspended during shortage conditions. For historic IID annual rainfall, net consumptive use, transfers and IID underrun/overrun amounts, see **Table 12.**

Table 12. IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024

Year	IID Total Annual Rainfall	IID Water Users	IID/MWD Transfer	IID/ SDCWA Transfer	SDCWA Transfer Salton Sea Mitigation	IID Underrun / Overrun	IID/CVWD Transfer	AAC Lining
1988		2,947,581						
1989		3,009,451						
1990	91,104	3,054,188	6,110					
1991	192,671	2,898,963	26,700					
1992	375,955	2,575,659	33,929					
1993	288,081	2,772,148	54,830					
1994	137,226	3,048,076	72,870					
1995	159,189	3,070,582	74,570					
1996	78,507	3,159,609	90,880					
1997	64,407	3,158,486	97,740					
1998	100,092	3,101,548	107,160					
1999	67,854	3,088,980	108,500					
2000	29,642	3,112,770	109,460					
2001	12,850	3,089,911	106,880					
2002	12,850	3,152,984	104,940					
2003	116,232	2,978,223	105,130	10,000	0	**6,555**		
2004	199,358	2,743,909	101,900	20,000	15,000	-166,408		
2005	202,983	2,756,846	101,940	30,000	15,000	-159,881		
2006	19,893	2,909,680	101,160	40,000	20,000	**12,414**		
2007	64,580	2,872,754	105,000	50,000	25,021	**6,358**		
2008	63,124	2,825,116	105,000	50,000	26,085	-47,999	4,000	8,898
2009	30,0354	2,566,713	105,000	60,000	30,158	-237,767	8,000	65,577
2010	189,566	2,545,593	105,000	70,000	33,736	-207,925	12,000	67,700
2011	109,703	2,915,784	103,940	63,278	0	**82,662**	16,000	67,700
2012	133,526	2,903,216	104,140	106,722	15,182	**134,076**	21,000	67,700
2013	134,497	2,554,845	105,000	100,000	71,398	-64,981	26,000	67,700
2014	53,517	2,533,414	104,100	100,000	89,168	-797	31,000	67,700
2015	97,039	2,480,933	107,820	100,000	153,327	-90,025	36,000	67,700
2016	90,586	2,504,258	105,000	100,000	130,796	-62,497	41,000	67,700
2017	105,919	2,548,171	105,000	100,000	105,311	-30,591	45,000	67,700
2018	63,318	2,625,422	105,000	130,000	0	0	63,000	67,700
2019	146,384	2,558,136	105,000	160,000	46,555	-34,215	68,000	67,700
2020	130,275	2,493,623	105,000	192,500	0	-98,073	73,000	67,700
2021	81,901	2,552,674	105,000	205,000	0	-37,737	78,000	67,700
2022	61,377	2,577,164	105,000	202,500	0	-6,470	83,000	67,700
2023	68,122	2,417,024	105,000	150,000	0	-146.8	88,000	67,700
2024	**88,063**	**2,311,905**	105,000	150,000[1]	0	**-93,255**	93,000	67,700

Notes: Volumes in acre-feet and except Total Annual Rainfall are USBR Decree Accounting Report record at Imperial Dam.

IID Total Annual Rainfall from IID Provisional Water Balance, first available calculations are for 1990

Not all IID QSA programs are shown on this table.

Source: USBR Decree Accounting reports, except IID Total Rainfall and IID Overrun/Underrun is a separate calculation

Source: 2023 IID Annual Water & QSA Implementation Report and 2024 IID SWRCB Report; IID Total Rainfall and IID Overrun/ Underrun is a separate calculation

On August 16, 2021, the water level in Lake Mead was 1,060 feet and for the first time since the IOPP came into effect, the Secretary of the Interior declared the first-ever, Tier 1 shortage condition for Colorado River operations, with elevations reaching 1,045 as of mid 2022 (**Figure 7**). For IID, this meant that no overruns would be allowed to IID's approved water order which continues in effect through 2024.

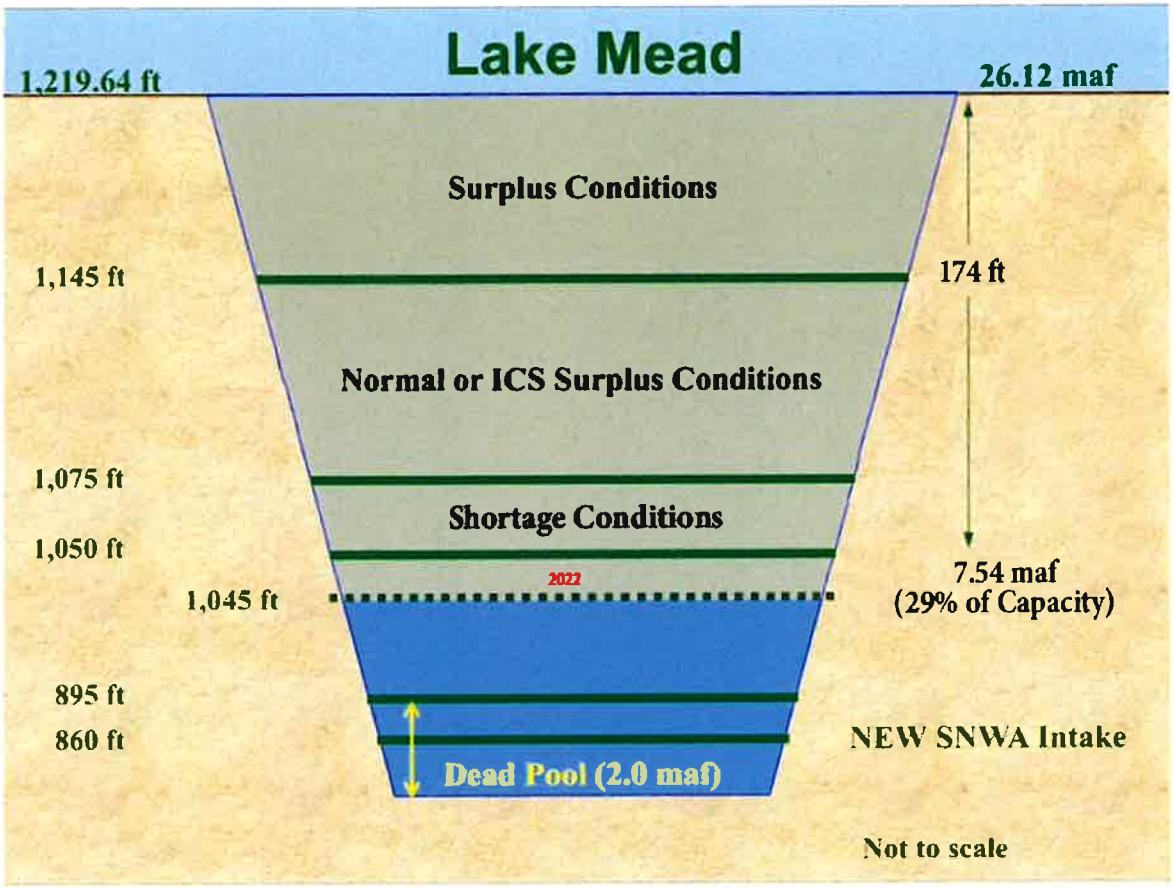


Figure 7. Lake Mead Schematic (June 15, 2022)

The flexibility that IID was allowed in 2013 and 2014 is no longer available to the district. Under the terms of the IOPP, no overruns are allowed in a year when payback is required. IID has not experienced any overrun pay back since 2014 as noted in **Table 13**. Under shortage conditions, IID would use any conserved water stored in a non-System reservoir, if available, to prevent any overrun.

Table 13. IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024

Calendar Year of Payback	2011 Overrun Payback (AF)	2012 Overrun Payback (AF)	Payback Total for Calendar Year (AF)
2013	55,710	-	55,710
2014	20,662	134,076	154,738
Total Payback	**76,372**	**134,076**	**210,448**

Notes: All values are consumptive use volumes at Imperial Dam (AF).
2013 Payback Total was 62 KAF, but in 2012 IID had 6,290 AF of early payback, reducing volume to 55,710 AF

The 2013 IOPP payback obligation, prohibition on overruns in payback years, and suspension of this flexibility during shortage conditions led the IID Board to implement an apportionment program pursuant to the 2007 EDP, which has been subsequently revised and modified over the years. The 2023 EDP is a version approved and adopted by the IID Board on July 26, 2023 (see Attachment B). The Revised 2023 EDP also establishes a water exchange clearinghouse to facilitate the movement of water supply between all water users and within water user categories. The established water user categories are 1) agricultural water users, 2) industrial/commercial water users and 3) potable water users. As designed, the clearinghouse will allow IID and its water customers to balance water demands with the water supplies that are available to all users.

Generally, the EDP Apportionment, as discussed in the proceeding section, is not expected to impact potable water uses or industrial/commercial uses. However, given the certainty of continuing drought on the Colorado River through 2026 and other stressors, provisions such as the 2012 IWSP Water Agreement sections 3.7 and 3.8 as well for dry and multiple dry year water assessment may come into effect. IID has agreed to work with public and private treatment water purveyors and Project proponents to ensure to the extent possible that the IWSP Water Supply Agreement terms will not adversely impact Project operation. For purposes of this WSA, years with a shortage condition that impacts non-agricultural projects such as an IOPP payback obligation constitute "dry" years for IID. For single-dry year and multiple-dry water year assessments, IID's EDP shall govern.

Equitable Distribution Plan (EDP) History

A 2006 study by Hanemann and Brookes suggested that overrun conditions were likely to occur 40-50 percent of the years during the decade following the report. Under such conditions a supply/demand imbalance would occur resulting in a need to apportion water consistent with state law. Under California state law, water must be distributed equitably as determined by the IID Board of Directors.

On November 28, 2006, the IID Board of Directors adopted Resolution No 22-2006 approving development and implementation of an Equitable Distribution Plan to address times when customers' demand would exceed IID's Colorado River supply. The EDP, adopted in 2007 allowed the IID Board to institute an apportionment program. As part of this resolution, the IID Board directed the General Manager to prepare the rules and regulations necessary or appropriate to implement the plan within the district. The EDP Regulations were created to enable IID to implement a water management tool (apportionment) to address years in which water demand is expected to exceed supply.

It was expected that an annual EDP Apportionment would be established for each of the next several years, if not for the duration of the QSA. However, the implementation of the EDP apportionment was legally challenged in 2013 with litigation ensuing through 2017 when a statement of decision was issued by the trial court, followed by a writ of mandate and a declaratory judgment later that year. The writ of mandate directed IID to repeal the EDP. On February 6, 2018, the IID board approved a resolution repealing the EDP while the case was on appeal. On July 16, 2020, the appellate court reversed the writ of mandate and declaratory judgment on almost all grounds, including declaratory relief on the water rights issue and IID's

discretion to determine the method of apportionment except for a provision as to how water was prioritized among water user categories. The court ruled that the district is required to distribute water equitably for all categories of users.

On June 21, 2022, IID adopted a revised EDP to address the single outstanding legal issue with respect to prioritization of apportionments among categories of water users. The revised EDP also updated certain operational provisions and most importantly, to the extent feasible, provides for a defined quantity of available, annual water supply apportioned to each water user to prevent cumulative demands from exceeding IID's available, authorized annual Colorado River supply (Appendix B-Equitable Distribution Plan). In July 2023 the EDP was revised again to allow for direct transfer of water through the IID Clearinghouse and among the respective water user categories. Implementation of the EDP resumed in January 1, 2023 and will continue annually thereafter consistent with the latest adopted EDP. For details regarding the EDP and its implementation, including related forms, please visit IID's website at Equitable Distribution | Imperial Irrigation District (iid.com).

Projected Water Supplies

The projected and continued decline in runoff and prolonged drought conditions in the West are expected to contribute to even lower water elevation levels at Lakes Powell and Mead. The Department of the Interior made the decision in early 2022 to protect critical Lake Powell elevations above Glen Canyon Dam by adding 500,000 AF of water from Flaming Gorge reservoir and temporarily reducing the 2022 annual operational release to Lake Mead by 480,000 AF. These conditions resulted in a reduced water apportionment to most of the Lower Division States and Mexico for 2022 through 2024, but did not affect IID's water supply available for consumptive use. However, IID's voluntary commitments for Lake Mead have been in effect since 2023 and will continue through 2026 at the maximum conservation volume of 300,000 AFY.

Despite the Department's extraordinary actions, the hydrological forecasts and reservoir elevations would have continued to decline if not for the Basin state contributions, particularly California's commitments. California reductions, or the potential for regulatory reductions by the Secretary of the Interior post 2026 remain undefined as of the date of this water supply assessment for the Big Rock 2 Solar project.

IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community. In this vein, IID recognizes the need for significant response actions to protect the long-term water supply certainty for the Imperial Valley as the Colorado River operates under these unprecedented conditions. On October 5, 2022 the Colorado River Board of California, in partnership with representatives of the four primary California Section 5 contractors (IID, Palo Verde Irrigation District, Coachella Valley Water District and Metropolitan Water District of Southern California) submitted a letter to the Department of Interior proposing for California to conserve up to an additional 400,000 AF of water in Lake Mead each year, beginning in 2023 and extending through 2026, to assist with stabilizing Colorado River reservoir elevations. IID has entered into an agreement with Reclamation for its share of the California proposal that would not exceed 300,000 AFY. IID proposes to conserve its contribution to Lake

Mead via system and on-farm efficiency conservation and short-term, deficit irrigation (seasonal fallowing).

PROJECT WATER AVAILABILITY FOR A 30-YEAR PERIOD TO MEET PROJECTED DEMANDS

The proposed Project will not require potable (drinking) water for operational purposes.

Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). The Project parcels consist of individual parcels zoned for general agriculture (A-2), general agriculture/rural (A-2-R), general agriculture/rural/renewable energy (A-2-R-RE), heavy agricultural (A-3), and heavy agriculture/renewable energy (A-3-RE). Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland. The Project would use approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development. 90FI 8me LLC (the Applicant) is seeking approval of four (4) CUPs associated with the construction and operation of the Big Rock 2 solar facility. Water would be supplied by IID via the Westside Main canal and delivery gates listed in Table 15 which are all assumed to be in adequate working condition

The proposed amortized 125 AFY water demand for the Project represents an estimated 98.3 percent reduction in historical water demand from the calculated historical 7,348 AFY water demand on the Project parcels.[22]

As noted previously, under the terms of California legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the IID board adopted the TLCFP to address how to deal with any temporary reduction of water use by projects such as solar projects that are developed under a CUP.

While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce the need for efficiency conservation and other water use reduction practices on the part of IID and its water users providing the district with wide benefits. One of the considerations in developing the TLCFP was to provide agricultural land owners with long-term assurances from IID that, at Project termination, irrigation service would be available for them to resume farming operations.

IWSP Water

The IWSP, provided herein as Attachment A, designates up to 25,000 AFY of water for potential conservation for Non-Agricultural Projects within IID's water service area. As of March 2025, IID has up to 18,620 AFY that it may make available for conservation under the IWSP for new projects such as the proposed Project. The IWSP establishes a schedule for Processing Fees, Reservation Fees, and Development Fees that change each year for all non-agricultural projects, and annual Water Supply

[22] The 20 year average demand includes a 2 year construction period and 18 years of operation.

Development fees for some non-agricultural projects. The proposed Project's water use will be subject to the annual Water Supply Development fee if IID determines that water for the Project is to be supplied under the IWSP.

Given the Colorado River conditions, the likelihood that IID will not receive its annual 3.1 MAF apportionment less QSA/Transfer Agreement obligations of Colorado River water is no longer low despite the high priority of the IID entitlement relative to other Colorado River contractors, see IID's Water Rights section on page 26 and projected water supplies. Given the prolonged drought conditions and recent communication from the Department of the Interior, reductions to all basin contractors, including IID, are increasingly likely. If such obligatory reductions were to come into effect within the 30-year Project life, the Applicants are to work with IID to ensure any anticipated reduction can be managed.

The County of Imperial as the lead agency has a responsibility to determine if the current and projected demands and water supply conditions, including projected uncertainties of Colorado River hydrology are sufficient to enable the County to make the findings necessary to approve this WSA. IID, like any water provider, has jurisdiction to manage the water supply within its service area and impose conservation measures during a period of temporary water shortage, such as the one we are experiencing now.

Furthermore, with the proposed Project's replacement of agricultural land with the Big Rock 2 solar facility , IID's task of managing water supply under the QSA/Transfer Agreements and any other voluntary contributions to Lake Mead would be lighter, because agricultural water use on the proposed Project site would be significantly higher than the proposed water demand for the proposed Project as explained in the Expected Water Demands for the Proposed Project on the section that follows.

Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for MCI temporary water use.[23] Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the Project proponent will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which allows the Water Department to provide the district with information needed to manage the district apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts. If water is to be provided under IWSP in addition to the established delivery charges, the Applicant may also need to enter into a IWSP Water Supply Agreement.

[23] *Complete the Application for Temporary Water Use and submit to Division office. Complete encroachment permit through Real Estate – non-refundable application fee of $250, se. IID website: Real Estate / Encroachments, Permissions, and Other Permitting. Fee for temporary service water: Schedule No. 7 General Industrial Use / Temporary Service Minimum charge for up to 5 AF, pay full flat fee for 5 AF at General Industrial Use rate ($425); use more than 5 AF, pay fee for actual use at General Industrial Rate ($85/AF).*

EXPECTED WATER DEMANDS FOR THE PROPOSED PROJECT

Water for the proposed Project will be needed on-site for operational demands including the O&M building, fire flow storage, and panel washing (no water for dust suppression during operation required). Untreated Colorado River water will be supplied to the project via the adjacent Westside Main canal from the gates listed in Table 15 which are assumed to be good condition. As noted above, the Project is estimated to require up to 10 AFY over a 30 year, which is a 99.9 percent decrease from the historical Project site demand of 7,348 AFY.

Projected water use by Big Rock 2 are summarized in **Table 14**.

Table 14. Project Operational Water Uses (AFY)

Use	Acre-Feet per Year	Total AF Over 30-Year Period
Water for Landscape Irrigation	0	0
Water for Dust Control	0	0
Water for Operation and Maintenance (30 years)	10	300
TOTAL RAW WATER USAGE	10	300

As of the date of this WSA, IID delivers untreated Colorado River water to the proposed Project site for agricultural uses through the following gates and laterals. The 10-year record for 2015-2024 of water delivery accounting is shown in **Table 15.** The data documents a 10-year 7,348 AFY average.

Table 15. Ten-Year Historic Delivery (AFY), 2015-2024

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Westside Main 14A (Brundy)	319.7	219.7	81.7	372.2	431.2	345.8	280.3	429.1	398.1	546.9
Foxglove 3 (Brundy)	507.3	322.6	530.9	585.1	527.9	502.5	395.6	525.8	477.9	582
Foxglove 1 (Downs)	437	444.7	393.4	391.4	310.8	396.3	401.4	395.2	423.3	437.5
Foxglove 2 (Downs)	426.4	462.5	394.6	386.3	316.3	347.2	413.2	398.1	404.5	465.7
Fern 15 (Gabrych/Kuhn)	431.5	232.1	380.9	310.9	288.5	304.8	356.7	330.4	228.6	243.2
Fern 22 (Gabrych/Kuhn)	793.5	0	0	408.5	993.6	1,029.4	1182.7	838.5	949.5	902.6
Fig 6 (Gabrych/Kuhn)	249.8	221.3	261	287	311.2	177.5	108.6	0	0	255.5
Fig 7 (Gabrych/Kuhn)	430.9	393.4	491	411.3	457.1	450.4	436.4	502.8	365.3	347.4
Fig 12A (Gabrych/Kuhn)	1,133.8	855.4	264	219.1	450.6	760.9	308.6	989.6	264	141.5
Fig 13 (Gabrych/Kuhn)	395.1	268.2	299.4	142.1	142.1	98.8	203.6	487	518.6	587
Fig 18 (Gabrych/Kuhn)	0	0	0	0	0	0	0	0	0	0
Westside Main 13 (LaValle Sabbia)	1,325.8	1,314.1	1,155.7	1,302.3	1,206.9	903.1	1,310.7	1,620.2	1,258.2	936.6
Westside Main 13A (LaValle Sabbia)	0	544.7	914.1	887.5	719.2	771.6	953.7	931.7	888.8	648.7
Fern 17 (Tomlinson)	243.1	290.8	373.5	386.4	165.2	253.2	333	329	230.5	48.1
Fern 18 (Tomlinson)	27.9	69.6	113	52.8	37.9	43	46.8	47.4	131	8
Fern 20 (Tomlinson)	148.6	149.7	248.2	192.2	150.1	126.1	203.5	204.8	132.8	29.9
Fern 23 (Tomlinson)	638.4	603.1	827.6	811	817.6	603.1	680.4	778.8	209.4	0

Fern 29 (Tomlinson)	155	178.6	251.1	203.6	220.2	173.6	234.8	250.9	134.4	34.9
Fern FSM 12A (Whitmer)	0	0	0	0	0	0	0	0	0	0
TOTAL	7,663.8	6,570.5	6,980.1	7,349.7	7,546.4	7,287.3	7,778	9,059.3	7,014.9	6,215.5

Source: *IID Staff, 2025, Marian Gabrych, Randal Whitmer, Tom Brundy, Susan Downs, Will Tomlinson, and La Valle Sabia, received in February 2025.*

The proposed Project has an estimated total water demand of up to 300 AF or 10 AFY for the 30-year operational period. Thus, the proposed Project demand is a decrease of 7,338 AFY from the historical 10-year average (7,348 AFY) or 99.9 percent less than the historic 10-year average annual delivery for agricultural uses at the proposed Project site. The proposed Project's estimated operational water demand of up to10 AFY represents only 0.054 percent of the 18,620 AFY balance of water supply that may be available for contracting under the IWSP.

IID's Ability to Meet Demands With Water Supply

Under normal operating conditions, non-agricultural water demands for the IID water service area are projected for 2025-2055 in **Table 5**, and IID agricultural demands including system operation are projected for 2025-2055 in **Table 6**, all volumes within the IID water service area. IID water supplies available for consumptive use after accounting for mandatory transfers are projected to 2077 in **Table 11** Column 11), volumes at Imperial Dam.

To assess IID's ability to meet future water demands, IID historic and forecasted demands are compared with CRWDA Exhibit B net availability under its water supply entitlement, volumes at Imperial Dam **Table 11** (Column 11). The analysis requires accounting for system operation consumptive use within the IID water service area, from AAC at Mesa Lateral 5 to Imperial Dam, and for water pumped for use by the USBR Lower Colorado Water Supply Project (LCRWSP), an IID consumptive use component in the USBR Decree Accounting Report. IID system operation consumptive use for 2020 is provided in **Table 16** to show the components to be included in the calculation of 2024 volumes in comparison to 2020.

Table 16. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024

	2020 Operational Consumptive Use (KAF)	2024 Operational Consumptive Use (KAF)
IID Delivery System Evaporation	24.4	24.9
IID Canal Seepage	90.8	94.9
IID Main Canal Spill	10.1	8.4
IID Lateral Canal Spill	121.5	112.9
IID Seepage Interception	-39.0	-8.9
IID Unaccounted Canal Water	-40.0	TBD
Total IID System Operational Use, within water service area	167.8	**TBD**
"Losses" from AAC @ Mesa Lat 5 to Imperial Dam (Station 1117-2900)	9.2	TBD
LCWSP pumpage	-10	-10.0
Total System Operational Use in 2020 and 2024	167.0	**TBD**

Sources: 2024 IID Water Balance Ran 03/27/2024

Notwithstanding any regulatory water supply cuts from the Secretary of Interior, IID's ability to meet customer water demands through 2055 as shown in **Table 17** is based on the following:

- Non-agricultural use from **Table 5.**
- Agricultural and Salton Sea mitigation uses from **Table 6.**
- CRWDA Exhibit B net available for IID consumptive use from **Table 11.**
- System operation consumptive use from **Table 16** for 2020.

Table 17. IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2025

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Non-Ag Delivery	107.4	113.2	133.1	142.9	151.4	163.2	175.4	188.4	199.3
Ag Delivery	2,158.9	2,165.4	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5
QSA SS Mitigation Delivery	153.3	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
System Op CU in IID & to Imperial Dam	61.3	167.0	230.5	225.4	225.4	225.4	225.4	225.4	225.4
IID CU at Imperial Dam	**2,488.2**	**2,503.6**	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Conservation in Excess of Exhibit B	**45.5**	**51.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total IID CU	**2,533.6**	**2,554.6**	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Exhibit B IID Net Available for CU at Imperial Dam (adjusted PPR's 2015/2020)	**2,623.7**	**2,652.7**	**2,617.8**	**2,612.8**	**2,612.8**	**2,612.8**	**2,612.8**	**2,665.8**	**2,665.8**
2015 & 2020 Actual and 2025-2055 Projected IID Underrun (-)/Overrun at Imperial Dam	**-90.02**	**-98.07**	5.30	-35.00	-26.50	-14.70	-2.50	-42.50	-31.60

Notes: 2015 and 2020 have been updated to reflect actual consumptive use with respective USBR decree accounting adjustments
Non-Ag Delivery CI 15.0%, Ag Delivery CI 3.0%, QSA SS mitigation CI 15%
QSA Salton Sea Mitigation Delivery terminated on 12/31/2017
Underrun /Overrun = IID CU at Imperial Dam minus CRWDA Exhibit B Net Available
Notes: Ag Delivery for 2025-2055 does not take into account land conversion for solar use nor reduction in agricultural land area due to urban expansion.

As shown above, IID forecasted demand has the potential to exceed CRWDA Exhibit B Net Consumptive Use volumes during several time intervals through the lifespan projection for the Project. However, due to temporary land conversion for solar use and urban land expansion that will reduce agricultural acres in the future, a water savings of approximately 217,000 AFY will likely be generated into the future and for the lifetime of the proposed Project, assuming no regulatory cutbacks are enforced upon IID.

In addition, USBR 2020 Decree Accounting Report states that IID Consumptive Use was 2,493.7 KAF (excludes 1,579 AF of ICS for storage in Lake Mead and an additional 49,444 AF of conserved water left on the Colorado River system) with an underrun of -98.1 KAF, as reported by IID in 2020 Annual SWRCB Report per WRO 2002-2013; that is, IID uses less than the amount in its approved Water Order (2,615,300 AF).

Table 18. 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam

IID Approved Water Order	2,625.3 less 10 supplied by LCWSP and less 26 of additional conserved water
IID Consumptive Use	2,493.7
IID **Underrun** /Overrun	**-98.1**
Sources: *2020 IID Revised Water Order, approved on March 10, 2020, 2020 Decree Accounting Report, and* *2020 Annual Report of IID Pursuant to SWRCB Revised Order WRO 2002-2013*	

As reported in the 2023 Annual Water & QSA Implementation Report and 2024 SWRCB Report and presented in **Table 12**, from 2013 to 2024 IID consumptive use (CU) resulted in underruns; i.e., annual CU was less than the district's QSA Entitlement of 3.1 MAFY minus QSA/Transfer Agreements obligations. This would indicate that even though **Table 17** shows IID Overrun/Underrun at Imperial Dam not exceeding CRWDA Exhibit B Net Available for CU, for the 30-year life of the proposed Project, IID consumptive use may be less than forecasted.

Meanwhile, forecasted Ag Delivery reductions presented in **Table 6** are premised on implementation of on-farm practices that will result in efficiency conservation. These reductions do not take into account land conversion for solar projects nor reduction in agricultural land area due to urban expansion; that is to say, the forecasted Ag Delivery is for acreage in 2003 with reduction for projected on-farm conservation efficiency. Thus, Ag Delivery demand may well be less than forecasted in **Table 6**. In any case, the proposed Project will use less water than the historical agricultural demand of proposed Project site, so the proposed Project will ease rather than exacerbate overall IID water demands.

In the event that IID has issued water supply agreements that exhaust the 25 KAFY IWSP set aside for conservation, and it becomes apparent that IID delivery demands due to non-agriculture use are going to cause the district to exceed its quantified 3.1 MAFY entitlement less QSA/Transfer Agreements obligations, IID has identified options to meet these new non-agricultural demands. These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing conservation strategies and projects to expand the size of the district's water supply portfolio.

These factors will be discussed in the next two sections, Tracking Water Savings from Growth of Non-Agricultural Land Uses and Expanding Water Supply Portfolio.

Tracking Water savings from Growth of Non-Agricultural Land Uses

The Imperial County Board of Supervisors has targeted up to 25,000 acres of agricultural lands, about 5 percent of the farmable acreage served by IID, for temporary conversion to solar farms; because the board found that this level of reduction would not adversely affect agricultural production. As reported for IID's Temporary Land Conversion Fallowing Program, existing solar developments at the end of 2024 have converted 13,307 acres of farmland. Solar projects had a total yield at-river of 72,320 AF of water in 2024. The balance of the 25,000-acre agriculture-to-solar policy is 11,693 acres. On average, each agricultural acre converted reduces agricultural demand by 5.1 AFY, which results in a total at-river yield (reduction in consumptive use) of 127,500 AFY.

However, due to the nature of the conditional use permits under which solar farms are developed, IID cannot rely on this supply being permanently available. In fact, should a solar project decommission early, that land may go immediately back to agricultural use (it remains zoned an agricultural land). Nevertheless, during their operation, the solar farms do ameliorate pressure on IID to implement projects to meet demand from new non-agricultural projects.

Unlike the impact of solar projects, other non-agricultural uses are projected to grow, as reflected in the nearly 85.6 percent increase in non-agricultural water demand from 107.4 KAF in 2015 to 199.3 KAF in 2055 reflected herein in **Table 17**. Although state mandated water conservation goals to municipalities has curtailed the upward trend, Table 17 continues to depict a conservative scenario. This increase in demand of 92 KAFY is likely to be offset by reductions in agricultural lands; however, as the land remains zoned as agricultural land, that source is not reliable to be permanently available to IID.

The amount of land developed for residential, commercial, and industrial purposes is projected to grow by 55,733 acres from 2015 to 2050[24] within the sphere of influence of the incorporated cities and specific plan areas in Imperial County. A conservative estimate is that such development will displace at least another 24,500 acres of farmland based on the Imperial Local Agency Formation Commission (LAFCO) sphere of influence maps and existing zoning and land use in Imperial County. At 5.13 AFY yield at-river, there would be a 125,000 AFY reduction IID net consumptive use. However, the total acreage from actual annexations that have resulted in reductions to agricultural acreage between 2015 and 2024 has been 2,224 acres, according to IID's annual inventory of total farmable land which is consistent with the acreage gain to non-agricultural land uses (2,224 acres) and based off of annexation records obtained through the Imperial County Local Agency Formation Commission. This shift in acreage documents a growth rate of approximately 50 percent of the originally projected rate.

The total foreseeable solar project temporary yield at-river (91,800 AFY) and municipal development permanent yield at-river, conservatively adjusted (65,000 AFY) is to reduce forecasted IID net consumptive use at-river 156,800 AFY, which is more than enough to meet the forecast demand minus Exhibit B Net Available volumes shown in **Table 17.** This yield at-river is sufficient to meet the forecasted excess of non-agricultural use over Net Available supply within the IID service area for the next 20 years, as is required for SB 610 analysis (assuming there are no regulatory cuts to IID's full entitlement).

Farmland retirement associated with municipal development would reduce IID agricultural delivery requirements beyond the efficiency conservation projections shown **Table 6.** Therefore, in the event that Schedule 7 General Industrial Use water has exhausted its apportioned amount, the Applicants will rely on IID IWSP water to supply the Project, as discussed above in the Projected Water Availability section.

Expanding Water Supply Portfolio

The proposed Project, as a new non-agricultural development, may need to enter into a water supply agreement with IID. Upon agreement, the District will procure or develop a water supply for the Project at its sole discretion, which may include policy changes, construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the

[24] IRWMP, Chapter 5, Table 5-14.

corresponding water supply agreement, along with other terms and conditions including the requisite environmental permitting.

While forecasted long-term annual yield-at-river from the reduction in agricultural acreage due to municipal development in the IID service area may be sufficient to meet the forecasted excess of non-agricultural use over CRWDA Net Available supply (**Table 17**) without regulatory cuts and without expanding IID's Water Supply Portfolio, IID has also evaluated the feasibility of a number of capital projects to increase its water supply portfolio.

As reported in 2012 Imperial IRWMP Chapter 12, IID contracted with GEI Consultants, Inc. to identify a range of capital project alternatives that the district could implement. Qualitative and quantitative screening criteria and assumptions were developed in consultation with IID staff. Locations within the IID water service area with physical, geographical, and environmental characteristics most suited to implementing short- and long-term alternatives were identified. Technical project evaluation criteria included volumes of water that could be delivered and/or stored by each project, regulatory and permitting complexity, preliminary engineering components, land use requirements, and costs.

After preliminary evaluation, a total of 27 projects were configured:

- 17 groundwater or drain water desalination
- 2 groundwater blending
- 6 recycled water
- 1 groundwater banking
- 1 IID system conservation (concrete lining)

Projects were assessed at a reconnaissance level to allow for comparison of project costs. IID staff and the board identified key factors to categorize project alternatives and establish priorities. Lower priority projects were less feasible due to technical, political, or financial constraints. Preferential criteria were features that increased the relative benefits of a project and grant it a higher priority. Four criteria were used to prioritize the IID capital projects:

1. **Financial Feasibility.** Projects whose unit cost was more than $600/AF were eliminated from further consideration.
2. **Annual Yield.** Project alternatives generating 5,000 AF or less of total annual yield were determined not to be cost-effective and lacking necessary economies of scale.
3. **Groundwater Banking.** Groundwater banking to capture and store underruns is recognized as a beneficial use of Colorado River water. Project alternatives without groundwater banking were given a lower priority.
4. **Partnering.** Project alternatives in which IID was dependent on others (private and/or public agencies) for implementation were considered to have a lower priority in the IID review; this criterion was reserved for the IRWMP process, where partnering is a desirable attribute.

Based on these criteria, the top ten included six desalination, two groundwater blending, one system conservation, and one groundwater storage capital projects. These capital projects are listed in **Table 19** which follows. Some of these project alternatives have proven to longer be feasible due to technical and/or environmental constraints and have been stricken, as noted.

Table 19. IID Capital Project Alternatives and Cost (May 2009 price levels $)

Name	Description	Capital Cost	O&M Cost	Equivalent Annual Cost	Unit Cost ($/AF)	In-Valley Yield (AF)
~~GW 18~~	~~Groundwater Blending E. Mesa Well Field Pumping to AAC~~	~~$39,501,517~~	~~$198,000~~	~~$2,482,000~~	~~$99~~	~~25,000~~
~~GW 19~~	~~Groundwater Blending: E. Mesa Well Field Pumping to AAC w/Percolation Ponds~~	~~$48,605,551~~	~~$243,000~~	~~$3,054,000~~	~~$122~~	~~25,000~~
WB 1	Coachella Valley Groundwater Storage	$92,200,000	$7,544,000	$5,736,746	$266	50,000
DES 8	E. Brawley Desalination with Well Field and Groundwater Recharge	$100,991,177	$6,166,000	$12,006,000	$480	25,000
AWC 1	IID System Conservation Projects	$56,225,000	N/A	$4,068,000	$504	8,000
DES 12	East Mesa Desalination with Well Field and Groundwater Recharge	$112,318,224	$6,336,000	$12,831,000	$513	25,000
DES 4	Keystone Desalination with IID Drainwater/ Alamo River	$147,437,743	$15,323,901	$23,849,901	$477	50,000
~~DES 14~~	~~So. Salton Sea Desalination with Alamo River Water and Industrial Distribution~~	~~$158,619,378~~	~~$15,491,901~~	~~$24,664,901~~	~~$493~~	~~50,000~~
~~DES 15~~	~~So. Salton Sea Desalination with Alamo River Water and MCI Distribution~~	~~$182,975,327~~	~~$15,857,901~~	~~$26,438,901~~	~~$529~~	~~50,000~~
DES 2	Keystone Desalination with Well Field and Groundwater Recharge	$282,399,468	$13,158,000	$29,489,000	$590	50,000

Source: Imperial IRWMP, Chapter 12; see also Imperial IRWMP Appendix N, IID Capital Projects

[1] Pumping on the East Mesa via Well Fields was assessed by IID and it was determined that the area is not condusive of groundwater recovery due to the geological conditions in the area and/or environmental challenges.

[2] It has been demonstrated over time that any reduction in Salton Sea water could result in environmental impacts related to existing biological resources, air quality and other potential adverse community impacts. Salton Sea water desalination for redistribution to industrial and/or municipal use is not being persued at any level.

IID Near Term Water Supply Projections

As mentioned above, IID's quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID's use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including seepage recovery from IID canals and the All-American Canal (ACC) and measures to reduce operational discharge. As the IID website Water Department states:

> Through the implementation of extraordinary conservation projects, the development of innovative efficiency measures and the utilization of progressive management tools, the IID Water Department is working to ensure both the long-term viability of agriculture and the continued protection of water resources within its service area.

Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including this Project for the next 20 years and for the life of the proposed Project under a water supply consistent with the district's full entitlement.

COUNTY OF IMPERIAL FINDINGS

IID serves as the regional wholesale water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, industrial, environmental and recreational water users within its water service area. Imperial County serves as the responsible agency with land use authority over the proposed project. Imperial County Water Assessment findings are summarized as follows, based on the information contained herein and as supported by IID water supply data:

1. IID's annual entitlement to consumptive use of Colorado River water is capped at 3.1 MAF less water transfer obligations, pursuant to the QSA and Related Agreements. Under the terms of the CRWDA, IID is implementing efficiency conservation measures to reduce net consumptive use of Colorado River water needed to meet its QSA/Transfer Agreements obligations while retaining historical levels of agricultural productivity.
2. In 2024 IID consumptively used 2311905 AF of Colorado River water (volume at Imperial Dam); 2,103,768 AF were delivered to customers (including recreational and environmental water deliveries) of which 1,991,796 AF, or 95 percent, went to agricultural users as per IID's Provisional Water Balance of Selective Flow Paths run on March 2025.
3. Reduction of IID's net consumptive use of Colorado River water under the terms of the Colorado River Water Delivery Agreement is to be the result of efficiency conservation measures. Crop water use in the Imperial Valley will not decline under these conditions, however IID operational spill and tailwater from field runoff will decline as efficiency conservation measures are implemented, impacting the Salton Sea.
4. The dependability of IID's water rights, Colorado River flows, and Colorado River storage facilities for Colorado River water alone are not sufficient to assure water availability for the Project. The prolonged drought conditions on the Colorado River Basin have made it increasingly likely that the water supply of IID may be disrupted, in dry years or/and under shortage conditions. Mexico, Arizona and Nevada, which have lower priority than IID, have already experienced Tier 1 and/or Tier 2a reductions in 2022, 2023, and 2024 as a result of the declared Colorado River water shortage.
5. Due to ongoing Colorado River drought conditions, Lake Mead's declining elevation, reduced inflows from Lake Powell, and the suspension of the federal Inadvertent Overrun and Payback Policy, which eliminates IID's ability to overrun its 3.1 MAF annual entitlement during water shortage conditions, the IID Board has implemented an annual apportionment program (otherwise known as the Equitable Distribution Plan or EDP).
6. IID's EDP apportions the available water supply among all its water users equitably and among three water user categories based on historical use: 1) agricultural water users, 2) commercial/industrial water users, and 3) potable water users. Apportionment into these categories as a whole is initiated after deducting from the available water supply water for operational system needs, system conservation yields, environmental mitigation requirements,

recreational uses, and similar unmeasured small pipe account water uses. See Attachment B - Equitable Distribution Plan.

7. Historically, IID has never been denied the right to use the annual volume of water it has available for its consumptive uses under its entitlement. Nevertheless, IID is participating in discussions for possible actions in response to continued extreme drought on the Colorado River.
8. The proposed Project has an estimated operational water demand of 300 AF or 10 AFY over a 30-year period. Thus, the proposed Project demand is a decrease of 7,338 AFY from the historical 10-year average or 99.9 percent decrease from the historical 10-year average annual delivery for agricultural uses at the proposed Project site.
9. The Project's water delivery will be covered under the Schedule 7 General Industrial Use. In the event that IID determines that the proposed Project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. In which case, the proposed Project would use 0.054 percent of the 18,620 AFY of IWSP water.
10. The Project is required to enter into a Water Supply Agreement with IID for the 10 AFY of projected water demand. Under any fully executed water supply agreement, IID has the capacity to procure or develop water supplies for the Project through the implementation of policies, the construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions, including the requisite environmental permitting.
11. Based on the Environmental Impact Report (EIR) prepared for this proposed Project pursuant to the CEQA, California Public Resources Code sections 21000, *et seq*. (SCH No. 2024090063), the County of Imperial hereby finds that the IID projected water supply, together with water conservation measures required, is sufficient to satisfy the demands of this proposed Project in addition to existing and planned future uses, including agricultural and non-agricultural uses for a 30-year Water Supply Assessment period.

ASSESSMENT CONCLUSION

This Water Supply Assessment has determined that IID water supply is adequate for the Big Rock 2 solar facility (proposed Project). The Imperial Irrigation District's IWSP for Non-Agricultural Projects may dedicate up to 25,000 AF of IID's annual conserved water supply to serve new projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID. Imperial County estimates a cumulative, non-agricultural project water supply demand increase of up to 63,243 AFY within the foreseeable 30-year planning period, within its jurisdiction. However, all new non-agricultural projects, including Big Rock 2 solar, are required to mitigate their respective water supply demand via conservation programs or conservation projects in order to receive future water apportionments.

New, non-agricultural projects may be susceptible to delivery cutbacks when an EDP Apportionment is exhausted, thus all approved projects require best management practices and water use efficiency at all times. Given the prolonged drought conditions and recent communication to IID from the Department of the Interior, reductions to all basin contractors, including IID and its water customers, are increasingly likely. If such reductions were to come into effect within an approved project's operation, the County of Imperial is to work with IID to ensure any anticipated reduction can be managed via the means identified herein or other equivalent measures.

Under an authorized water supply agreement, Big Rock 2 solar will be required to acknowledge and accept as a condition of water service that to the extent that IID receives an order or directive from a governmental authority, having appropriate jurisdiction, that reduces the total volume of water available to IID from the Colorado River during all or any part of their water service agreement, IID may reduce the water service agreement amount, as directed by the IID Board, as a proportionate reduction of the total volume of water available to IID. This reduction is separate from and in addition to any allocation authorized pursuant to the EDP.

The Project's operational water demand of approximately 10 AFY represents 0.054 percent of the unallocated supply that may be set aside for additional conservation and contracting under the IWSP for non-agricultural projects, and approximately 0.016 percent of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed Project represents a 99.9 percent decrease from the 10-year historical average agricultural water use for 2015-2024 at the proposed Project site.

For all the reasons described herein, the historical stability of the IID water supply, the amount of foreseeable water available, along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers suggest that Big Rock 2 solar 's water needs will be reasonably met for the next 20 years as assessed for compliance under SB-610.

RESOURCES AND REFERENCES

1. California Department of Water Resources. (2003). Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001 to assist water suppliers, cities, and counties in integrating water and land use planning.

2. Imperial County Planning and Development Services. (2008). Imperial County General Plan 2008 Update. El Centro, CA. General Plan | Imperial County Planning & Development Services (icpds.com), retrieved, 2021

3. Imperial Irrigation District. Website: Equitable Distribution Plan.

4. Imperial Irrigation District Website: 2021 Water Conservation Plan. (2025). Imperial Irrigation District 2021 Water Conservation Plan. Imperial, CA.

5. Imperial Irrigation District. (2024). IID Interactive GIS Water Service Area Map. Imperial, CA.

6. Imperial Irrigation District. (2009). Interim Water Supply Policy for Non-Agricultural Projects. Imperial, CA

7. Imperial Irrigation District. (2012). Temporary Land Conversion Fallowing Policy (TLFCP) for Water Conservation Yield Water conservation yield attributable to land removed from agricultural production and temporarily fallowed. Updated March 27, 2018.

8. Imperial Irrigation District Water Department. (2013). Colorado River Water Accounting and. Conservation Commitments Update. Tina Anderholt Shields, PE. Colorado River Resources Manager Imperial, CA.

9. Imperial Irrigation District. (2023). 2023 Water & QSA Implementation Report, Imperial, CA

10. Imperial Irrigation District. (2021). Consultation with Justina Gamboa-Arce., Water Conservation Planner. Imperial, CA.

11. Imperial Irrigation District. (2021). Temporary Land Fallowing Conversion Policy. (TLFCP).

12. Imperial Irrigation District. (2024). 2023 IID SWRCB Report.

13. Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., and Macknick, J. 2013. Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States. July 2013. http://large.stanford.edu//courses/2020/ph240/multani2/docs/sand-2013-5238.pdf

14. Macknick, J., Newmark, R., Heath, G., and Hallet, KC. 2011. A Review of Operational Water Consumption and Withdrawal Factors for Electricity Generating Technologies. March 2011. https://www.nrel.gov/docs/fy11osti/50900.pdf

15. United States Bureau of Reclamation Lower Colorado Region Website: Boulder Canyon Operations Office – Programs and Activities, Lower Colorado River Water Accounting, Water Accounting Reports (1964 - 2015). Compilation of Records in Accordance with Article V of the Decree of the Supreme Court of the United States in Arizona v. California Dated March 9, 1964: Calendar Years 1964 - 2015 Boulder City, NV.

ATTACHMENTS

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects

Attachment B: IID 2023 Equitable Distribution Plan, revised July 26, 2023

(This page intentionally left blank)

ATTACHMENT A: IID INTERIM WATER SUPPLY POLICY FOR NON-AGRICULTURAL PROJECTS[25]

1.0 Purpose.

Imperial Irrigation District (the District) is developing an Integrated Water Resources Management Plan (IWRMP) [26] that will identify and recommend potential programs and projects to develop new water supplies and new storage, enhance the reliability of existing supplies, and provide more flexibility for District water department operations, all in order to maintain service levels within the District's existing water service area. The first phase of the IWRMP is scheduled to be completed by the end of 2009 and will identify potential projects, implementation strategies and funding sources. Pending development of the IWRMP, the District is adopting this Interim Water Supply Policy (IWSP) for Non-Agricultural Projects, as defined below, in order to address proposed projects that will rely upon a water supply from the District during the time that the IWRMP is still under development. It is anticipated that this IWSP will be modified and/or superseded to take into consideration policies and data developed by the IWRMP.

2.0 Background.

The IWRMP will enable the District to more effectively manage existing water supplies and to maximize the District's ability to store or create water when the available water supplies exceed the demand for such water. The stored water can be made available for later use when there is a higher water demand. Based upon known pending requests to the District for water supply assessments/verifications and pending applications to the County of Imperial for various Non-Agricultural Projects, the District currently estimates that up to 50,000 acre feet per year (AFY) of water could potentially be requested for Non-Agricultural Projects over the next ten to twenty years. Under the IWRMP the District shall evaluate the projected water demand of such projects and the potential means of supplying that amount of water. This IWSP currently designates up to 25,000 AFY of water for potential Non-Agricultural Projects within IID's water service area. Proposed Non-Agricultural projects may be required to pay a Reservation Fee, further described below. The reserved water shall be available for other users until such Non-Agricultural projects are implemented and require the reserved water supply. This IWSP shall remain in effect pending the approval of further policies that will be adopted in association with the IWRMP.

3.0 Terms and Definitions.

3.1 Agricultural Use. Uses of water for irrigation, crop production and leaching.

[25] IID Board Resolution 31-2009. Interim Water Supply Policy for New Non-Agricultural Projects. September 29, 2009. < IID Interim Water Supply Policy for Non-Agricultural Projects>

[26] The 2009 Draft IID IWRMP has been superseded by the October 2012 Imperial IRWMP, which incorporates the conditions of the IWSP by reference.

3.2 Connection Fee. A fee established by the District to physically connect a new Water User to the District water system.

3.3 Industrial Use. Uses of water that are not Agricultural or Municipal, as defined herein, such as manufacturing, mining, cooling water supply, energy generation, hydraulic conveyance, gravel washing, fire protection, oil well re-pressurization and industrial process water.

3.4 Municipal Use. Uses of water for commercial, institutional, community, military, or public water systems, whether in municipalities or in unincorporated areas of Imperial County.

3.5 Mixed Use. Uses of water that involve a combination of Municipal Use and Industrial Use.

3.6 Non-Agricultural Project. Any project which has a water use other than Agricultural Use, as defined herein.

3.7 Processing Fee. A fee charged by the District Water Department to reimburse the District for staff time required to process a request for water supply for a Non-Agricultural Project.

3.8 Reservation Fee. A non-refundable fee charged by the District when an application for water supply for a Non-Agricultural Project is deemed complete and approved. This fee is intended to offset the cost of setting aside the projected water supply for the project during the period commencing from the completion of the application to start-up of construction of the proposed project and/or execution of a water supply agreement. The initial payment of the Reservation Fee will reserve the projected water supply for up to two years. The Reservation Fee is renewable for up to two additional two-year periods upon payment of an additional fee for each renewal.

3.9 Water Supply Development Fee. An annual fee charged to some Non-Agricultural Projects by the District, as further described in Section 5.2 herein. Such fees shall assist in funding IWRMP or related water supply projects,

3.10 Water User. A person or entity that orders or receives water service from the District.

4.0. CEQA Compliance.

4.1 The responsibility for CEQA compliance for new development projects within the unincorporated area of the County of Imperial attaches to the County of Imperial or, if the project is within the boundaries of a municipality, the particular municipality, or if the project is subject to the jurisdiction of another agency, such as the California Energy Commission, the particular agency. The District will coordinate with the County of Imperial, relevant municipality, or other agency to help ensure that the water supply component of their respective general plans is comprehensive and based upon current information. Among other things, the general plans should assess the direct, indirect and cumulative potential impacts on the environment of using currently available water supplies for new industrial, municipal, commercial and/or institutional uses instead of the historical use of that water for agriculture. Such a change in land

use, and the associated water use, could potentially impact land uses, various aquatic and terrestrial species, water quality, air quality and the conditions of drains, rivers and the Salton Sea.

4.2 When determining whether to approve a water supply agreement for any Non-Agricultural Project pursuant to this IWSP, the District will consider whether potential environmental and water supply impacts of such proposed projects have been adequately assessed, appropriate mitigation has been developed and appropriate conditions have been adopted by the relevant land use permitting/approving agencies, before the District approves any water supply agreement for such project.

5.0. Applicability of Fees for Non-Agricultural Projects.[27]

5.1 Pursuant to this Interim Water Supply Policy, applicants for water supply for a Non-Agricultural Project shall be required to pay a Processing Fee and may be required to pay a Reservation Fee as shown in Table A. All Water Users shall also pay the applicable Connection Fee, if necessary, and regular water service fees according to the District water rate schedules, as modified from time to time.

5.2 A Non-Agricultural Project may also be subject to an annual Water Supply Development Fee, depending upon the nature, complexity, and water demands of the proposed project. The District will determine whether a proposed Non-Agricultural Project is subject to the Water Supply Development Fee for water supplied pursuant to this IWSP as follows:

5.2.1. A proposed project that will require water for a Municipal Use shall be subject to an annual Water Supply Development Fee as set forth in Table B if the projected water demand for the project is in excess of the project's estimated population multiplied by the District-wide per capita usage. Municipal Use projects without an appreciable residential component will be analyzed under sub-section 5.2.3.

5.2.2. A proposed project that will require water for an Industrial Use located in an unincorporated area of the County of Imperial shall be subject to an annual Water Supply Development Fee as set forth in Table B.

5.2.3. The applicability of the Water Supply Development Fee set forth in Table B to Mixed Use projects, Industrial Use projects located within a municipality, or Municipal Use projects without an appreciable residential component, will be determined by the District on a case-by-case basis, depending upon the proportion of types of land uses and the water demand proposed for the project.

5.3. A proposed Water User for Non-Agricultural Projects may elect to provide some or all of the required water supply by paying for and implementing some other means of providing water in a manner approved by the District, such as conservation projects, water storage projects and/or use of an alternative source of supply, such as recycled water or some source of water other than from the District water supply. Such election shall require consultation with the District regarding the details of such alternatives and a determination by the District, in its reasonable discretion, concerning how much credit,

[27] The most recent fee schedules can be found in a link at IID/Water/ Municipal, Industrial and Commercial Customers; or visit by URL at Imperial Irrigation District : Water Rate Schedules

if any, should be given for such alternative water supply as against the project's water demand for purposes of determining the annual Water Supply Development Fee for such project.

5.4 The District Board shall have the right to modify the fees shown on Tables A and B from time to time.

6. Water Supply Development Fees collected by the District under this IWSP shall be accounted for independently, including reasonable accrued interest, and such fees shall only be used to help fund IWRMP or related District water supply projects.

7. Any request for water service for a proposed Non-Agricultural Project that meets the criteria for a water supply assessment pursuant to Water Code Sections 10910-10915 or a water supply verification pursuant to Government Code Section 66473.7 shall include all information required by Water Code Sections 10910 –10915 or Government Code Section 66473.7 to enable the District to prepare the water supply assessment or verification. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

8. Any request for water service for a proposed Non-Agricultural Project that does not meet the criteria for a water supply assessment pursuant to Water Code Section 10910-10915 or water supply verification pursuant to Government Code Section 66473.7 shall include a complete project description with a detailed map or diagram depicting the footprint of the proposed project, the size of the footprint, projected water demand at full implementation of the project and a schedule for implementing water service. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

9. All other District rules and policies regarding a project applicant or Water User's responsibility for paying connection fees, costs of capital improvements and reimbursing the District for costs of staff and consultant's time, engineering studies and administrative overhead required to process and implement projects remain in effect.

10. Municipal Use customers shall be required to follow appropriate water use efficiency best management practices (BMPs), including, but not limited to those established by the California Urban Water Conservation Council BMP's (see http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx) [https://calwep.org/our-work/conservation/bmp-guidebooks/], or other water use efficiency standards, adopted by the District or local government agencies.

11. Industrial Use customers shall be required to follow appropriate water use efficiency BMP's, including but not limited to those established by the California Urban Water Conservation Council and California Energy Commission, as well as other water use efficiency standards, adopted by the District or local government agencies.

12. The District may prescribe additional or different BMPs for certain categories of Municipal and Industrial Water Users.

(This page intentionally left blank)

ATTACHMENT B: IID EQUITABLE DISTRIBUTION PLAN[28]

Adopted December 11, 2007
Revised November 18, 2008
Revised April 07, 2009
Revised April 23, 2013
Revised May 14, 2013
Revised October 28, 2013
Revised June 21, 2022
Revised July 26, 2023

[28] Equitable Distribution Plan documents. July 26, 2023 https://www.iid.com/water/rules-and-regulations/equitable-distribution

ATTACHMENT "D"

FEIR RESOLUTION

AND CEQA FINDINGS

RESOLUTION NO.

A RESOLUTION TO THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE FINAL ENVIRONMENTAL IMPACT REPORT (FEIR) FOR THE BIG ROCK 2 CLUSTER ENERGY SOLAR PROJECT.

WHEREAS, a Final Project EIR SCH #2024090063 and Candidate CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended for the Big Rock 2 Cluster Solar Project which consists of an Environmental Impact Report (EIR), a Mitigation Monitoring & Reporting Program (MM&RP), General Plan Amendment (GPA), Zone Change (ZC), four (4) Conditional Use Permits and four (4) Variances; and

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying the FEIR; and,

WHEREAS, the Final Project EIR has been provided in a timely manner to public agencies; and

WHEREAS, timely public notice of the Board of Supervisors hearing on the Project application has been given, and the Board of Supervisors has considered the recommendation by the Planning Commission and evidence presented by the Imperial County Planning & Development Services Department and other interested parties at that public hearing held with respect to this item on November 4, 2025; and,

WHEREAS, the Final Project EIR includes analysis of various alternatives as required by CEQA including Conditional Use Permit, and Mitigation Monitoring & Reporting Program; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors independently has reviewed and considered the proposed Final Environmental Impact Report (FEIR), Mitigation Monitoring and Reporting Program (MM&RP), and Candidate CEQA Findings of fact. The Board of Supervisors finds and determines that the Environmental Impact Report is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with, CEQA, State Planning and Zoning law and the County of Imperial Land Use Ordinance, the following findings for the recommendation for approval and certification of the Final EIR, MM&RP and Findings of Fact have been made as follows:

1.That the Final Project EIR SCH #2024090063, MM&RP and Candidate CEQA Findings for the Big Rock 2 Cluster Solar Project have been prepared in accordance with the

requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended, and such findings are incorporated by reference herein.

2. That the County independently has reviewed, analyzed, and considered the Final Project EIR, the environmental impacts therein identified for this Project, the Mitigation Monitoring and Reporting Program, and the entire Record of Proceedings prior to recommending approval of this project.

3. The Final Project EIR and the Candidate CEQA Findings reflect the independent judgment of the County.

4. That the Candidate CEQA Findings are supported by substantial evidence and backed by information provided to the County by experts, including but not limited to the County staff and the EIR preparer, on whom the County relies.

5. That the County accept as its own, incorporate as if set forth in full herein, and make each and every one of the findings contained in the CEQA Findings, including feasibility of mitigation measures pursuant to Public Resources Code 21081 (a)/CEQA Guidelines 15091, and the infeasibility of project alternatives.

6. That the Project will not individually or cumulative have an unmitigated adverse effect on fish and wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

7. That the Mitigation Monitoring and Reporting Program is designed to ensure that during project implementation, the Developer and any other responsible parties implement the Project components and comply with feasible mitigation measures identified in the CEQA Findings, the Project entitlements, and the Mitigation Monitoring and Reporting Program and that these measures are fully enforceable through permit conditions, agreements, and/or other measures, such as their inclusion in the Mitigation Monitoring and Reporting Program.

8. Finally, all documents submitted by members of the public and public agencies in connection with the Final Project EIR; minutes and transcripts of all public meetings and public hearings; all written and verbal public testimony presented during a noticed public hearing for the proposed project which such testimony was taken and any and all other materials which constitute the record of proceeding pursuant to Public Resources Code section 21167.6(e); and matters of common knowledge to the County staff, Planning Commission, and Board of Supervisors, including, but not limited to the County General Plan, the County Land Use Ordinance, and County policies, which may be found at the Clerk's Office located at 940 Main Street, Suite 209, El Centro, CA, 92243 during regular business hours, and the Imperial County Planning & Development Services Department at 801 Main Street, El Centro, CA 92243.

9. That the County Board of Supervisors deny the resolution to certify the Final Project EIR (FEIR) and the Finding of Fact.

NOW, THEREFORE, based on the above findings, the Board of Supervisors of the County of Imperial **DOES HEREBY DENY** the Final EIR **SCH #2024090063** & Candidate CEQA Findings for the Big Rock 2 Cluster Solar Project.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote took the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS
(Public Resource Code §21081, CEQA Guidelines §15091)
Final Environmental Impact Report for the
Big Rock 2 Cluster Solar and Storage Project
(SCH No. 2024090063)

1 Introduction

The following Findings are made for the Environmental Impact Report SCH #2024090063 (the "EIR") for the proposed Big Rock 2 Cluster Solar and Storage Project. The project applicant, 90FI 8me LLC, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and four variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility"); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

1.1 Purpose of CEQA Findings; Terminology

CEQA Findings play an important role in the consideration of projects for which an EIR is prepared. Under Public Resources Code §21081 and CEQA Guidelines §15091 above, where a final EIR identifies one or more significant environmental effects, a project may not be approved until the public agency makes written findings supported by substantial evidence in the administrative record regarding each of the significant effects. In turn, the three possible findings specified in CEQA Guidelines §15091(a) are:

1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

CEQA Guidelines §15092(b) provides that no agency shall approve a project for which an EIR was prepared unless either:

1. The project approved will not have a significant effect on the environment, or
2. The agency has:
   a. Eliminated or substantially lessened all significant effects where feasible as shown in the findings under Section 15091, and
   b. Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

1.2 EIR Process

After the County reviewed the applications for the proposed project, it concluded that the project could have a significant impact on the environment and that preparation of an environmental impact report was determined to be the appropriate CEQA environmental document. The County issued a Notice of Preparation (NOP) on September 3, 2024. The NOP was distributed to city, county, and state and federal agencies, other public agencies, and various interested private organizations and individuals. The NOP was also published in the Imperial Valley Press on September 3, 2024. A public scoping meeting was held on September 26, 2024. No comment letters were received during the scoping meeting. A copy of the NOP is included in Appendix A of the Final EIR.

Based on the analysis presented in the NOP, it was determined that the Draft EIR should analyze project related environmental impacts relative to the following 15 substantive potential impact areas in the Environmental Analysis section:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas (GHG) Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)

- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

Additionally, the Draft EIR was required to include other CEQA substantive sections including an Executive Summary, Introduction, Environmental Setting, Project Description, Analysis of Long-Term Effects, Cumulative Impacts, Effects Not Significant, and Alternatives.

The Draft EIR was distributed to various federal, state, regional, local agencies and interested parties for a 50-day public review period (May 1, 2025 through June 20, 2025) in accordance with Section 15087 of the CEQA Guidelines. Four letters were received during the comment period, and are responded to in the responses to comments section of the Final EIR.

2 Project Location

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately-owned land, comprising 24 assessor parcels.

As previously mentioned above, the project applicant is seeking approval of four separate CUPs associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility, which together define the project site. The four CUP applications or individual site locations consist of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

2.1 Big Rock 2 Cluster North: CUP #24-0006

The Big Rock 2 Cluster North site is located on 13 parcels comprising approximately 1,030 acres. The Big Rock 2 Cluster North site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

2.2 Big Rock 2 Cluster South: CUP #24-0007

The Big Rock 2 Cluster South site is located on five parcels comprising approximately 410 acres. The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

2.3 Big Rock 2 Cluster East/Laurel Cluster South: CUP #24-0008

The Big Rock 2 Cluster East/Laurel Cluster South site is located on two parcels comprising approximately 160 acres. The Big Rock 2 Cluster East site/Laurel Cluster South site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

2.4 Big Rock 2 Cluster West: CUP #24-0009

The Big Rock 2 Cluster West site is located on five parcels comprising approximately 249 acres. The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

3 Project Description

The proposed project involves the construction of a utility-scale PV solar and BESS facility on approximately 1,849 acres of privately-owned land. The project would generate up to a combined 500 MW of AC on a daily basis and up to 500 MW of battery storage. Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines which could run overhead and/or underground to a dedicated project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the project substation to the existing Liebert Switchyard, which will then be connected via an overhead 230-kV gen-tie line to the existing Mandrapa Switchyard and the San Diego Gas and Electric (SDG&E) Imperial Valley Substation.

Each individual CUP site may include a ground mounted photovoltaic solar power generating system, supporting structures, inverter modules, pad mounted transformers, BESS, access roads and fencing, an operations and maintenance (O&M) building, and an on-site substation

It is anticipated that all BESS facilities associated with the project will be developed concurrently with PV componentry and situated in proximity to project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and project needs, by allowing one CUP area to utilize BESS credits of another CUP area. Likewise, the project may share facilities such as O&M facilities, transmission-related facilities, project sub-station(s), and/or other appurtenances.

3.1 Project Objectives

The primary project objective is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.

- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Renewable Energy and Transmission Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce GHG emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of GHGs to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.

3.2 Discretionary Actions/Approvals by the County of Imperial

The County is the "lead agency" for the proposed project. Lead agency is defined as, "the public agency, which has the principal responsibility for carrying out or approving a project." The County must undertake the following discretionary actions and approvals for the project:

1. **General Plan Amendment (#24-0002).** An amendment to the County's General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.
2. **Zone Change (#24-0003).**
    - **Big Rock 2 Cluster North**. The Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy

Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the RE Overlay Zone. The applicant is requesting a Zone Change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

- **Big Rock 2 Cluster South**. The Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). The applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-3-RE).
- **Big Rock 2 Cluster East.** The Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.
- **Big Rock 2 Cluster West.** The Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). The applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

3. **Approval of the following CUPs:**
    - Big Rock 2 Cluster North: #24-0006
    - Big Rock 2 Cluster South: #24-0007
    - Big Rock 2 Cluster East: #24-0008
    - Big Rock 2 Cluster West: #24-0009

Implementation of the project would require the approval of the four CUPs listed above by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. With approval of the zone change, the project site would be zoned General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone (A-2-RE, A-2-R-RE and A-3-RE).

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*

- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

4. **Variance (#24-0002 through 24-0005).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project.

The project may involve additional ministerial and discretionary approvals as listed below. Ministerial and discretionary approvals may include, but are not limited to the following:

- Grading Permit(s) - Imperial County Planning & Development Services (ICPDS)
- Building Permit(s) - ICPDS
- Dust Control Plan – Imperial County Air Pollution Control District (ICAPCD)
- Rule 310 Exemption (as applicable) - ICAPCD
- Construction Traffic Control Plan – Imperial County Department of Public Works (ICDPW)
- County Road Encroachment Permits, Transportation Permits - ICDPW
- Vacation of Public Easements (as applicable) - ICDPW
- Site Plan and Architectural Review – ICPDS
- Occupancy Permits - ICPDS

- Fire Safety Plan – Imperial County Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements – Imperial County Fire Department and Office of Emergency Management
- On-site Water Treatment Permit – Imperial County Division of Environmental Health, ICDPW
- Private Sewage Disposal Permit - Imperial County Division of Environmental Health
- Project Decommissioning Plan - ICPDS, ICDPW
- Pest Management Plan - Agricultural Commissioner's Office

3.3 Discretionary Actions/Approvals by Other Agencies

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of the project. Trustee Agencies are state agencies that have discretionary approval or jurisdiction by law over natural resources affected by a project. These agencies may include, but are not limited to the following:

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- California Endangered Species Act (CESA), Incidental Take Permit (ITP) for Western Burrowing Owl (recently listed by California Department of Fish and Wildlife as a "Candidate" species).
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

4 Issues Addressed In the EIR

Based on the analysis presented in the NOP, the following environmental topics were analyzed in the EIR.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils

- GHG Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

5 Mitigation Monitoring Program

Pursuant to PRC §21081.6, the County has adopted a detailed mitigation and monitoring program prepared under the County's direction. The program is designed to ensure that all mitigation measures as hereafter required are in fact implemented on a timely basis as the project is implemented.

6 Record of Proceedings

For all purposes of CEQA compliance, including these Findings of Fact, the administrative record of all County proceedings and decisions regarding the environmental analysis of the project include but are not limited to:

- The Draft and Final EIR for the project, together with all appendices and technical reports referred to therein, whether separately bound or not, or on a CD;
- All reports, letters, applications, memoranda, maps or other planning and engineering documents prepared by the County, its planning consultant and environmental consultant, the applicant or others and presented to or before the decision-makers or staff;
- All minutes of any public workshops, meetings or hearings, and any recorded or verbatim transcripts or videotapes thereof;
- Any letters, reports or other documents or evidence submitted into the record at any public workshops, meetings or hearings; and
- Matters of common general knowledge to the County which it may consider, including applicable state or local laws, ordinances and policies, the General Plan and all applicable planning programs and policies of the County.

Documents or other materials that constitute the record of proceedings upon which these Findings are made are located at the Department of Planning and Development Services of the County of Imperial, 801 Main Street, El Centro, CA 92243.

7 Findings of Significant Impacts, Required Mitigation Measures and Supporting Facts

The County, having reviewed and considered the information contained in the EIR and the entire administrative record, including but not limited to the expert opinions of the County's professional planning staff and independent consultants familiar with the environmental conditions of the County and the facts and circumstances of the project who prepared the EIR, finds pursuant to Public Resources Code §21081(a)(1) and Guidelines §15091(a)(1) that changes or alterations have been required in, or incorporated into, the project which would mitigate, avoid, or substantially lessen to below a level of significance the following potential significant environmental effects identified in the EIR.

7.1 Agricultural Resources

7.1.1 Conversion of Important Farmlands to Non-Agricultural Use

A. Potential Impact. Implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland
- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

The loss of agricultural land designed Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is typically considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.3, Agricultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with the implementation of Mitigation Measures AG-1a and AG-1b of the Final EIR as identified below. With the implementation of Mitigation Measure AG-1a, the project applicant would be required to minimize the impact associated with the permanent loss of valuable farmlands through either provision of an agricultural conservation easement (Option 1) , payment into the County agricultural fee program (Option 2), entering into a public benefit agreement (Option 3), or avoiding Prime Farmlands (Option 4). Option 1 would require the Permittee to procure agricultural conservation easements on a "1 on 1" (for Non-Prime Farmland) or "2 on 1" (for Prime Farmland) basis of land of equal size, equal quality farmland, outside the path of development. Option 2 would require the Permittee to pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent (for Non-Prime Farmland) or 30 percent (for Prime Farmland) of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program

costs on a cost recovery/time and material basis. This fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. Option 3 would require the Permittee and County to voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment. The Agricultural Benefit Fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. Option 4 would require the Permittee to revise their CUP Application/Site Plan to avoid Prime Farmland. Mitigation Measure AG-1b will ensure that the project applicant adheres to the terms of the agricultural reclamation plan prepared for the project site, which would address the temporary conversion impact. The Reclamation Plan will include the procedures by which the project site will be returned to its pre-project agricultural condition during decommissioning.

Mitigation Measure(s)

Mitigation Measure AG-1a: Payment of Agricultural and Other Benefit Fees. Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented:

A. Mitigation for Non-Prime Farmland:

Option 1: *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or,

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that: 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development

Agreement, including addressing the mitigation of agricultural job loss on the local economy.

B. Mitigation for Prime Farmland:

Option 1: *Provide Agricultural Conservation Easements.* Provide Agricultural Conservation Easement(s). The permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project; or

Option 4: *Avoid Prime Farmland.* The Permittee must revise their Conditional Use Permit Application/Site Plan to avoid Prime Farmland.

Mitigation Measure AG-1b: Site Reclamation Plan. In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.

Additional facts in support are found in EIR Section 3.3, Chapter 5, and the Final EIR responses to comments relating to agricultural resources.

7.1.2 Involve Other Changes that Coult Result in Conversion of Farmland to Non-Agricultural Use

A. **Potential Impact.** With the implementation of the solar facilities, it is possible that the physical and chemical makeup of the soil materials within the upper soil horizon may change. For example, improper soil stockpiling and management of the stockpiles could result in increased decomposition of soil organic materials, increased leaching of plant available nitrogen, and depletion of soil biota communities (e.g., Rhizobium or Frankia). Any reductions in agricultural productivity could significantly limit the types of crops (e.g., deeper rooting crops, orchards, etc.) that may be grown within the project site in the future. Additionally, there is the potential that weeds or other pests may occur within the solar field if the area is not properly maintained and managed to control weeds and pests.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.3, Agricultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with the implementation of Mitigation Measures AG-1b and AG-2 of the Final EIR as identified below. With implementation of Mitigation Measure AG-1b, the project applicant would be required to adhere to the terms of the comprehensive reclamation plan that would restore the project site to preexisting (pre-project) conditions following decommissioning of the project (after their use for solar generation activities). Implementation of Mitigation Measure AG-2 would require the project applicant to prepare and submit a Pest Management Plan to the County of Imperial Agricultural Commissioner for approval. The project applicant will be required to implement the strategies contained in the Pest Management Plan until reclamation is complete on the project site.

Mitigation Measure(s)

Mitigation Measure AG-1b: Site Reclamation Plan (as described above).

Mitigation Measure AG-2: Pest Management Plan. Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following:

1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line);
2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows:

- Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business;
- All treatments must be performed by a qualified applicator or a licensed pest control operator;
- "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments;
- Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation;
- Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture;
- Obey all pesticide use laws, regulations, and permit conditions;
- Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties;
- Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current;
- Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, EPA Registration numbers, and application rates. A pesticide use report may be used for this;
- Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request.

3. A long-term strategy for weed and pest control and management during the operation of the proposed project. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis.
4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands.
5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.

Additional facts in support are found in EIR Section 3.3, Chapter 5, and the Final EIR responses to comments relating to agricultural resources.

7.2 Air Quality

7.2.1 Cumulatively Considerable Net Increase of Criteria Pollutant - Construction

A. Potential Impact. As shown in Table 3.4-8 of the Final EIR, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. The proposed project must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Regulation VIII requires all unpaved roadways, on- and off-site, to be conditioned and maintained with soil stabilizers to reduce dust opacity to no more than 20 percent; all unpaved disturbed surfaces, on- and off-site, to be stabilized with a dust suppressant, watering, or soil stabilizers to reduce opacity to no greater than 20 percent; and to reduce vehicle speed to no greater than 15 mph on all unpaved surfaces.

Mitigation Measure AQ-2 would require a list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted monthly to ICAPCD to perform a NO_X analysis. ICAPCD will utilize this list to calculate NOx emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5.

Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development

and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9 of the Final EIR, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure AQ-1: Fugitive Dust Control. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process.

ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control

- All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover.
- All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.
- The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and

visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering.

ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control

- Water exposed soil with adequate frequency for continued moist soil.
- Replace ground cover in disturbed areas as quickly as possible.
- Automatic sprinkler system installed on all soil piles.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.
- Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.
- Implement a shuttle service to and from retail services and food establishments during lunch hours.

Standard Mitigation Measures for Construction Combustion Equipment

- Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Enhanced Mitigation Measures for Construction Equipment

To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures:

- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

AQ-2 Construction Equipment. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted monthly to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate NOx emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and

Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of construction. During the operational life of the project, the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department). (Further, construction and operational dust control management plans are required by Mitigation Measure AQ-4 and AQ-6.)

AQ-4 Dust Suppression Management Plan. Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.

AQ-5 Speed Limit. During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.

Additional facts in support are found in EIR Section 3.4, Chapter 5, and the Final EIR responses to comments relating to air quality.

7.2.2 Cumulatively Considerable Net Increase of Criteria Pollutant - Operations

A. **Potential Impact.** During long-term operations of the project, minimal amounts of criteria air pollutants would be generated from periodic vehicle trips for maintenance, inspections, and routine cleaning. However, these events are expected to be occasional and result in minimal emissions. Operational emissions are not anticipated to exceed ICAPCD's significance thresholds. Although no significant air quality impact would occur during operation, the project applicant is required to submit a Dust Suppression Management Plan for both construction and operation in order to reduce fugitive dust emissions.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Implementation of Mitigation Measures AQ-3 and AQ-4 would ensure that a Dust Suppression Management Plan is implemented, thereby ensuring that this potential impact would remain less than significant. In addition, implementation of Mitigation Measure AQ-5 would limit the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less and Mitigation Measure AQ-6 would ensure an Operational Dust Control Plan is implemented.

Mitigation Measure(s)

Mitigation Measure AQ-3: Dust Suppression (as described above).

Mitigation Measure AQ-4: Dust Suppression Management Plan (as described above).

Mitigation Measure AQ-5: Speed Limit (as described above).

Mitigation Measure AQ-6: Operational Dust Control Plan. Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Additional facts in support are found in EIR Section 3.4, Chapter 5, and the Final EIR responses to comments relating to air quality.

7.3 Biological Resources

7.3.1 Burrowing Owls

A. Potential Impact. Burrowing owls and active burrow sites were recorded on the project site during the 2023 and 2024 burrowing owl surveys. Potential direct impacts to burrowing owls, including unintentional clearing or trampling of occupied habitat and/or destruction of burrowing owl dens, eggs, young, or adults, would be significant. Potential short-term, indirect impacts to burrowing owls include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on burrowing owls would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-1 through BIO-4 of the Final EIR. Mitigation Measure BIO-1 requires pre-construction clearance surveys to be conducted within 14 days prior to the start of ground disturbance by qualified and agency-approved biologists to determine the presence or absence of this species within the project footprint. These surveys are necessary because burrowing owls may not use the same burrow every year. The identification of any active burrows would result in the establishment of appropriate buffers and avoidance/minimization of impacts to burrowing owls.

Mitigation Measure BIO-2 establishes compensation for unavoidable direct impacts to burrowing owls. Mitigation Measure BIO-3 establishes an education program to provide information on burrowing owl biology, regulations, protection measures, and reporting procedures. Mitigation Measure BIO-4 requires evaluation and implementation of best measures to reduce burrowing owl mortality along access roads and establishment of a speed limit and perimeter fencing.

Mitigation Measure(s)

Mitigation Measure BIO-1: Burrowing Owl Mitigation. Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities.

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the

burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation.

Burrowing Owl Protection and Mitigation Plan

If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.

As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall

include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant.

Incidental Take Authorization

The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

Mitigation Measure BIO-2: Burrowing Owl Habitat Compensation. The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site.

Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-2 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

Mitigation Measure BIO-3: Worker Awareness Program and Ongoing Training. Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:

- Biology and status of burrowing owl.
- California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations.
- Protection measures designed to reduce potential impacts on the species.
- The function of flagging designated authorized work areas.
- Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field.

All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The

construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

Mitigation Measure BIO-4: Speed Limit. During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.

Perimeter Fencing. Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.2 California Black Rail and Yuma Ridgeway's Rail

A. **Potential Impact.** California black rail and Yuma Ridgeway's rail were not recorded during the 2023 reconnaissance survey; however, marginally suitable habitat occurs in small quantities within the irrigation canals on the project site. Potential direct impacts to California black rail or Yuma Ridgeway's rail, including destruction of nests, eggs, and/or young if one or both species nest on site, would be considered significant. Potential short-term, indirect impacts to California black rails and Yuma Ridgeway's rails include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on California black rail and Yuma Ridgeway's rail would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-3 and BIO-5 of the Final EIR. Mitigation Measure BIO-3 establishes an education program to provide information on regulations, protection measures, and reporting procedures. Implementation of Mitigation Measure BIO-5 would require nesting bird pre-construction surveys to be completed if construction occurs during the nesting bird season (February 1 through September 15). These surveys would identify any California black rails and Yuma Ridgeway's rails within the project site, establish appropriate buffers, and avoid impacts to California black rails and Yuma Ridgeway's rails. Construction-related direct impacts to California black rails and Yuma Ridgeway's rails would be reduced to a level less than significant with implementation of Mitigation Measure BIO-5.

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-5: Migratory Birds and Other Sensitive Non-Migratory Bird Species. To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial.

Construction conservation measures to be incorporated into the ABPP shall include the following:

- Minimizing disturbance to vegetation to the maximum extent practicable.
- Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest.
- Minimizing wildfire potential.
- Minimizing activities that attract prey and predators.
- Controlling non-native plants.

Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following:

- Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities.
- Minimizing noise.
- Minimizing use of outdoor lighting.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.3 Northern Harrier

A. Potential Impact. One northern harrier was recorded foraging during the June 2023 burrowing owl survey. Potential direct impacts to northern harriers, including destruction of nests, eggs, and/or young if they nest on site, would be significant. The proposed project also has the potential to impact the species' migratory movement. The agriculture fields on the project site provide foraging habitat for northern harrier,

and the migratory movements of the species may be adversely affected by construction and presence of construction on the project site. Potential short-term, indirect impacts to northern harriers include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on northern harrier would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-3 and BIO-6. Mitigation Measure BIO-3 establishes an education program to provide information on regulations, protection measures, and reporting procedures. Mitigation Measure BIO-6 would require a qualified biologist to conduct a pre-construction bird survey within and adjacent to the project area. The survey will account for breeding and nesting birds, as wells other bird activity, such as foraging, and for behavior possibly caused by project activities, such as agitation, stress, and/or nest abandonment. The survey would identify any northern harriers within the project site, establish appropriate buffers, and avoid impacts to northern harriers.

Mitigation Measure(s)

Mitigation Measure BIO-3: Worker Awareness Program and Ongoing Training (as described above)

Mitigation Measure BIO-6: Pre-Construction Bird Surveys and Nest Avoidance. Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species).

If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures.

If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.4 Nesting Birds

A. **Potential Impact.** The project site has the potential to support avian nests, which are protected under the Migratory Bird Treaty Act and the California Fish and Game Code (Section 3503), under which it is unlawful to "take, possess, or needlessly destroy" avian nests or eggs. Thus, potentially significant impacts could occur if vegetation clearing is undertaken during the breeding season (February 1 through September 15). Potential short-term, indirect impacts to nesting birds include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on nesting birds would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-3 and BIO-5. Mitigation Measure BIO-3 establishes an education program to provide information on regulations, protection measures, and reporting procedures. If vegetation removal cannot occur outside of the breeding season, Mitigation Measure BIO-5 would be implemented to require a pre-construction nesting bird survey, thus addressing direct and indirect impacts to nesting birds.

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-5: **Migratory Birds and Other Sensitive Non-Migratory Bird Species** (as described above)

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.5 Bats

A. **Potential Impact.** The following non-listed special-status bat species were determined to have a low potential to forage on the project site: western yellow bat, western mastiff bat, and pocketed free-tailed bat. In addition, pallid bat and Townsend's big-eared bat have yearlong ranges that encompass the project site. The project site provides foraging habitat for these bat species, and the movements of these species may be adversely affected by construction and presence of construction on the project site.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on bats would be mitigated to below a level of significance with implementation of Mitigation Measure BIO-7. Mitigation Measure BIO-7 requires a focused bat survey to be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable. A Bat Management Plan will be prepared by the qualified bat biologist to identify situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats. The Bat Management Plan will be prepared for CDFW's review and approval. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist.

Mitigation Measure(s)

Mitigation Measure BIO-7: Focused Bat Surveys and Bat Management Plan. A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings.

If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing

project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.6 Increased Human Activity

A. **Potential Impact.** Increased human activity can deter wildlife from using habitat areas near the project site and increase the potential for vehicle collisions.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Mitigation Measure BIO-3 requires worker training for operational staff to minimize impacts associated with increased human activity. Mitigation Measure BIO-4 imposes speed limits on site and limits allowed activities to reduce effects from increased human activity. Therefore, with implementation of Mitigation Measures BIO-3 and BIO-4, impacts would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-4: **Speed Limit** (as described above)

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.7 Jurisdictional Waters

A. Potential Impact. According to the project's Aquatic Resources Delineation Report (Appendix E of the Final EIR), the project site contains approximately 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW. While it is assumed that the project would avoid all direct impacts to IID irrigation canals, the smaller canals along the boundaries of agricultural fields on the project site may be impacted.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on jurisdictional waters would be mitigated to below a level of significance with implementation of Mitigation Measure BIO-8. Mitigation Measure BIO-8 requires the project applicant or its designee to obtain the following permits if required: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. Avoidance and minimization measures would be included in the conditions of the permits and shall be adhered to.

Mitigation Measure(s)

Mitigation MeasureBIO-8: Federal and State Agency Permits. Prior to impacts occurring to USACE, RWQCB, and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.4 Cultural Resources

7.4.1 Archaeological Resources

A. Potential Impact. Based on available archival information, the presence of archaeological resources adjacent to the project site, and in consideration of the topography, and the project's vicinity to the New River; there is a moderate potential for the inadvertent discovery of archaeological resources on the project site. The project includes ground-disturbing activities that will extend to depths of 20 feet below the ground surface. As such, the project has the potential to disturb previously

undocumented cultural resources that could qualify as unique archaeological resources pursuant to CEQA.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.6, Cultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measures CUL-1 and CUL-2 of the Final EIR. Mitigation Measure CUL-1 requires a Cultural Resources Worker Environmental Awareness Program Training to be developed and implemented to train equipment operators about cultural resources prior to construction. The program will inform construction personnel about regulations pertaining to cultural resources, the subsurface indicators of resources that will require a work stoppage, procedures for notifying the lead agency of any occurrences, project-specific requirements and mitigation measures, and enforcement of penalties and repercussions for non-compliance with the program. Mitigation Measure CUL-2 requires the project applicant to retain a qualified professional archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist will evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA.

Mitigation Measure(s)

Mitigation Measure CUL-1: Cultural Resources Worker Environmental Awareness Program Training. Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist.

The training shall be provided to all personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

Mitigation Measure CUL-2: Archaeological Monitoring. Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.

In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.

Additional facts in support are found in EIR Section 3.6, Chapter 5, and the Final EIR responses to comments relating to cultural resources.

7.4.2 Human Remains

A. Potential Impact. Although the potential for encountering subsurface human remains within the project site is low, there remains a possibility that human remains are present beneath the ground surface, and that such remains could be exposed during project

construction. The potential to encounter human remains is considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.6, Cultural Resources, of the Final EIR, the project's potential impact to human remains would be mitigated to below a level of significance with implementation of Mitigation Measure CUL-3. This measure requires that construction be halted in the area where the remains are found and the procedures set forth in California Health and Safety Code 7050.5, AB 2641, and California Public Resources Code Section 5097.98 (NPS 1983), as applicable.

Mitigation Measure(s)

Mitigation Measure CUL-3: Discovery of Human Remains. In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983). If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Additional facts in support are found in EIR Section 3.6, Chapter 5, and the Final EIR responses to comments relating to cultural resources.

7.5 Geology and Soils

7.5.1 Seismic Ground Shaking

A. Potential Impact. Even with the integration of building standards, ground shaking within the project site could cause some structural damage to the facility structures or, at least, cause unsecured objects to fall. During a stronger seismic event, ground shaking could result in structural damage or collapse of electrical distribution facilities. Given the potentially hazardous nature of the project facilities, the potential impact of ground motion during an earthquake is considered a significant impact, as proposed structures, such as the substation and transmission lines could be damaged.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1 of the Final EIR. The proposed project would be constructed in accordance with the applicable geotechnical and seismic design standards as well as the site-specific design recommendations in the final geotechnical report per Mitigation Measure GEO-1; and upon operation, the proposed project would not result in any significant changes related to the risk of seismic hazards on the project site when compared to existing conditions, nor would project operation increase or exacerbate the potential for strong seismic ground shaking to occur.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures. Facility design for all project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following:

- Site preparation
- Soil bearing capacity
- Appropriate sources and types of fill
- Potential need for soil amendments
- Structural foundations
- Grading practices
- Soil corrosion of concrete and steel
- Erosion/winterization
- Seismic ground shaking
- Liquefaction
- Expansive/unstable soils

In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.2 Liquefaction

A. **Potential Impact.** Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet below ground surface) in zones of loose sands with variable fines content on the project site. Therefore, the potential for liquefaction exists at the project site. Additional geotechnical investigation would be required during the design phase of the project in order to assess the risk of liquefaction on the project site. The potential impact on liquefaction is considered a significant impact.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1 of the Final EIR. The proposed project would be constructed in accordance with the site-specific design recommendations in the final geotechnical report per Mitigation Measure GEO-1.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.3 Construction Related Erosion

A. **Potential Impact.** Construction activities will involve demolition and grubbing, grading of the project site to establish access roads and pads for electrical equipment, trenching for underground electrical collection lines, and the installation of solar equipment and security fencing which could result in increased erosion and sedimentation to surface waters. Construction could produce sediment-laden stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality. If precautions are not taken to contain contaminants, construction-related erosion impacts are considered a significant impact.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 of the Final EIR. As provided in Mitigation Measure GEO-1, during final engineering for the project, a design-level geotechnical study would identify appropriate measures for the project related to soil erosion. Mitigation Measure HYD-

1 would require the preparation of a Stormwater Pollution Prevention Plan(SWPPP) for sediment and erosion control and implementation of Best Management Practices to reduce erosion from the construction site. The project applicant would be required to implement on-site erosion control measures in accordance with County standards, which require the preparation, review, and approval of a grading plan by the County Engineer.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration. The project applicant or its contractor shall prepare a SWPPP specific to the project and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories:

- Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching)
- Sediment control practices (e.g., temporary sediment basins, fiber rolls)
- Temporary and post-construction on- and off-site runoff controls
- Special considerations and BMPs for water crossings and drainages
- Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity
- Waste management, handling, and disposal control practices
- Corrective action and spill contingency measures
- Agency and responsible party contact information
- Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP

The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control

practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.4 Unstable Geologic Unit or Soil

A. Potential Impact. In areas where project components are planned adjacent to existing channels, there could be potential lateral spreading issues that may require further evaluation in future design phases. Additional geotechnical investigation would be required in order to assess the risk of lateral spreading to occur on the project site. The potential impact associated with lateral spreading is considered a significant impact.

According to the City of Calipatria's 2035 General Plan, natural subsidence occurs in the Salton Trough. Therefore, the potential for subsidence exists at the project site. Additional geotechnical investigation would be required in order to assess the risk of subsidence to occur on the project site. The potential impact associated with subsidence is considered a significant impact.

Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the project site (Appendix G of this EIR). Additional geotechnical investigation would be required in order to assess the risk of liquefaction on the project site. Therefore, the potential impact on liquefaction is considered a significant impact.

It is unknown whether collapsible soils are present on the project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the project site is possible. As such, the potential for collapsible soils exists at the project site. Additional geotechnical investigation would be required in order to assess the risk of collapsible soils to occur on the project site. The potential impact associated with collapsible soils is considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impacts associated with lateral spreading, subsidence, liquefaction, and collapsible soils would be reduced to a level less than significant with implementation of Mitigation Measure GEO-1. The proposed project would be constructed in accordance with the site-specific design recommendations in the final geotechnical report per Mitigation Measure GEO-1.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.5 Expansive and Corrosive Soils

A. Potential Impact. Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils. Clays are expected to be found at the project site. Therefore, the potential for expansive soils exists at the project site. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures and electrical connections producing shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material. These conditions could be worsened if structural facilities are constructed directly on expansive soil materials. This potential impact would be significant as structures could be damaged by these types of soils.

In addition, fine grained and potentially corrosive soils are expected to be encountered at the project site. Corrosive soils can damage underground utilities, including pipelines and cables, or weaken roadway structures. Generally, fine grained soils like clays are more likely to be corrosive. A site-specific geotechnical investigation would be required at the project site to determine the extent and effect of problematic soils.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1. The proposed project would adhere to County building standards and CBC requirements for building on expansive soils. Moreover, Mitigation Measure GEO-1 would identify any potential hazards for building at the project site with recommended engineering practices that would reduce potential project impacts to a level less than significant.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.6 Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems

A. Potential Impact. The project applicant is proposing the use of a standard on-site septic tank and leach field for the treatment and disposal of on-site generated sanitary wastewater. This would occur only at the O&M building. Site specific studies will be required to determine that County Environmental Health standards are met in regard to soil percolation rates and separation of leach fields from groundwater. Notwithstanding these design requirements, potential equipment failures or wastewater loading rates in excess of the design capacity of the treatment and disposal system could lead to water quality degradation.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-2. The proposed project would adhere to County building standards and CBC requirements for building on expansive soils. Moreover, Mitigation Measure GEO-1 would identify any potential hazards for building at the project site with recommended engineering practices that would reduce potential project impacts to a level less than significant. With implementation of Mitigation Measure GEO-2, potential impacts related to infiltration of wastewater into the soil column and water quality degradation would be reduced to a less than significant level through compliance with County performance standards.

Mitigation Measure(s)

Mitigation Measure GEO-2: Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.7 Paleontological Resources

A. Potential Impact. The project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla. Sediments from this formation have yielded

fossilized remains of continental vertebrates, invertebrates, and plants at numerous previously recorded fossil sites in the Imperial Valley. Therefore, the project site is considered paleontologically sensitive. Although unlikely, project construction has the potential to unearth and/or potentially destroy previously undiscovered paleontological resources. Surficial sediments that have been disturbed by agricultural activities or other human-made disturbances have low paleontological resource sensitivity and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments would be considered a potentially significant impact.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact on paleontological resources would be mitigated to below a level of significance with implementation of Mitigation Measures GEO-3 and GEO-4. Mitigation Measure GEO-3 requires a qualified paleontological monitor to be present during excavation activities associated with project construction. The paleontological monitor will be equipped to salvage fossils as they are unearthed and are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Mitigation Measure GEO-4 requires all construction personnel to attend and complete a WEAP training, which will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance.

Mitigation Measure(s)

Mitigation Measure GEO-3: Paleontological Resources Monitoring. Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

Mitigation Measure GEO-4: Paleontological Resources Worker Awareness Program. Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.6 Hydrology and Water Quality

7.6.1 Violation of Water Quality Standards during Construction

A. Potential Impact. During the construction phase, sedimentation and erosion could occur because of tracking from earthmoving equipment, erosion and subsequent runoff of soil, or improperly designed stockpiles. The utilization of proper erosion and sediment control Best Management Practices (BMPs) is critical in preventing discharge to surface waters/drains.

The proposed project has the potential to affect surface water quality. Many different types of hazardous compounds will be used during the construction phase, with proper application, management, and containment being of high importance. Poorly managed construction materials can lead to the possibility for exposure of potential contaminants to precipitation. When this occurs, these visible and/or non-visible constituents become entrained in storm water runoff. If they are not intercepted or are left uncontrolled, the polluted runoff would otherwise freely sheet flow from the project to the IID Imperial Valley Drains and could result in the accumulation of these pollutants in the receiving waters. This is considered a potentially significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.10, Hydrology/Water Quality, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measure HYD-1 of the Final EIR. Prior to construction and grading activities, the project applicant is required to file a Notice of Intent with the SWRCB to comply with the General National Pollutant Discharge Elimination System (NPDES) Construction Permit and prepare a SWPPP, which addresses the measures that would be included

during construction of the project to minimize and control construction and post-construction runoff to the maximum extent practicable. In addition, NPDES permits require the implementation of BMPs that achieve a level of pollution control to the maximum extent practical. With implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a level less than significant through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction and decommissioning.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Additional facts in support are found in EIR Section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.2 Violation of Water Quality Standards during Operation

A. **Potential Impact**. Long-term operation of the solar facility poses a limited threat to surface water quality after the completion of construction. The project would be subject to the County's Grading Regulations as specified in Section 91010.02 of the Ordinance Code. However, since the project site is located in unincorporated Imperial County and not subject to a Municipal Separate Storm Sewer System or NPDES General Industrial Permit, there is no regulatory mechanism in place to address post-construction water quality concerns. Based on this consideration, the project has the potential to result in both direct and indirect water quality impacts that could be significant.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Findings.** Based on the analysis provided in Section 3.10, Hydrology/Water Quality, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measure HYD-2 of the Final EIR. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The proposed project will be designed to include site design, source control, and treatment control BMPs. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. As such, upon implementation of Mitigation Measure HYD-2, impacts would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be

integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.

Additional facts in support are found in EIR Section 3.11, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.3 Substantial Erosion or Siltation On- or Off-Site

A. Potential Impact. Project construction activities, specifically grading and excavation, have the potential to temporarily alter the existing drainage pattern of the project site such that soil erosion occurs.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. During construction, erosion would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1. Therefore, upon implementation of Mitigation Measure HYD-1, impacts related to erosion would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.4 Substantial Flooding On- or Off-Site

A. Potential Impact. Project implementation would not substantially alter the existing drainage pattern of the site or area. The majority of the project site would continue to sheet flow through the pervious native soils. However, the project will need to be designed to meet County of Imperial storage requirements (100 percent of the 100-year storm (3 inches of rain)) (refer to the County's *Engineering Guidelines Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County* (2008) for storm water runoff.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Findings.** Implementation of Mitigation Measure HYD-2 requires that the project Drainage Plan adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. As such, infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. Upon implementation of Mitigation Measure HYD-2, impacts would be less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.5 Creation of Runoff Water Exceeding the Capacity of Stormwater Drainage Systems

A. **Potential Impact.** Project implementation would not substantially alter the existing drainage pattern of the site or area. During construction, erosion and associated pollutants would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Findings.** During construction, erosion and associated pollutants would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.6 Conflict with Water Quality Control Plan

A. Potential Impact. As described above in Sections 7.6.1 and 7.6.2, the proposed project has the potential to affect surface water quality during construction and operation.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. With the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a less than significant level through the inclusion of focused BMPs for the protection of surface water resources. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. Implementation of Mitigation Measures HYD-1 and HYD-2 would reduce impacts to a level less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Mitigation Measure HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.7 Tribal Cultural Resources

7.7.1 Substantial Adverse Change in the Significance of a Tribal Cultural Resource

A. Potential Impact. As discussed in Section 3.15.1, Tribal Cultural Resources, of the Final EIR, in accordance with AB 52, the County provided notification of the proposed project to Native American tribes that the County understands to be traditionally and culturally affiliated with the geographic area of the proposed project. Ray Teran of the Viejas Band of Kumeyaay Indians ("Viejas") responded via email on September 3, 2024, stating he had reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas.

B. Findings. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. Based on the analysis provided in Section 3.15, Tribal Cultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measures TCR-1 and CUL-2 of the Final EIR. In the event previously unidentified

tribal cultural resources are identified during construction activities, Mitigation Measure TCR-1 would require construction work within 100 feet of the find be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074. Mitigation Measure CUL-2 requires the project applicant to retain a qualified professional archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction.

Mitigation Measure(s)

Mitigation Measure TCR-1: Discovery of Unidentified Tribal Cultural Resources. If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.

Mitigation Measure CUL-2: Archaeological Monitoring (as described above)

Additional facts in support are found in EIR Section 3.15, Chapter 5, and the Final EIR responses to comments relating to tribal cultural resources.

8 Cumulative Impacts

As analyzed in Chapter 5 of the Final EIR, cumulative impacts to agricultural resources, air quality, biological resources, cultural resources, geology and soils, hydrology/water quality, and tribal cultural resources would be significant prior to implementation of project specific mitigation measures, and mitigation that would be required of other cumulative projects.

Agricultural Resources

Cumulative impacts on agricultural resources take into account the proposed project's temporary impacts as well as those likely to occur as a result of other existing, proposed and reasonably foreseeable projects. To determine cumulative impacts on agricultural resources, an assessment is made of the temporal nature of the impacts on individual resources (e.g., temporary such as in solar projects versus permanent as in industrial or residential developments) as well as the inventory of agricultural resources within the cumulative setting.

As discussed in Section 3.3, Agricultural Resources of the Final EIR, implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland

- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

Thus, the proposed project would incrementally add to the temporary conversion of agricultural land in Imperial County. According to the California Department of Conservation, in 2020, approximately 519,891 acres out of a total of 1,028,522 acres in Imperial County is classified as Important Farmland (California DOC n.d.). Table 5-2 of the Final EIR summarizes the percentage of each type of farmland in the County that would be converted by the proposed project.

As shown in Table 5-2 of the Final EIR, the Prime Farmland and Farmland of Statewide Importance within the project site comprises approximately 0.78 percent (0.52 + 0.26) of the total Important Farmland in the County. Thus, the proposed project would temporarily convert a very small fraction of the total Important Farmlands in the County and have a minimal effect on agricultural land on a cumulative scale. Furthermore, the conversion would be temporary and last for the duration of the project's useful life which is expected to be up to 30 years.

Development of the solar energy facility, BESS, and supporting infrastructure is subject to the County's zoning ordinance. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be*

approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.

- *Solar energy plants meeting the requirements in Division 17*

Upon approval of a CUPs, the project's uses would be consistent with the Imperial County Land Use Ordinance and thus, is also consistent with the General Plan land use designations of the site. Additionally, as a condition of project approval, the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan.

As discussed in Section 3.3, Agricultural Resources of the Final EIR, Mitigation Measure AG-1a (Payment of Agricultural and Other Benefit Fees), AG-1b (Site Reclamation Plan), and AG-2 (Pest Management Plan) would be implemented to reduce potential impacts on agricultural resources to a level less than significant. Each individual cumulative project would be or would have been required to provide mitigation for any impacts on agricultural resources in accordance with the County's policies directed at mitigating the impact associated with the conversion of important farmlands. Therefore, the project's contribution to this impact would be less than cumulatively considerable.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to agricultural resources.

Air Quality

Construction. The proposed project would generate air emissions due to vehicle and dust emissions associated with construction activities. Similar effects would also be realized upon site decommissioning, which would be carried out in conjunction with the project's restoration plan, and subject to applicable ICAPCD standards. Likewise, the other cumulative projects that are pending construction (Laurel I, Laurel II, and Laurel III), or pending entitlement (Saavi BESS) identified in Table 5-1 of the Final EIR would result in the generation of air emissions during construction activities.

With respect to the proposed project, during the construction and decommissioning phases, the project would generate PM_{10}, $PM_{2.5}$, ROG, CO, and NO_x emissions during each active day of construction. As discussed in Section 3.4, Air Quality of the Final EIR, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissions. With implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

The proposed project, in conjunction with the construction of other cumulative projects as identified in Table 5-1 of the Final EIR, could result in a cumulatively considerable increase in the generation of PM_{10}, $PM_{2.5}$, and NO_x; however, like the proposed project, cumulative projects would be subject to mitigation pursuant to County ICAPCD's Regulations and Rules, and the cumulative impact would be reduced to a level less than significant through compliance with these measures. Because the project will be required to implement measures consistent with ICAPCD regulations designed to alleviate the cumulative impact associated with PM_{10}, the proposed project's contribution is rendered less than cumulatively considerable and is therefore, less than significant.

Operation

Operation. As the proposed project would have no major stationary emission sources and would require minimal vehicular trips, operation of the proposed solar facility would result in substantially lower emissions than project construction. The project's operational emissions would not exceed the Tier I thresholds; therefore, the impact would be less than significant. Operational impacts of other renewable energy facilities identified in Table 5-1 of the Final EIR would also be similar. Although these cumulative projects generally involve large areas, their operational requirements are very minimal, requiring minimal staff or use of machinery or equipment that generate emissions. Further, alternative energy projects, such as the project, would assist attainment of regional air quality standards and improvement of regional air quality by providing clean, renewable energy sources. Consequently, the projects would provide a positive contribution to the implementation of applicable air quality plan policies and compliance with EO S-3-05.

However, from a cumulative air quality standpoint, the potential cumulative impact associated with the generation of O_3, $PM_{2.5}$ and PM_{10} emissions during operation of the cumulative projects is a consideration because existing O_3 and PM_{10} levels in the SSAB are at unhealthy levels during certain periods. Imperial County is classified as non-attainment for $PM_{2.5}$ for the urban areas of Imperial County. However, the project's operational contribution to O_3, $PM_{2.5}$ and PM_{10} would be below a level of significance. As with the construction phases, the cumulative projects would be required to comply with ICAPCD's Regulation VIII for dust control (Regulation VIII applies to both the construction and operational phases of projects). As a result, the ICAPCD would be required to comply with the various dust control measures and to prepare and implement operational dust control plans as approved by the ICAPCD, which is a component of ICAPCD's overall framework of the AQAP that sets forth a comprehensive program for SSAB's compliance with all federal and state air quality standards. Therefore, the project would not contribute to long-term cumulatively considerable air quality impacts and the project would not result in cumulatively significant air quality impacts, and cumulative impacts would be less than significant.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to air quality.

Biological Resources

The geographic scope for considering cumulative impacts on biological resources includes the Imperial Valley and related biological habitats. Table 5-1 of the Final EIR lists the projects considered for the biological resources cumulative impact analysis.

In general terms, in instances where a potential impact could occur, CDFW and USFWS have promulgated a regulatory scheme that limits impacts on these species. The effects of the project would be rendered less than significant through mitigation requiring compliance with all applicable regulations that protect plant, fish, and animal species, as well as waters of the U.S. and state. Other cumulative projects would also be required to avoid impacts on special-status species and/or mitigate to the satisfaction of the CDFW and USFWS for the potential loss of habitat.

As described in Section 3.5, Biological Resources of the Final EIR, the project would have the potential to result in impacts on biological resources. These impacts are generally focused on potential construction-related effects to burrowing owls, raptor species (California Black Rail, Yuma Ridgeway's Rail, and northern harrier), migratory birds, and bats. Additionally, project construction has the potential to result in direct and indirect impacts on nesting birds.

Burrowing Owls are protected by the CDFW mitigation guidelines for burrowing owl (CDFW 2012) and Consortium guidance (1993), which require a suite of mitigation measures to ensure direct effects to burrowing owls during construction activities are avoided and indirect effects through burrow destruction and loss of foraging habitat are mitigated at prescribed ratios. Mitigation measures identified in Section 3.5, Biological Resources of the Final EIR, would ensure that all regulations required to protect burrowing owls, raptor species, and migratory birds, are implemented, thereby minimizing potential impacts on these species to a less than significant level. Similarly, the cumulative projects within the geographic scope of the project would be required to comply with the legal framework as described above. Based on these considerations, impacts on biological resources would not be cumulatively considerable.

As with the proposed project, each of the cumulative projects would be required to provide mitigation for impacts on biological resources. The analysis below is conducted qualitatively and in the context that the cumulative projects would be subject to a variety of statutes and administrative frameworks that require mitigation for impacts on biological resources.

Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The MBTA is enforced by USFWS. This act prohibits the killing of any migratory birds without a valid permit. Any activity which contributes to unnatural migratory bird mortality could be prosecuted under this act. With few exceptions, most birds are considered migratory under this act. Raptors and active raptor nests are protected under California FGCs 3503.5, 3503, and 3513.

The CWA and California's Porter-Cologne Water Quality Control Act provide protection for water-related biological resources by controlling pollution, setting water quality standards, and preventing jurisdictional streams, lakes, and rivers from being filled without a federal permit. No jurisdictional wetlands are located with the project site that could otherwise be directly impacted by construction of the proposed project. Likewise, Mitigation Measures HYD-1 and HYD-2 would be required to avoid or minimize potential water quality impacts that could otherwise indirectly impact biological resources. Further, the proposed project would result in a net decrease in water demand, which would provide a benefit to IID's water budget and available supply for the Salton Sea. Implementation of the project would result in fallowing of currently irrigated agricultural fields. The IID's "Imperial Valley Natural Community Conservation Plan and Habitat Conservation Plan Planning Agreement No. 2810-2004-001-06 (February 2006) covers water conservation and irrigation and drainage of land to which IID delivers water to which the environmental impacts and various approaches to mitigate potential impacts to the Salton Sea include fallowing agricultural lands as identified in the HCP Final EIR/EIR. Final EIR Section 3.16 discusses the IID's Interim Water Supply Policy (IWSP) for Non-Agricultural Projects and Temporary Land Conversion Fallowing Policy (TLCFP) adopted by the IID and according to the TLCFP "This fallowing program satisfies multiple district objectives and service to reduce the conservation and water use demands on other IID water uses and thus provide district-wide benefits."

Given the above, the project would not contribute substantially to a cumulative biological resources impact. Similarly, the cumulative projects within the geographic scope of the proposed project will be required to comply with the legal frameworks set forth above, as well as others, and will be required to mitigate their impacts to a less than significant level. Therefore, the project would not contribute to a cumulatively considerable impact to biological resources, and cumulative impacts would be less than significant.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to biological resources.

Cultural Resources

As discussed in Section 3.6, Cultural Resources of the Final EIR, 7 previously recorded cultural resources were identified within the project site during field surveys. Under Impact 3.6-1, the eligibility of the identified resources were discussed. None of the 7 previously recorded cultural resources were determined eligible for listing in the CRHR or NRHP.

The potential of finding a buried archaeological site during construction is considered low. However, like all construction projects in the state, the possibility exists. This potential impact is considered significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce potential impacts associated with the unanticipated discovery of unknown buried archaeological resources. Implementation of Mitigation Measure CUL-3 would reduce potential impacts on human remains to a level less than significant.

Future projects with potentially significant impacts on cultural resources would be required to comply with federal, state, and local regulations and ordinances protecting cultural resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures CUL-1 through CUL-3, the proposed project would have a less than cumulatively considerable contribution to impacts on cultural resources.

During operations and decommissioning of the project, no additional impacts on archaeological resources would be anticipated because the soil disturbance would have already occurred and been mitigated during construction.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to cultural resources.

Geology and Soils

The Imperial Valley portion of the Salton Trough physiographic province of Southern California is used as the geographic scope for the analysis of cumulative impacts on geology/soils and mineral resources. Cumulative development would result in an increase in population and development that could be exposed to hazardous geological conditions, depending on the location of proposed developments. Geologic and soil conditions are typically site specific and can be addressed through appropriate engineering practices. Cumulative impacts on geologic resources would be considered significant if the project would be impacted by geologic hazard(s) and if the impact could combine with off-site geologic hazards to be cumulatively considerable. None of the projects identified within the geographic scope of potential cumulative impacts would intersect or be additive to the project's site-specific geology and soils impacts; therefore, no cumulatively considerable effects are identified for geology/soils, and cumulative impacts would be less than significant.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant paleontological resources impact due to the potential loss of paleontological resources unique to the region. However, mitigation is included in the Final EIR to

reduce potentially significant project impacts to paleontological resources during construction of the proposed project. Implementation of Mitigation Measures GEO-3 and GEO-4 would ensure that the potential impacts on paleontological resources do not rise to the level of significance. Future projects with potentially significant impacts on paleontological resources would be required to comply with federal, state, and local regulations and ordinances protecting paleontological resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures GEO-3 and GEO-4, the proposed project would have a less than cumulatively considerable contribution to impacts on paleontological resources.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to geology and soils.

Hydrology/Water Quality

Table 5-1 of the Final EIR lists the projects considered for the hydrology and water quality cumulative impact analysis. The geographic scope for considering cumulative hydrology and water quality impacts is the Imperial Valley Hydrologic Unit as defined by the Colorado Basin RWQCB Basin Plan.

The construction of the project is expected to result in short-term water quality impacts. Compliance with the SWRCB's NPDES general permit for activities associated with construction (2009-0009-DWQ) would reduce water quality impacts. As with the proposed project, each of the cumulative projects would be required to comply with the Construction General Permit. The SWRCB has determined that the Construction General Permit protects water quality, is consistent with the CWA, and addresses the cumulative impacts of numerous construction activities throughout the state. This determination in conjunction with the implementation of mitigation would ensure short-term water quality impacts are not cumulatively considerable.

The project is not expected to result in long-term operations-related impacts related to water quality. The project would mitigate potential water quality impacts by implementing site design, source control, and treatment control BMPs, as outlined in Mitigation Measures HYD-1 and HYD-2. Some cumulative projects would require compliance with the SWRCB's NPDES general permit for industrial activities, as well as rules found in the CWA, Section 402(p)(1) and 40 CFR 122.26, and implemented Order No. 90-42 of the RWQCB. With implementation of SWRCB, Colorado River RWQCB, and County policies, plans, and ordinances governing land use activities that may degrade or contribute to the violation of water quality standards, cumulatively considerable impacts on water quality would be minimized to a less than significant level.

Based on a review of the FEMA Flood Insurance Rate Map FIRM, the proposed project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. As such, the project would not result in a significant cumulatively considerable impact on floodplains by constructing new facilities within an identified flood hazard zone.

Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact to hydrology or water quality, and cumulative impacts would be less than significant.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to hydrology/water quality.

Tribal Cultural Resources

As discussed in Section 3.15, Tribal Cultural Resources of the Final EIR, the County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians ("Viejas") have requested to be involved with monitoring efforts. The proposed project was determined to have cultural significance or ties to Viejas. As a result, implementation of Mitigation Measures CUL-3 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance. Other projects listed in Table 5-1 of the Final EIR would potentially be located in sensitive areas where unidentified tribal cultural resources may exist. Therefore, future cumulative projects would also be required to comply with the requirements of AB 52 to determine the presence/absence of tribal cultural resources and engage in consultation to determine appropriate mitigation measures to minimize or avoid impacts on tribal cultural resources. Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact tribal cultural resources.

9 Effects Found Not to Be Significant

CEQA Guidelines §15128 require that an EIR contain a brief statement disclosing the reasons why various possible significant effects of the project were found not to be significant, and therefore would not be discussed in detail in the EIR. Final EIR Chapter 6 identifies the following issues areas that will not be impacted by the project: Forestry Resources, Energy, Mineral Resources, Population/Housing, Public Services (Schools and Parks/Other Public Facilities), Recreation, Utilities (Wastewater, Stormwater, Power, and Solid Waste), and Wildfire.

10 Findings Regarding Feasible Alternatives

Pursuant to CEQA Guidelines §15126.6(a), EIRs must "describe a range of reasonable alternatives to the project, or to the location of this project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. To be legally sufficient, the consideration of project alternatives in an EIR must permit informed agency decision-making and informed public participation. The analysis of alternatives is evaluated against a rule of reason. Alternatives are suitable for study in an EIR if they meet all of the following thresholds: (1) substantially reduce or avoid the project's significant environmental impacts; (2) attain most of the basic project objectives; (3) are potentially feasible; and (4) are reasonable and realistic. (Guidelines §15126.6, Subds. (a), (c).) Candidate alternatives that do not satisfy these requirements may be excluded from further analysis. An EIR need not consider alternatives that would change the fundamental nature of the project or that cannot achieve the fundamental goals and purposes of the proposed project.

The alternatives to the project are evaluated in Chapter 7 of the EIR in terms of their ability to meet the basic objectives of the project, and eliminate or further reduce its significant environmental effects. Based on these parameters, the following alternatives were considered and analyzed in the EIR:

1) Alternative 1–No Project/No Development Alternative
2) Alternative 2–Reduced Project Site

10.1 Alternative 1 – No Project/No Development

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e)(1), "the specific alternative of 'no project' shall also be evaluated along with its impact." Also, pursuant to Section 15126.6(e)(2); "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, ... at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be developed. The No Project/No Development Alternative would not meet the project objectives.

A. Finding. Alternative 1 is infeasible. It is found pursuant to Public Resources Code Section 21081(a)(3), that specific economic, legal, social, technological, or other considerations, make Alternative 1 infeasible.

B. Facts in Support of Findings. Alternative 1-No Project/No Development Alternative is rejected as infeasible because it will not meet the primary objectives of the proposed project which include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Renewable Energy and Transmission Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce GHG emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of GHGs to at least the 1990 emissions level by 2020. This timeline was

updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.

- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.

For the reasons stated above, the County finds that this alternative is infeasible and less desirable than the proposed project and rejects this alternative.

10.2 Alternative 2 – Reduced Project Site

The purpose of this alternative is to reduce impacts on Prime Farmland within the project site. Implementation of the project would result in the temporary conversion of 973.24 acres of Prime Farmland to non-agricultural uses. A majority of the Prime Farmland occurs within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would reduce the overall size of the solar facility by avoiding the Prime Farmland occurring within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would avoid developing parcels that contain large areas of Prime Farmland. (NOTE: this alternative would not avoid several pockets of Prime Farmland, as these represent small, isolated pockets of land, which would likely not remain economically viable or practically feasible to farm as they would be surrounded by solar uses). Therefore, the project site would be reduced by approximately 788 acres from a total of 1,849 acres to 1,061 acres.

A. **Finding.** It is found pursuant to Public Resources Code Section 21081(a)(3), that specific economic, legal, social, technological, or other considerations, make Alternative 2 infeasible.

B. **Facts in Support of Findings.** The purpose of studying alternatives to the proposed project is to identify alternatives that would substantially reduce or avoid the significant environmental impacts of the proposed project. Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced.

   For the reasons stated above, the County finds that this alternative is infeasible and less desirable than the proposed project and rejects this alternative.

10.3 Findings Regarding Range of Alternatives

A. **Finding.** The EIR considers a reasonable range of alternatives. Substantial evidence supports the conclusion of the EIR regarding alternatives considered and rejected.

B. **Facts in Support of Findings.** The purpose of studying alternatives to the proposed project is to identify alternatives that would substantially reduce or avoid the significant environmental impacts of the proposed project. Substantial evidence shows that all potentially significant environmental impacts of the proposed project are mitigated below significant levels and that no significant unavoidable significant environmental impacts remain. Consequently, the range

of alternatives studied in the EIR is reasonable because it included four alternatives to the proposed project despite there being no significant unavoidable environmental impacts necessitating consideration of alternatives to substantially reduce or avoid such impacts. Although some alternatives would reduce the less-than-significant impacts of the proposed project, CEQA does not require that such alternatives be adopted.

11 Findings Regarding Growth Inducing Impacts

The proposed project is located within the unincorporated area of Imperial County and it does not involve the development of permanent residences that would directly result in population growth in the area. The unemployment rate in Imperial County, as of January 2025 was 17.9 percent (State of California Employment Development Department 2025). The applicant expects to utilize construction workers from the local and regional area, a workforce similar to that involved in the development of other utility-scale solar facilities. Based on the unemployment rate, and the availability of the local workforce, construction of the proposed project would not have a growth-inducing effect related to workers moving into the area and increasing the demand for housing and services. Once construction is completed, no permanent construction workers would be hired. The proposed project would employ 4 to 10 full-time personnel to maintain the project facility 7 days a week during normal daylight hours. As such, the proposed project would not induce substantial population growth in the area.

While the proposed project would contribute to energy supply, which indirectly supports population growth, the proposed project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, it would also replace existing sources of non-renewable energy. Unlike a gas-fired power plant, the proposed project is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts, consistent with the findings and declarations in SB 100 that a benefit of the Renewable Portfolio Standard is displacing fossil fuel consumption within the state. The project is being proposed in response to state policy and legislation promoting development of renewable energy.

The proposed project would supply energy to accommodate and support existing demand and projected growth, but the energy provided by the project would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project site; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project (CEQA Guidelines Appendix F(II); PRC Section 21100(b)(3)). However, the relationship between the proposed project's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 CCR Section 15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in Napa Citizens for Honest Gov't v. Napa County Board of Supervisors, 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or

in the cases, requires more than a general analysis of projected growth" *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the proposed project's growth-inducing effects cannot be resolved by collection of further data because of the diversity of factors affecting growth.

While this document has considered that the proposed project, as an energy project, might foster regional growth, the particular growth that could be attributed to the proposed project is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the proposed project. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the proposed project's contribution of additional electrical capacity. The County of Imperial has not adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA.

Additionally, the project would not involve the development of any new local or regional roadways, new water systems, or sewer; and thus, the project would not further facilitate additional development into outlying areas. For these reasons, the proposed project would not be growth-inducing.

12 Findings Regarding Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines Section 15126.2(d), an EIR must identify any significant irreversible environmental changes that would be caused by implementation of the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses.

Energy resources needed for the construction of the proposed project would contribute to the incremental depletion of renewable and non-renewable resources. Resources, such as timber, used in building construction are generally considered renewable and would ultimately be replenished. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the project. Thus, the project would irretrievably commit resources over the anticipated 30-year life of the project.

At the end of the project's operation term, the applicant may determine that the project should be decommissioned and deconstructed. Should the project be decommissioned, the project applicant is required to restore land to its pre-project state. Consequently, some of the resources on the site could potentially be retrieved after the site has been decommissioned. Concrete footings, foundations, and pads would be removed and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. The applicant anticipates using the best available recycling measures at the time of decommissioning.

Implementation and operation of the proposed project would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources. Additionally, the project is consistent with the state's definition of an "eligible renewable energy resource" in Section 399.12 of the California Public Utilities Code and the definition of "in-state renewable electricity generation facility" in Section 25741 of the California PRC.

13 Conclusion

1. The County of Imperial (the County), acting through the Board of Supervisors, is the Lead Agency for the project evaluated in the EIR. The County finds that the EIR was prepared in compliance with CEQA and the CEQA Guidelines. The County finds that it has independently reviewed and analyzed the EIR for the project, that the Draft EIR which was circulated for public review reflected its independent judgment and that the Final EIR reflects the independent judgment of the County.
2. The County finds that the EIR provides objective information to assist the decision-makers and the public at large in their consideration of the environmental consequences of the project. The public review period provided all interested jurisdictions, agencies, private organizations, and individuals the opportunity to submit comments regarding the Draft EIR. The Final EIR was prepared after the review period and responds to comments made during the public review period.
3. The Planning and Development Services Department evaluated comments on environmental issues received from persons who reviewed the Draft EIR. In accordance with CEQA, the Planning and Development Services Department prepared written responses describing the disposition of significant environmental issues raised. The Final EIR provides adequate, good faith and reasoned responses to the comments. The Planning Department reviewed the comments received and responses thereto and has determined that neither the comments received nor the responses to such comments add significant new information regarding environmental impacts to the Draft EIR. The Lead Agency has based its actions on full appraisal of all viewpoints, including all comments received up to the date of adoption of these findings, concerning the environmental impacts identified and analyzed in the EIR.
4. The EIR evaluated the following potential project and cumulative environmental impacts:
    - Aesthetics
    - Agricultural Resources
    - Air Quality
    - Biological Resources
    - Cultural Resources
    - Geology and Soils
    - GHG Emissions
    - Hazards and Hazardous Materials
    - Hydrology/Water Quality
    - Land Use and Planning
    - Noise and Vibration
    - Public Services (Fire Protection and Police Protection)
    - Transportation
    - Tribal Cultural Resources

- Utilities/Service Systems (Water Supply)

Additionally, the EIR considered, in separate sections, Significant Irreversible Environmental Changes, Growth Inducing Impacts and potential secondary effects of the project. The significant environmental impacts of the project were identified in the Final EIR. The significant environmental impacts of the project and the alternatives were also identified in the Draft and Final EIR.

5. The mitigation measures which have been identified for the project were identified in the Draft and Final EIR. The final mitigation measures are described in the MMRP. Each of the mitigation measures identified in the MMRP, and contained in the Final EIR, is incorporated into the project. The County finds that the impacts of the project have been mitigated to the extent feasible by the mitigation measures identified in the MMRP, and contained in the Final EIR.

6. Textual refinements and errata were compiled and presented to the decision-makers for review and consideration. The Planning and Development Services Department staff has made every effort to notify the decision-makers and the interested public/agencies of each textual change in the various documents associated with the project review. These textual refinements arose for a variety of reasons. First, it is inevitable that draft documents would contain errors and would require clarifications and corrections. Second, textual clarifications were necessitated in order to describe refinements suggested as part of the public participation process.

7. The responses to the comments on the Draft EIR, which are contained in the Final EIR, clarify and amplify the analysis in the Draft EIR.

8. Having reviewed the information contained in the EIR and in the administrative record as well as the requirements of CEQA and the CEQA Guidelines regarding recirculation of Draft EIRs, the County finds that there is no new significant information in the Final EIR, finds that the additional information provided therein merely clarifies, amplifies and/or makes insignificant modifications to the adequate Draft EIR, and finds that recirculation of the Draft EIR is not required.

9. CEQA requires the Lead Agency approving a project to adopt an MMRP for the changes to the project which it has adopted or made a condition of project approval in order to ensure compliance with the mitigation measures during project implementation. The mitigation measures included in the EIR as certified by the County and included in the MMRP as adopted by the County serves that function. The MMRP includes all of the mitigation measures identified in the EIR and adopted by the County in connection with the approval of the project and has been designed to ensure compliance with such measures during implementation of the project. In accordance with CEQA, the MMRP provides the means to ensure that the mitigation measures are fully enforceable. In accordance with the requirements of Public Resources Code §21081.6, the County hereby adopts the MMRP.

10. In accordance with the requirements of Public Resources Code §21081.6, the County hereby adopts each of the mitigation measures expressly set forth herein as conditions of approval for the project.

11. The custodian of the documents or other material which constitute the record of proceedings upon which the County's decision is based is the Imperial County

Planning and Development Services Department, 801 Main Street, El Centro, California, 92243.

12. The County finds and declares that substantial evidence for each and every finding made herein is contained in the EIR, which is incorporated herein by this reference, or is in the record of proceedings in the matter.
13. The County is certifying an EIR for, and is approving and adopting findings for, the entirety of the actions described in these Findings and in the EIR as comprising the project. It is contemplated that there may be a variety of actions undertaken by other State and local agencies (who might be referred to as "responsible agencies" under CEQA). Because the County is the Lead Agency for the project, the EIR is intended to be the basis for compliance with CEQA for each of the possible discretionary actions by other State and local agencies to carry out the project.
14. The EIR is a Project EIR for purposes of environmental analysis of the project. A Project EIR examines the environmental effects of a specific project. The EIR serves as the primary environmental compliance document for entitlement decisions regarding the project by the County of Imperial and the other regulatory jurisdictions.

ATTACHMENT "E"
MM&RP RESOLUTION

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE MITIGATION MONTORING AND REPORTING PROGRAM FOR THE BIG ROCK 2 CLUSTER SOLAR PROJECT.

WHEREAS, a Mitigation Monitoring and Reporting Program has been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended; and

WHEREAS, the Board of Supervisors of the County of Imperial has the responsibility Denying the Mitigation Monitoring and Reporting Program; and

WHEREAS, public notice of said application has been given, and Board of Supervisors has considered the Planning Commission recommendation and evidence presented by the Imperial County Planning & Development Services Department, and other interested parties at a public hearing held with respect to this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Mitigation Monitoring and Reporting Program (MM&RP) prior to making a decision to recommend the adoption of the proposed MM&RP. The Board of Supervisors finds and determines that the Environmental Impact Report is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with CEQA, State Planning and Zoning law, Imperial County Land Use Ordinance and the County of Imperial General Plan, the following findings for recommending the approval of the MM&RP as follows:

1. That the Final Project EIR **SCH #2024090063**, Candidate CEQA Findings for the Big Rock 2 Cluster Solar Energy Project ("Project") have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA as amended".

2. That the County has reviewed, analyzed, and considered Final Project EIR, the environmental impacts therein identified for this Project, the Candidate CEQA Findings, and the Mitigation Monitoring and Reporting Program, and the entire Record of Proceedings prior to approving this project.

3. That the Mitigation Monitoring and Reporting Program is designed to ensure that during project implementation, the Developer and any other responsible parties implement the Project components and comply with feasible mitigation measures

identified in the CEQA Findings, the Project entitlements, and the Mitigation Monitoring and Reporting Program and that these measures are fully enforceable through permit conditions, agreements, and/or other measures, such as their inclusion in the Mitigation Monitoring and Reporting Program.

4. That the Project will not individually or cumulative have an unmitigated adverse effect on fish and wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

5. That the Record of Proceedings consists of the Final Project EIR (and all its technical reports and addendums thereto); the County staff reports; the CEQA Findings; the Mitigation Monitoring and Reporting Program; the various Project entitlements and documents referenced therein; all final reports, applications, memoranda, maps, letters, and other planning documents prepared by the EIR planning/environmental consultant; all final reports, memoranda, maps, letters, and other planning documents prepared by the County staff; all documents submitted by members of the public and public agencies in connection with the Final Project EIR; minutes and transcripts of all public meetings and public hearings; all written and verbal public testimony presented during a noticed public hearing for the proposed project which such testimony was taken and any and all other materials which constitute the record of proceeding pursuant to Public Resources Code section 21167.6(e); and matters of common knowledge to the County staff, Planning Commission, including, but not limited to the County General Plan, the County Zoning Ordinance, County policies, which may be found at the Clerk's Office located at 940 Main Street, Suite 209, El Centro, CA, 92243 during regular business hours, and the Imperial County Planning & Development Services Department at 801 Main Street, El Centro, CA 92243.

6. That the County Board of Supervisors does hereby deny the resolution of the Mitigation Monitoring and Reporting Program.

NOW, THEREFORE, based on the above findings, the IMPERIAL COUNTY BOARD OF SUPERVISORS **DOES HEREBY DENY** the Mitigation Monitoring Reporting Program (MM&RP), for the Big Rock 2 Cluster Solar and Battery Storage Project.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote took the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

RY/XX/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\2.BR2_BOAR RESOLUTION MMRP .docx

0.4 Mitigation Monitoring and Reporting Program

The County of Imperial will adopt this Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. The purpose of the MMRP is to ensure that the Big Rock 2 Cluster Solar and Storage Project, which is the subject of the Environmental Impact Report (EIR), complies with all applicable environmental mitigation requirements. The mitigation measures for the project will be adopted by the County of Imperial, in conjunction with the certification of the Final EIR. The mitigation measures have been integrated into this MMRP.

The mitigation measures are provided in Table 0.4-1. The MMRP includes a checklist to be used during the mitigation monitoring period. The MMRP includes the following information for each mitigation measure:

- Description of Recommended Mitigation Measures from the CEQA EIR
- Time Frame for Implementation
- Steps to Compliance and Verification
- Responsible Monitoring Agency

The mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or reducing or eliminating impacts over time by maintenance operations during the life of the action.

Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The County of Imperial is the designated CEQA lead agency for the Mitigation Monitoring and Reporting Program. The County of Imperial is responsible for review of all monitoring reports, enforcement actions, and document disposition as it relates to impacts within the County's jurisdiction. The County of Imperial will rely on information provided by the monitor as accurate and up to date and will field check mitigation measure status as required.

A record of the MMRP will be maintained at County of Imperial, Department of Planning and Development Services, 801 Main Street, El Centro, CA 92243. All mitigation measures contained in the EIR shall be made conditions of the project as may be further described below.

This page is intentionally blank.

Table 0.4-1. Mitigation Measures

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
Agricultural Resources			
AG-1a: Payment of Agricultural and Other Benefit Fees. Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented: **Mitigation for Non-Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.	Prior to the issuance of a grading permit or building permit (whichever is issued first)	Submit documentation for establishment of Agricultural Conservations easements, Enrollment in Agricultural In-lieu Mitigation Fee program or Public Service Agreement	Imperial County Planning & Development Services (ICPDS)

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
Mitigation for Prime Farmland **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project **Option 4:** *Avoid Prime Farmland.* The Permittee must revise their CUP Application/Site Plan to avoid Prime Farmland.			

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
AG-1b: Site Reclamation Plan. In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.	Prior to the issuance of a grading permit	Submit Reclamation Plan to the County for Review	ICPDS

AG-2: Pest Management Plan. Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following: 1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line); 2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows: • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business; • All treatments must be performed by a qualified applicator or a licensed pest control operator; • "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments; • Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation; • Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture; • Obey all pesticide use laws, regulations, and permit conditions;	Prior to the issuance of a grading permit or building permit (whichever is issued first)	Submit Pest Management Plan to the County for Review	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties; • Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current; • Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, Environmental Protection Agency (EPA) Registration numbers, and application rates. A pesticide use report may be used for this; • Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request. 3. A long-term strategy for weed and pest control and management during the operation of the proposed projects. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis. 4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands. 5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.			
Air Quality			

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
AQ-1: Fugitive Dust Control. Pursuant to Imperial County Air Pollution Control District (ICAPCD), all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process. ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control • All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover. • All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material. • All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.	Prior to the issuance of a grading permit	Submit construction dust control plan for Imperial County Air Pollution Control District (ICAPCD) approval	ICAPCD

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line. • The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering. ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control • Water exposed soil ~~only in those areas where active grading and vehicle movement occurs~~ with adequate frequency ~~to control dust~~ for continued moist soil. • Replace ground cover in disturbed areas as quickly as possible. • Automatic sprinkler system installed on all soil piles. • Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site. • Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees. • Implement a shuttle service to and from retail services and food establishments during lunch hours. Standard Mitigation Measures for Construction Combustion Equipment • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.			

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). Enhanced Mitigation Measures for Construction Equipment To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures: • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways. • Implement activity management (e.g., rescheduling activities to reduce short-term impacts).			
AQ-2: Construction Equipment. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted ~~periodically~~ monthly to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate ~~air~~ NOx emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.	Prior to the issuance of a grading permit	A list of the construction equipment shall be submitted to the ICPDS and ICAPCD monthly, for verification and corrective action (if necessary) by ICAPCD	ICPDS and ICAPCD
AQ-3: Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. During the operational life of the project, the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved	Prior to the issuance of a grading permit	Submit construction Dust Suppression Management Plan (MM AQ-4) for construction and an Operational Dust Control Plan (MM AQ-6) for operation for ICAPCD approval	ICAPCD

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).			
AQ-4: Dust Suppression Management Plan. Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.	Prior to the issuance of a grading permit	Submit construction dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
AQ-5: Speed Limit. During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.	During construction and operations activities	Submit a construction dust control plan and operations dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
AQ-6: Operational Dust Control Plan. Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval. ICAPCD Rule 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.	Prior to issuance of a Certificate of Occupancy	Submit an operations dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
Biological Resources			
BIO-1: Burrowing Owl Mitigation. Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better	Prior to ground-disturbing activities	Submit report with results of surveys. Submit Burrowing Owl Protection and Mitigation Plan.	ICPDS and California Department of Fish and Wildlife

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency

than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities.

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If incidental take authorization from CDFW is required, submit a copy of the incidental take authorization permit to ICPDS.

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs. Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation. *Burrowing Owl Protection and Mitigation Plan* If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must			

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant. *Incidental Take Authorization* The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.			
BIO-2: Burrowing Owl Habitat Compensation. The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site. Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.	Prior to ground-disturbing activities	Submit documentation for off-site preservation of foraging habitat through a CDFW-approved conservation easement, or payment of an in-lieu fee. If incidental take authorization from CDFW is required,	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		submit a copy of the incidental take authorization permit to ICPDS.	
BIO-3: Worker Awareness Program and Ongoing Training. Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects: • Biology and status of burrowing owl. • California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations. • Protection measures designed to reduce potential impacts on the species. • The function of flagging designated authorized work areas. • Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Prior to project initiation	Submit a copy of the signed training roster to ICPDS	ICPDS
BIO-4: Speed Limit. During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads. **Perimeter Fencing.** Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall	Prior to ground-disturbing activities and during construction	Submit construction plans showing the inclusion of the speed limit and perimeter fencing as specifications.	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.			
BIO-5: Migratory Birds and Other Sensitive Non-Migratory Bird Species. To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial. Construction conservation measures to be incorporated into the ABPP shall include the following: • Minimizing disturbance to vegetation to the maximum extent practicable. • Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest. • Minimizing wildfire potential. • Minimizing activities that attract prey and predators. • Controlling non-native plants. Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following: • Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities. • Minimizing noise. • Minimizing use of outdoor lighting.	Prior to ground-disturbing activities	Submit ABPP to ICPDS	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
BIO-6: Pre-Construction Bird Surveys and Nest Avoidance. Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species). If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.	Prior to ground-disturbing activities	Submit report with results of surveys, and if necessary Project-specific sensitive species management plan for review.	ICPDS
BIO-7: Focused Bat Surveys and Bat Management Plan. A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors)	Prior to ground-disturbing activities	Submit report with results of surveys to ICPDS. Submit a Bat Management Plan for review and approval to CDFW, and submit documentation of	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.		approved plan to ICPDS.	
BIO-8: Federal and State Agency Permits. Prior to impacts occurring to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.	Prior to impacts occurring to USACE, RWQCB, and CDFW jurisdictional aquatic resources	If permits are required, submit documentation of USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		Agreement to ICPDS.	
Cultural Resources			
CUL-1: Cultural Resources Worker Environmental Awareness Program Training. Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist. The training shall be provided to all personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Prior to construction	Submit a copy of the signed training roster to ICPDS	ICPDS
CUL-2: Archaeological Monitoring. Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards to serve as the principal archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling). In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.	Prior to construction	Submit documentation that the project applicant has retained a qualified professional archaeologist and a traditionally and culturally affiliated Native American Monitor.	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.		Submit monitoring report to ICPDS and South Coastal Information Center.	
CUL-3: Discovery of Human Remains. In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983).If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	During ground-disturbing activities	Discovery of human remains shall result in work stoppage in that area until the coroner and the Native American Heritage Commission are contacted.	ICPDS
Geology and Soils			
GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures. Facility design for all project	Prior to issuance of building permits	A geotechnical and/or civil	Imperial County Public

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: • Site preparation • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Structural foundations • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.		engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval	Works Department, Engineering Division
GEO-2: Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all	Prior to construction and operation	Submit documentation of permits and/or approvals from the Imperial County	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.		Public Health Department, Division of Environmental Health to ICPDS	
GEO-3: Paleontological Resources Monitoring. Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.	Prior to grading	Submit documentation that the project applicant has retained a qualified paleontologist. Submit a report of findings with an appended itemized inventory of specimens to ICPDS.	ICPDS
GEO-4: Paleontological Resources Worker Awareness Program. Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction	Prior to grading	Submit a copy of the signed training roster and training video or transcript to ICPDS	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.			
Hydrology/Water Quality			
HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration. The project applicant or its contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) specific to the project and be responsible for securing coverage under State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and best management practices (BMPs) relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories: • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching) • Sediment control practices (e.g., temporary sediment basins, fiber rolls) • Temporary and post-construction on- and off-site runoff controls • Special considerations and BMPs for water crossings and drainages	Prior to Construction Activities	Submit a SWPPP to the County and SWRCB to review.	Imperial County Planning & Development Services, and SWRCB

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity • Waste management, handling, and disposal control practices • Corrective action and spill contingency measures • Agency and responsible party contact information • Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.			
HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, Imperial Irrigation District (IID) "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.	Prior to issuance of a Certificate of Occupancy	Submit Drainage Plans to the County for Review. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall	Imperial County Public Works Department, Engineering Division Imperial Irrigation District

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		be approved by the IID.	
Tribal Cultural Resources			
TCR-1: Discovery of Unidentified Tribal Cultural Resources. If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.	During to ground-disturbing activities	Submit archaeologist treatment plan and evaluation prepared with tribal consultation for review to the County, and relevant Tribes.	Imperial County Planning & Development Services

This page is intentionally blank.

ATTACHMENT "F" GENERAL PLAN AMENDMENT RESOLUTION (GPA)24-0002

RESOLUTION NO.

A RESOLUTION OF BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE GENERAL PLAN AMENDMENT #24-0002 OF THE BIG ROCK 2 CLUSTER SOLAR ENERGY GENERATION AND BATTERY STORAGE PROJECT.

WHEREAS, the applicant 90FI 8ME LLC, for the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project filed a request for a General Plan Amendment #24-0002 to add parcels to the RE overlay map; and,

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated with the responsibility of denying the General Plan; and,

WHEREAS, the General Plan Amendment #24-0002 has been provided in a timely manner to public agencies; and

WHEREAS, timely public notice of the Board of Supervisors hearing on the Project application has been given, and the Board of Supervisors has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at that public hearing held with respect to this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial DOES HEREBY RESOLVE as follows:

SECTION 1. The Board of Supervisors independently has reviewed and considered the proposed General Plan Amendment #24-0002. The Board of Supervisors finds and determines that the Final Environmental Impact Report (FEIR) is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations that all significant impacts are mitigated to less than significant.

SECTION 2. That in accordance with, CEQA, State Planning and Zoning law and the County of Imperial General Plan & Land Use Ordinance, the following findings for the recommendation for approval and certification of the General Plan Amendment (GPA) #24-0002 have been made as follows:

1. That the IS/MND **SCH #22024090063** for the proposed Big Rock 2 Cluster Solar and Battery Storage Project have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended, and such findings are incorporated by reference herein.

2. That the County independently has reviewed, analyzed, and considered the Final Environmental Impact Report, the environmental impacts therein identified for this Project, the candidate CEQA findings and the Mitigation, Monitoring and Reporting

Program, and the entire Record of Proceedings prior to recommending approval of this project.

3. The General Plan Amendment for the Big Rock 2 Cluster Solar and Battery Storage Project is consistent with the Imperial County General Plan and allows for development of a solar and BESS facility. Additionally, the Project will not create significant environmental impacts with mitigation incorporated.

4. The General Plan Amendment #24-0002 is not likely to cause substantial environmental damage or substantially and avoidably injure fish, wildlife, or their habitat. Surveys accomplished for biological, and fish and impacts are less than significant with required mitigation.

5. The development and improvements are not likely to cause serious health problems.

NOW, THEREFORE, based on the above findings, the Board of Supervisors of the County of Imperial **DOES HEREBY DENY** of the proposed General Plan Amendment GPA #24-0002, for the Big Rock 2 Cluster Solar and Battery Storage Project.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the Board of Supervisors at a meeting conducted on **November 4, 2025** by the following vote took the preceding resolution:

AYES:

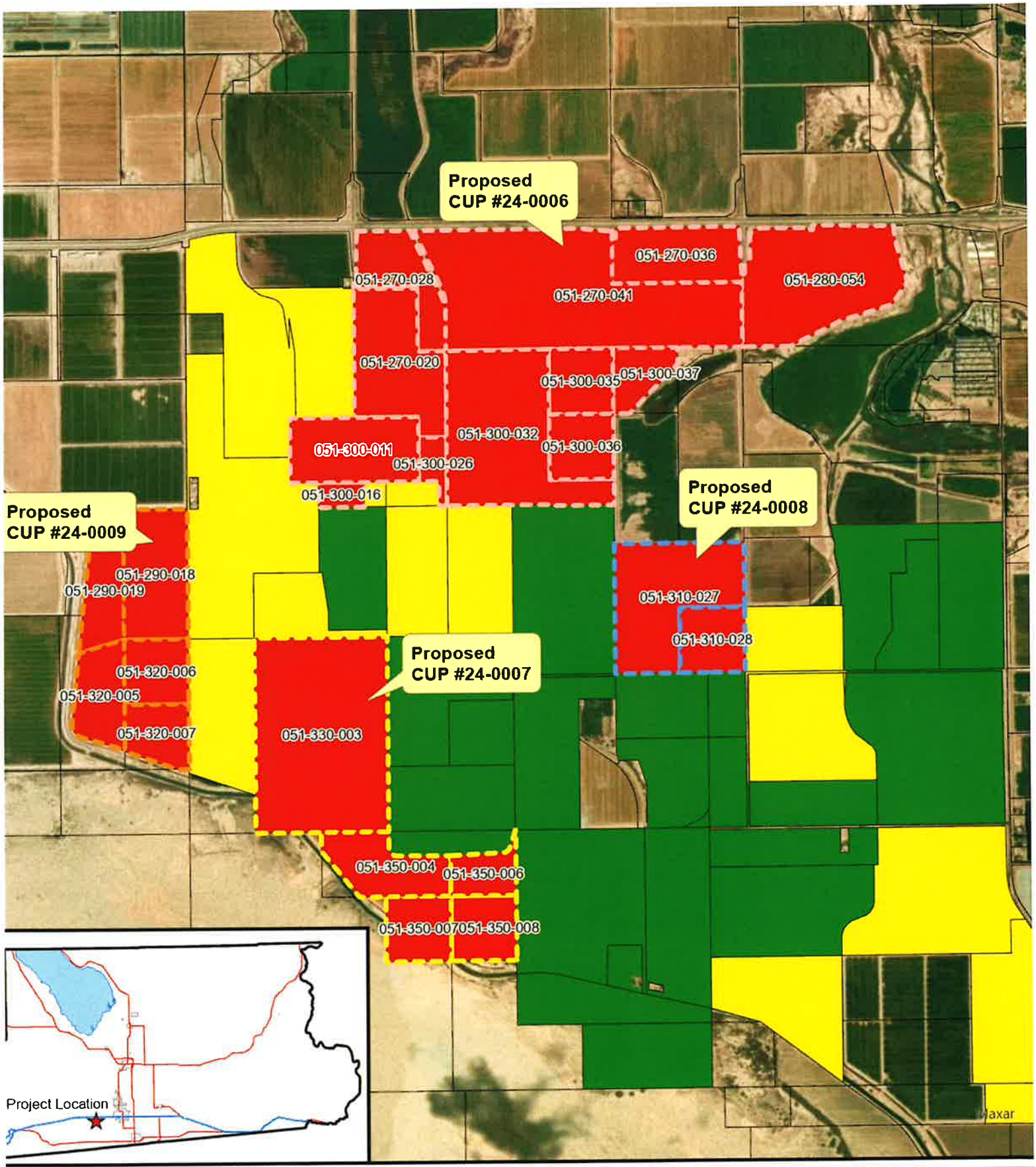
NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors



BIG ROCK CLUSTER 2 RENEWABLE ENERGY OVERLAY CUP #24-0006, CUP #24-0007, CUP #24-0008, CUP #24-0009, APN 051-300-036-000 ET AL

- Big Rock 2 Cluster North
- Big Rock 2 Cluster South
- Big Rock 2 Cluster East
- Big Rock 2 Cluster West
- Parcels
- Operational Solar
- Approved not build
- Pending Entitlement

N

ATTACHMENT "G"

ZONE CHANGE (ZC)24-0003
RESOLUTION & ORDINANCE

RESOLUTION NO.

A RESOLUTION TO THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE ZONE CHANGE #24-0003 FOR THE PROPOSED BIG ROCK 2 CLUSTER SOLAR ENERGY GENERATION AND BATTERY STORAGE PROJECT ZONE FROM A-2, A-2-R AND A-3 TO A-2-RE, A-2-R-RE AND A-3-RE AND THE ADOPTION OF THE ZONE CHANGE TO THE CODIFIED ORDINANCE.

WHEREAS, 90FI 8ME LLC has filed an application for a zone change to include the remaining project parcels into the Renewable Energy (RE) Overlay Zone from A-2, A-2-R and A-3 (General Agricultural Zone, General Agricultural / Rural Zone and Heavy Agricultural Zone) to A-2-RE, A-2-R-RE, and A-3-RE (General Agricultural with Renewable Energy overlay, General Agricultural / Rural Zone with Renewable Energy overlay and Heavy Agricultural Zone with Renewable Energy overlay). The proposed project is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California, consisting of twenty-one (21) parcels Assessor Parcel Number (APN) 051-270-020-000 et al. legally described as LOTS 11&12 SEC 21& NE4 TR81 & POR TR 80 16-12 102.44 AC, et al. The project site is located is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico, west of Drew Road and east and north of Mandapa Road; and,

WHEREAS, the project is designated on the adopted Land Use Element of the County of Imperial's General Plan as "Agriculture" (County of Imperial, 2015). Approval of a Zone Change by the Imperial County Board of Supervisors (Board) is required prior to any significant new use or development in this area, except agricultural use. The County Land Use Ordinance, Division 17, includes the Renewable Energy (RE) Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved Conditional Use Permit (CUP). CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone; and,

WHEREAS, the Zone Change for the proposed Big Rock 2 Cluster Solar and Battery Storage Project will consist of including/classifying APN's 051-270-020-000 et al into the RE Overlay Zone (i.e., Zone Change from A-2, A-2-R, and A-3 to A-2-RE, A-2-R-RE and A-3-RE); and,

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated with the responsibility of denying the changes to Zoning Maps #70 & #71 of the Imperial County Land Use Ordinance; and

WHEREAS, public notice of said application has been given, and the Board of Supervisors has considered evidence presented by the Planning Commission and Imperial County Planning & Development Services Department and other interested parties at a public hearing held with respect to this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Zone Change #24-0003, for a decision for the proposed amendment to Zoning Maps #70 & #71. The Board of Supervisors finds and determines that the FEIR is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations; and,

SECTION 2. That in accordance with State Planning and Zoning law and the County of Imperial General Plan and zoning ordinances, the following findings for the approval of Zone Change #24-0003 have been made as follows:

1. The proposed Zone Change has been analyzed relative to its potential to be detrimental to the health, safety, comfort and welfare of the persons residing or working within the neighborhood of the proposed Zone Change. Staff concluded that the project does not propose land uses, densities, or development patterns that will jeopardize the health and safety of the persons residing or working within the neighborhood of the property. Health, safety, and welfare will not be degraded as a result of this project.

2. The Zone Change to the County of Imperial General Plan Renewable Energy (RE) and Transmission Element zone A-2-RE, A-2-R-RE and A-3-RE will be consistent with the County Land Use Ordinance, Division 17, which includes the RE Overlay Zone.

3. The site physically is suitable of this type of development and zoning. The project site consists of generally flat terrain with very gentle topography.

4. The change of zones will not conflict with any easements required by the public at large for access through or use of the property with the proposed zone change. Several easements may surround and traverse the area. The easements and their associated facilities will be retained, vacated or realigned as appropriate.

5. The change of zone is also consistent with the General Plan Land Use Element goals and objectives, including objectives to "diversify employment and economic opportunities in the County."

NOW, THEREFORE, based on the above findings, the Board of Supervisors of the County of Imperial **DOES HEREBY DENY** of the proposed Zone Change #24-0003 to include twenty-one (21) parcels Assessor Parcel Number (APN) 051-270-020-000 et al. into the RE Overlay Zone from the current zoning of A-2, A-2-R, and A-3 (General Agricultural zone, General Agricultural/Rural zone and Heavy Agricultural) and approve the proposed zone change A-2-RE, A-2-R-RE and A-3-RE (General Agricultural with Renewable Energy overlay zone, General Agricultural/Rural with Renewable Energy overlay zone and Heavy Agricultural with Renewable Energy overlay zone) and the proposed change to the Imperial County Codified Zoning Ordinance.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

ORDINANCE NO. _____

AN ORDINANCE OF THE COUNTY OF IMPERIAL, STATE OF CALIFORNIA, AMENDING THE CODIFIED ORINANCES OF THE COUNTY OF IMPERIAL RELATING TO ZONES

The Board of Supervisors of the County of Imperial, State of California, does hereby ordain as follows:

SECTION 1: The Codified Ordinances of the County of Imperial is hereby amended by amending Sections **92571.07**, and **92570.13** is added to Chapter 71 of Division 25 of Title 9, of the Codified Ordinances of the County of Imperial, State of California, to read as follows:

The map entitled "Renewable Energy Overlay Map" Zoning Map No. 71 (Section 92571.07 of the Codified Ordinances) is hereby amended in the following particular only.

Section **92571.07** Amendment to Zoning Map No. 71 "Renewable Energy Overlay Zone"

Section **92570.13** is Amendment to "Zoning Map No. "70" Big Rock 2 Cluster Solar. A-2-RE, A-2-R-RE, A-3-RE added to Chapter 70 of Division 25 of Title 9, of the Codified Ordinances of the County of Imperial, State of California, to read as follows:

The map entitled "**Map #70 General Agricultural Area, General Agricultural / Rural Zone, Heavy Agricultural Zone** No. 70 (Section 92570.13 of the Codified Ordinances) is hereby amended in the following only.

The zone classification of this certain parcel(s) of real property situated in the County of Imperial, State of California, and more particularly described as:

LOTS 11&12 SEC 21& NE4 TR81 & POR TR 80 16-12 102.44 AC. ET AL, APN: 051-270-020-000 ET AL. A-2, A-2-R & A-3 (GENERAL AGRICULTURAL ZONE, GENERAL AGRICULTURAL / RURAL ZONE & HEAVY AGRICULTURAL ZONE) CHANGE TO "A-2-RE", "A-2-R-RE" & "A-3-RE"(GENERAL AGRICULTURAL WITH RENEWABLE ENERGY OVERLAY ZONE, GENERAL AGRICULTURAL WITH RENEWABLE ENERGY OVERLAY / RURAL ZONE & HEAVY AGRICULTURAL WITH RENEWABLE ENERGY OVERLAY ZONE).

SECTION 2: This Ordinance shall take effect and shall be in force thirty (30) days after the date of its adoption, and prior to the expiration of fifteen (15) days from the passage thereof, a summary of this Ordinance shall be published at least once in the Holtville Tribune, a newspaper of general circulation, printed and published in the County of Imperial, State of California, together with the names of the members of the Board of Supervisors voting for and against the same.

SECTION 3: That in accordance with State Planning and Zoning law and the County of Imperial General Plan and zoning ordinances, the following findings for the approval of **Zone Change No. #24-0003** as follows:

1. The proposed Zone Change was analyzed relative to its potential to be detrimental to the health, safety, comfort and welfare of the persons residing or working within the neighborhood of the proposed Zone Change. Staff concluded that the project does not propose land uses, densities, or development patterns that will jeopardize the health and safety of the persons residing or working within the neighborhood of the property. Health, safety, and welfare will not be degraded as a result of this project.

2. The Zone Change No. #24-0003 is consistent with Imperial County's General Plan's underlying land use. The Zone Change will allow for the development of a solar energy generation and battery storage related uses zone.

3. The proposed Zone Change No. #24-0003 is for an A-2-RE General Agriculture with Renewable Energy overlay Zone, A-2-R-RE General Agriculture/ Rural Zone with Renewable Energy overlay, and A-3-RE Heavy Agriculture with Renewable Energy overlay Zone and recommendation is consistent with the uses allowed by Imperial County's Land Use Ordinances 91701.01, Title 9 Division 17. The Proposed overlay zone would only be approved by the County Board of Supervisors if a future renewable energy project is located within a renewable energy overlay zoning and is not located in a sensitive area and would not result in any significant environmental impacts. All impacts have been found less than significant with mitigation incorporated. Additionally, the County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP.

4. The site physically is suitable of this type of development and zoning. The project site consists of generally flat terrain with very gentle topography.

5. The change of zone will not conflict with any known easements required by the public at large for access through or use of the property with the proposed zone change. Currently, there are no conflicts with easements on proposed project site.

6. The change of zone is also consistent with the General Plan Land Use Element goals and objectives, including objectives to "diversify employment and economic opportunities in the County while preserving agricultural activity" (Goal 2) and to "preserve agriculture and natural resources while promoting diverse economic growth through sound land use planning" (Goal 3, Objective 3.2). No change in the underlying General Plan land use (Agriculture) is proposed.

SECTION 4: A complete executed copy of this Ordinance shall be on file with the Office of the Clerk of the Board of Supervisors. It shall be available for review at the County Administration Center, located at 940 W. Main Street, Suite 209, El Centro, California, 92243. The Clerk of the Board of Supervisors may be reached at (442) 265-1020.

DENIED, by the Board of Supervisors of the County of Imperial this November 4, 2025.

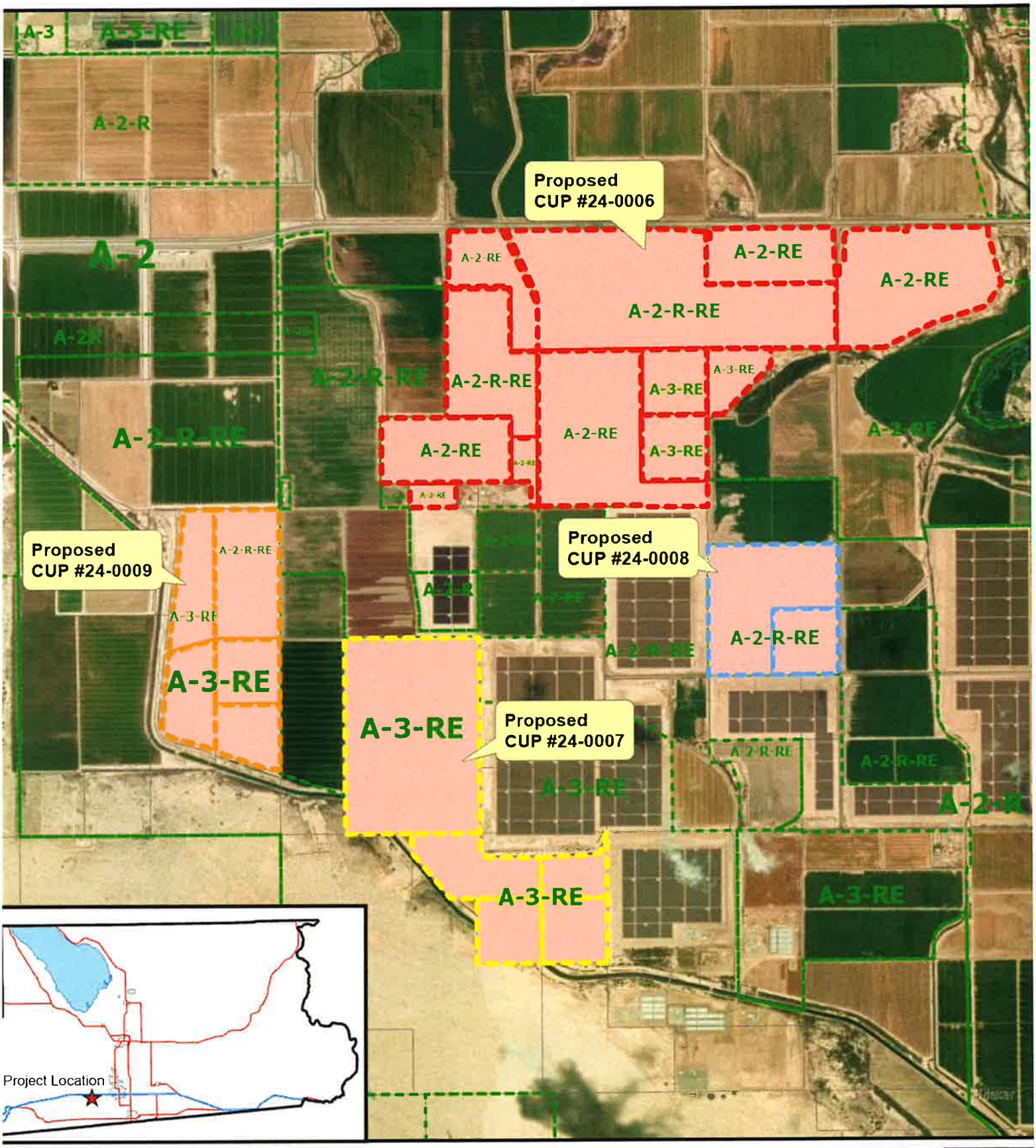
AYES:
NOES:
ABSENT:
ABSTAIN:

_____
John Hawk, Chairman
Board of Supervisors

ATTEST:_____
Clerk of the Board of Supervisors
County of Imperial, State of California

RY/S:\ALLUSERS\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\5.A_ BR2-ZC ORDINANCE.DOCX

PROJECT LOCATION MAP



BIG ROCK CLUSTER 2
ZONE CHANGE
CUP #24-0006, CUP #24-0007, CUP #24-0008, CUP #24-0009, APN 051-300-036-000 ET AL

- Big Rock 2 Cluster North
- Big Rock 2 Cluster South
- Big Rock 2 Cluster East
- Big Rock 2 Cluster West
- Imperial County Zoning
- Parcels

N

ATTACHMENT "H"

CUP 24-0006 RESOLUTION & CONDITIONS OF APPROVAL

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE BIG ROCK 2 CLUSTER NORTH CONDITIONAL USE PERMIT #24-0006.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0006 to develop a 100-megawatt (MW) solar facility and up to 140 MW of battery storage system, to be located on 13 parcels comprising approximately 1,030 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval or denial that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated with the responsibility of denying the conditional use permits;

WHEREAS, public notice of said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on November 4, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Conditional Use Permit #24-0006 for a decision for the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site and proposed parcels is "Agriculture" and 11 parcels are zoned "A-2, A-2-R, and A-3" (General Agriculture, General Agriculture within Rural Zone, and Heavy Agriculture respectively) with two additional parcels of the project (APN 051-300-032-000 & 051-300-036) within the Renewable Energy (RE) Overlay Zone. A General Plan Amendment to include the 11 proposed parcels (APN 051-270-020-000 et al) into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-2, A-2-R, A-2-RE, A-3 and A-3-RE (General Agriculture, General Agriculture within Rural Zone, General Agriculture with Renewable Energy Overlay, Heavy Agriculture and Heavy Agriculture with Renewable Energy Zone, respectively). A Zone Change to include/classify eleven (11) parcels into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan with requirements for an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use would be consistent with the zone A-2-RE (General Agriculture with Renewable Energy Zone) and A-3-RE (Heavy Agriculture with Renewable Energy Zone) upon approval of a Zone Change.

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulation of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will

further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0006 attached hereto and incorporated herein by this reference.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENY** of Conditional Use Permit #24-0006.

_____

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote approved the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____

Cynthia Medina
Clerk of the Board of Supervisors

RYS:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\6. BR2_BOARD RESOLUTION CUP24-0006.docx

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0006 FOR BIG ROCK 2 CLUSTER NORTH ENERGY PROJECT APNS: 051-270-020-000, 051-270-028-000, 051-270-036-000, 051-270-041-000, 051-280-054-000, 051-300-011-000, 051-300-016-000, 051-300-026-000, 051-300-035-000, 051-300-037-000, 051-300-032-000 (NORTHERN PORTION), 051-300-032-000 (SOUTHERN PORTION TO BE RE-ENTITLED) & 051-300-036-000 (TO BE RE-ENTITLED)

Conditional Use Permit #24-0006 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally describe as (OTS 11&12 SEC 21& NE4 TR81 & POR TR 80 16-12 102.44

AC. et al; in an unincorporated area of the County of Imperial; The project site involves of eleven (11) parcels: Assessor Parcel Numbers (APN) 051-270-020-000 et al, and portions of two (2) parcels to be re-entitled: Assessor Parcel Numbers (APN) 051-300-032-000 (southern portion) and 051-300-036-000.

WHEREAS, Permittee has applied to the County for permission to operate a 100-megawatts (MW) of alternating current photovoltaic solar energy and 140-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0007 (Big Rock 2 Cluster South); CUP #24-0008 (Big Rock 2 Cluster East); and CUP #24-0009 (Big Rock 2 Cluster West) that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS overall; and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0006 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of Planning Director or Commission, and the Board of Supervisors; and, (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

G-3 RECORDATION:

CUP #24-0006 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate

County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory

committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability

insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California. The Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP#24-0006 consists of three primary components:

1. Up to 100-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 140-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on 13 parcels comprising approximately 1,030 acres of which approximately 120.3 acres are associated with the previously approved CUP for Laurel Cluster 2 North. Approximately 80 acres of APN 051-300-032 and 40.3 acres of APN 051-300-036 would be re-entitled as part of the proposed project. The Big Rock 2 Cluster North site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0002 related to this CUP#24-0006 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building

Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all

operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17- Renewable Energy & Transmission Element regulations.

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to

verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.
B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.
D. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).
D. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.

2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three-hundred-and-sixty-degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.

4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology.

Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.

7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

(TOTAL "S" CONDITIONS are 28)

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024 and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0006 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES A. MINNICK, Director Date
Planning & Development Services Department

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

ATTACHMENT "I"

VARIANCE (V)24-0002

RESOLUTION

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL CALIFORNIA DENYING "VARIANCE #24-0002" FOR THE BIG ROCK 2 CLUSTER NORTH CUP#24-0006.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V) #24-0002 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0006); and,

WHEREAS, Variance #24-0002 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying Variance #24-0002; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Variance #24-0002 for denial. The Board of Supervisors finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the denial of Variance 24-0002 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

Variance 24-0002 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0002 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone.

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

   The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application and, the Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

   Staff has reviewed the request on Variance #24-0002 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, through the variance process, the approval for the construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line potentially mounted on tubular steel poles up to 200 feet in height, may be considered a minimal deviation from the current A-2 and A-3 height limits, therefore, it would not be deemed a variance that adversely impacts the Imperial County General Plan.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENNY** of the proposed Variance #24-0002.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

ATTACHMENT "J"

CUP 24-0007 RESOLUTION & CONDITIONS OF APPROVAL

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE BIG ROCK 2 CLUSTER SOUTH CONDITIONAL USE PERMIT #24-0007.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0007 to develop a 120-megawatt (MW) solar facility and up to 240 MW of battery storage system. The project is to be located on 5 parcels comprising approximately 410 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval or denial that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying the conditional use permits;

WHEREAS, public notice of said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on November 4, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Conditional Use Permit #24-0007 for a decision for the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site is "Agriculture" and 5 parcels are zoned "A-3" (Heavy Agriculture). A General Plan Amendment to include the other proposed parcels (APN 051-330-003-000 et al) into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-3 (Heavy Agriculture). A Zone Change to include/classify five (5) parcels into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan with requirements for an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use would be consistent with the zone A-3-RE (Heavy Agriculture with Renewable Energy Zone) upon approval of a Zone Change.

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0007 attached hereto and incorporated herein by this reference.

NOW, THEREFORE, based on the above findings, the Imperial Board of Supervisors **DOES HEREBY DENY** of Conditional Use Permit #24-0007.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote approved the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\8. BR2_BOARD RESOLUTION CUP24-0007 .docx

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0007
FOR BIG ROCK 2 CLUSTER SOUTH ENERGY PROJECT
APNS: 051-330-003-000, 051-350-004-000, 051-350-006-000, 051-350-007-000, AND 051-350-008-000

Conditional Use Permit #24-0007 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally described as SW4 OF NE4 & SE4 OF NW4 & E2 OF SW4 & W2 OF SE4 SEC 28 16-12. et al; in an unincorporated area of the County of Imperial; The project site involves five (5) parcels: Assessor Parcel Numbers (APN) 051-330-003-000 et al.

WHEREAS, Permittee has applied to the County for permission to operate 120-megawatts (MW) of alternating current photovoltaic solar energy and 240-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0006 (Big Rock 2 Cluster North); CUP #24-0008 (Big Rock 2 Cluster East/ Laurel Cluster South); and CUP #24-0009 (Big Rock 2 Cluster West) that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS overall; and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0007 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of The Board of Supervisors; and, (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

G-3 RECORDATION:

CUP #24-0007 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation

of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California, the Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP24#0007 consists of three primary components:

1. Up to 120-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 240-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on five parcels comprising approximately 410 acres. The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0003 related to this CUP#24-0007 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be

reviewed by the County Building Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall

be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17 Renewable Energy & Transmission Element regulations

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to verify the existing conditions of the impacted County roads before construction

begins. The haul route study shall also include recommended mitigation improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.

D. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).

C. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.

2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three-hundred-and-sixty-degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.

4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology.

Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.

7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

(TOTAL "S" CONDITIONS are 28)

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024 and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0007 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES MINNICK, Director Date
Planning & Development Services Department

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

ATTACHMENT "K"

VARIANCE (V)24-0003

RESOLUTION

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA DENYING "VARIANCE #24-0003" FOR BIG ROCK 2 CLUSTER SOUTH CUP #24-0007.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0003 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0007); and,

WHEREAS, Variance #24-0003 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying Variance #24-0003; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protest, objections and evidence presented by interested parties at a public hearing held with respect this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Variance #24-0003 for denial. The Board of Supervisors finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the denial of Variance #24-0003 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

Variance #24-0003 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0003 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

   The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application; The Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

   Staff has reviewed the request on Variance #24-0003 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, as allowed through the variance process, the granting of the variance for construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, exceeding the height limit would not constitute a grant adversely affecting the Imperial County General Plan.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENY** of the proposed Variance #24-0003.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

ATTACHMENT "L"

CUP 24-0008 RESOLUTION & CONDITIONS OF APPROVAL

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE BIG ROCK 2 CLUSTER EAST CONDITIONAL USE PERMIT #24-0008.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0008 to develop a 60-megawatt (MW) solar facility and up to 60 MW of battery storage system. The project is to be located on 2 parcels (APN: 051-310-027-000, and APN: 051-310-028-000) comprising approximately 160 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval or denial that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying conditional use permits;

WHEREAS, public notice of said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on November 4, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Conditional Use Permit #24-0008 for a decision for the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site is "Agriculture" and is within the Renewable Energy Overlay (RE). Therefore, the proposed uses could be found consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-2-R-RE. (General Agriculture / Rural Zone with Renewable Energy Overlay). The proposed uses are consistent with the zone since they are listed as allowed uses under the A-2-R zone with an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use is consistent with the zone: A-2-R-RE (General Agriculture / Rural Zone with Renewable Energy Overlay).

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and

property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0008 attached hereto and incorporated herein by this reference.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENY** of Conditional Use Permit #24-0008.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote approved the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\10. BR2_BOARD RESOLUTION CUP24-0008.docx

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0008
FOR BIG ROCK 2 CLUSTER EAST/LAUREL CLUSTER SOUTH SOLAR PROJECT
APNS: 051-310-027-000 AND 051-310-028-000

Conditional Use Permit #24-0008 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally described as S 1/2 OF E 1/2 & W 1/2 TR 53 T16S R12E 120 AC, and W 1/2 OF TR 45B T16S R12E 40 AC; in an unincorporated area of the County of Imperial; The project site involves two(2) parcels: Assessor Parcel Numbers (APN) 051-310-027-000, and 051-310-028-000

WHEREAS, Permittee has applied to the County for permission to operate a 60-megawatts (MW) of alternating current photovoltaic solar energy and 60-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0006 (Big Rock 2 Cluster North); CUP #24-0007 (Big Rock 2 Cluster South); and CUP #24-0009 (Big Rock 2 Cluster West) that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS overall; and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0008 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of the Board of Supervisors; (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

G-3 RECORDATION:

CUP #24-0008 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation

of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California, the Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP#24-0008 consists of three primary components:

1. Up to 60-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 60-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on two parcels comprising approximately 160 acres. The 160-acre site is associated with the previously-approved CUP for Laurel Cluster 2 South and will be re-entitled as part of the proposed project. The project site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0004 related to this CUP#24-0008 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-

3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for

Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the

Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17- Renewable Energy & Transmission Element regulations.

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to

verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.

C. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).

C. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.
2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three-hundred-and-sixty-degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for

administering and managing the reimbursement process as part of this condition of approval.

2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for

administering and managing the reimbursement process as part of this condition of approval.

5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology. Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.
7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

(TOTAL "S" CONDITIONS are 28)

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024 and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0008 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES MINNICK, Director Date
Planning & Development Services Department

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

ATTACHMENT "M"

VARIANCE (V)24-0004

RESOLUTION

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL CALIFORNIA DENYING "VARIANCE #24-0004" FOR BIG ROCK 2 CLUSTER EAST CUP#24-0008.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0004 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0008); and,

WHEREAS, Variance #24-0004 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying Variance #24-0004; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protest, objections and evidence presented by interested parties at a public hearing held with respect this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Variance #24-0004 for denial. The Board of Supervisors finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the denial of Variance #24-0004 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

Variance #24-0004 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0004 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application; The Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

Staff has reviewed the request on Variance #24-0004 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, as allowed through the variance process, the granting of the variance for construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, exceeding the height limit would not constitute a grant adversely affecting the Imperial County General Plan.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENY** of the proposed Variance #24-0004.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\11.BR2_BOARD RESOLUTION V24-0004.docx

ATTACHMENT "N"

CUP 24-0009 RESOLUTION & CONDITIONS OF APPROVAL

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL, CALIFORNIA, DENYING THE BIG ROCK 2 CLUSTER WEST CONDITIONAL USE PERMIT #24-0009.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0009 to develop a 80-megawatt (MW) solar facility and up to 60 MW of battery storage system. The project is to be located on 5 parcels comprising approximately 249 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying of conditional use permits;

WHEREAS, public notice of said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on November 4, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Conditional Use Permit #24-0009 for a decision for the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site and proposed parcels is "Agriculture" and 5 parcels are zoned "A-2-R and A-3" (General Agricultural / Rural Zone and Heavy Agriculture). A General Plan Amendment to include the other proposed parcels (APN 051-290-018-000 et al) into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-2-R and A-3 (General Agricultural / Rural Zone and Heavy Agriculture). A Zone Change to include five (5) parcels into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan with requirements for an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use would be consistent with the zone A-2-R-RE and A-3-RE (General Agricultural / Rural Zone with Renewable Energy Overlay and Heavy Agriculture with Renewable Energy Zone) upon approval of a Zone Change.

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0009 attached hereto and incorporated herein by this reference.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENY** of Conditional Use Permit #24-0009

_____

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote approved the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____

Cynthia Medina
Clerk of the Board of Supervisors

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\12. BR2_BOARD RESOLUTION CUP24-0009.docx

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0009
FOR BIG ROCK 2 CLUSTER WEST SOLAR PROJECT
APNS: 051-290-018-000, 051-290-019-000, 051-320-005-000, 051-320-006-000, AND 051-320-007-000

Conditional Use Permit #24-0009 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally described as LOT 1 SEC 29 & POR TR 107 16-12 80 AC et al; in an unincorporated area of the County of Imperial; The project site involves five (5) parcels: Assessor Parcel Numbers (APN) 051-290-018-000 et al.

WHEREAS, Permittee has applied to the County for permission to operate a 80-megawatts (MW) of alternating current photovoltaic solar energy and 60-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0006 (Big Rock 2 Cluster North); CUP #24-0007 (Big Rock 2 Cluster South); and CUP #24-0008 (Big Rock 2 Cluster East/Laurel Cluster South); and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0009 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of the Board of Supervisors; (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

G-3 RECORDATION:

CUP #24-0009 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation

of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California, the Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP#24-0009 consists of three primary components:

1. Up to 80-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 60-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on five parcels identified as Assessor's Parcel Numbers APNs 051-290-018-000, 051-290-019-000, 051-320-005-000, 051-320-006-000 and 051-320-007-000, comprising approximately 249 acres. The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0005 related to this CUP#24-0009 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building Official/Planning Director. Building permits shall

be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall

be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17- Renewable Energy & Transmission Element regulations.

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation

improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.

C. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).

D. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.
2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three hundred and sixty degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.

3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.

6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology. Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.
7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

(TOTAL "S" CONDITIONS are 28)

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024, and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0009 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES MINNICK, Director Date
Planning & Development Services Department

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

ATTACHMENT "O"

VARIANCE (V)24-0005

RESOLUTION

RESOLUTION NO.

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF IMPERIAL CALIFORNIA DENYING "VARIANCE #24-0005" FOR BIG ROCK 2 CLUSTER WEST CUP#24-0009.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0005 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0009); and,

WHEREAS, Variance #24-0005 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Board of Supervisors of the County of Imperial has been delegated the responsibility of denying Variance #24-0005; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Board of Supervisors has heard, received and considered all oral and written protest, objections and evidence presented by interested parties at a public hearing held with respect this item on November 4, 2025; and,

NOW THEREFORE, the Board of Supervisors of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Board of Supervisors has considered the proposed Variance #24-0005 for denial. The Board of Supervisors finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the denial of Variance #24-0005 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

Variance #24-0005 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0005 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone.

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application; The Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

Staff has reviewed the request on Variance #24-0005 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, as allowed through the variance process, the granting of the variance for construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, exceeding the height limit would not constitute a grant adversely affecting the Imperial County General Plan.

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY DENY** of the proposed Variance #24-0005.

John Hawk, Chairperson of the
Imperial County Board of Supervisors

I hereby certify that the preceding resolution was taken by the Board of Supervisors at a meeting conducted on **November 4, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Cynthia Medina
Clerk of the Board of Supervisors

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\BOARD\BOARD RESOLUTIONS\13. BR2_BOARD RESOLUTION V24-0005.docx

ATTACHMENT "P"

ECONOMIC IMPACT ANALYSIS

Development Management Group, Inc.

economic development ■ fiscal & economic analysis ■ development management



90FI 8ME LLC (Big Rock 2)
Solar Photovoltaic Energy Generation and Battery Storage Project



Economic Impact Analysis (EIA)
Employment (Jobs) Impact Analysis (JIA)
Fiscal Impact Analysis (FIA)
Statement of Potential for Urban Decay

Completed for:

Draft Report of Findings
September 12, 2025 (V3)



41-625 Eclectic Street, Suite D-2 ■ Palm Desert, CA 92260
Office: (760) 346-8820 ■ Mobile: (760) 272-9136
michael@dmgeconomics.com ■ www.dmgeconomics.com

Development Management Group, Inc.
economic development ■ fiscal & economic analysis ■ development management

September 12, 2025

Dr. Kathleen Lang, County Executive Officer
Ms. Rosa Lopez-Solis, Executive Office Budget and Program Administrator
County of Imperial
940 Main Street, Suite 208
El Centro, CA 92243

RE: DRAFT REPORT OF FINDINGS ECONOMIC/EMPLOYMENT (JOB)/FISCAL IMPACT ANALYSIS AND STATEMENT OF POTENTIAL FOR URBAN DECAY: 90FI 8ME LLC (BIG ROCK 2) SOLAR PHOTOVOLTAIC ENERGY PRODUCTION AND BATTERY ENERGY STORAGE SYSTEM (BESS) FACILTY

Dear Dr. Lang:

On behalf of Development Management Group, Inc., I am honored to provide you with our independent analysis of the economic, employment and fiscal impacts of the proposed 90FI 8ME LLC energy generation and battery energy storage project in Imperial County, CA. The purpose of this cover letter is to provide you with a brief explanation of each of the three analyses contained in this report and a summary. By review, the proposed project is (up to) a 500 MW photovoltaic energy generation and (up to) a 500 MW BESS facility on a portion of approximately 1,841 acres.

An ***Economic Impact Analysis*** calculates the predicted impact to a community or region as a result of a project or activity. This includes all known direct (and indirect) expenditures as a result of both construction and operation for the projected life of a facility/project. With respect to the 90FI 8ME LLC project we have calculated that the economic impact to the Imperial County region will be approximately $227.52 million over the thirty (30) year life of the project (inclusive of both project construction and operations but exclusive of governmental taxes and fees).

An ***Employment or Jobs Impact Analysis*** calculates the total number of construction and operational jobs specific to the 90FI 8ME LLC facility. The project applicant states that the project will generate 156.25 full-time one-year equivalent construction jobs over the construction period of about two (2) years (78.125 per year). The applicant further states the project will generate six (6) permanent jobs. Approximately 1,743 acres of the proposed Big Rock 2 land is actively being used for agriculture purposes and is estimated to be generating $5.37 million in crop value annually (average) while producing 27.09 full-time equivalent jobs.

41-625 Eclectic Street, Suite D-2 ■ Palm Desert, CA 92260
Office: (760) 346-8820 ■ Mobile: (760) 272-9136
michael@dmgeconomics.com ■ www.dmgeconomics.com

Finally, a ***Fiscal Impact Analysis*** calculates the amount of revenue a governmental agency is expected to receive and calculates the projected costs they will incur to provide appropriate services to both the project and the additional population/employment generated as a result of such. A comparative model is then produced in order to determine if the project is of economic benefit or cost to the government agency.

Development Management Group, Inc. has calculated that based on the information provided by 90FI 8ME LLC, the project will generate approximately $70.91 million in net local (county) tax revenue over the thirty (30) year life of the project. This is derived from an estimated $13.67 million in sales tax revenue, $8.37 million in property tax revenue and $48.86 million in solar fee revenue on active agriculture land.

It is projected that it will cost the County about $5.81 million to provide appropriate services to the project and related employment thus generating a projected ***surplus to the County of Imperial of about $65.10 million over the thirty (30) year period*** this report represents (subject to acceptance of the recommendations provided within the report).

Note that this amount is based solely on the tax laws that are currently in place and does not include any amounts that may be received by the County under a Public Benefits Agreement or similar arrangement.

A complete report of findings along with a list of sources and detailed calculations are contained within the report that follows. We are prepared to answer any questions you may have about our work and conclusions. I can be reached at (760) 272-9136 or by email at michael@dmgeconomics.com.

Sincerely,

Michael J. Bracken

Michael J. Bracken
Managing Partner

1. Introduction

Development Management Group, Inc. (DMG) has been retained by the County of Imperial, California to provide an independent Economic Impact Analysis (EIA), Employment/Jobs Impact Analysis (JIA) and Fiscal Impact Analysis (FIA) for a proposed solar photovoltaic energy production and battery storage facility to be constructed within the County of Imperial, California. The project is scheduled to produce up to 500 MW solar photovoltaic energy and store up to 500 MW of power through a battery system on approximately 1,850 acres of land, or a portion thereof.

This Employment Impact Analysis assumes all calculations in 2024-25 dollars as a base year with an appropriate adjustment for future years (see notes in exhibits for assumptions). The expected life of the facility is 30 years, which is generally in line with the length of entitlements for these types of projects).

The project developer is 90FI 8ME LLC. For purposes of readability, the project will generally be referred to by the name Big Rock 2 throughout this report.

2. Contact Information for the County of Imperial, California

Dr. Kathleen Lang, County Executive Officer
County of Imperial
940 Main Street, Suite 208
El Centro, CA 92243
(442) 265-1001

3. Contact Information for 90FI 8ME LLC (Big Rock 2)

Jennifer Jackson
90FI 8ME LLC (Big Rock 2)
4370 Town Center Boulevard, Suite 110
El Dorado Hills, CA 95762
(916) 608-9060

4. Contact Information for Development Management Group, Inc.

Michael Bracken, Managing Partner
Development Management Group, Inc.
41-625 Eclectic Street, Suite D-2
Palm Desert, CA 92260
(760) 346-8820
michael@dmgeconomics.com

© 2025 Development Management Group, Inc. All Rights Reserved

5. Statement of Contents:

1. Introduction/Purpose
2. Contact Information for the County of Imperial, CA
3. Contact Information for 90FI 8ME LLC (Big Rock 2)
4. Contact Information for Development Management Group, Inc.
5. Statement of Contents
6. Statement of Independence
7. Scope and References of Analysis
8. Qualifications of Consultant
9. Description of Economic Multipliers
10. Need for Renewable Energy Generation
11. Host Region and Location of Project
12. Description of Analyses Contained
13. Economic Impact Analysis (EIA)
14. Employment/Jobs Impact Analysis (JIA)
15. Impacts of Agriculture on Project Site (Current Use)
16. Fiscal Impact Analysis (FIA)
17. Statement Regarding Urban Decay
18. Recommendations Regarding Fiscal Impacts and Mitigation
19. Certification
20. Exhibit A: Consumer Price Index Calculations
21. Exhibit B: Construction/Operational Economic Impact
22. Exhibit C: Projected Governmental Revenues (Inclusive of Exhibits C-1, C-2, C-3)
23. Exhibit D: Taxing Organization Benefit Chart (County of Imperial)
24. Exhibit E: Consolidated County of Imperial Taxing Organization Benefit Chart
25. Exhibit F: Local Taxing Jurisdiction Tax Allocation Estimates
26. Exhibit G: Projected Employment Impacts Solar Production Facility
27. Exhibit H: Economic Value from Agriculture on Subject Site
28. Exhibit I: Agriculture Price Index Calculations (20-Year)
29. Exhibit J: Projected Future Agriculture Impacts of Subject Site
30. Exhibit K: Impact of Agriculture on Imperial Valley

© 2025 Development Management Group, Inc. All Rights Reserved

31. Exhibit L: Economic Impact of Agriculture on Subject Site
32. Exhibit M: Projected Costs for County to Provide General Government Services to Population
33. Exhibit N: Projected Costs for County to Provide General Government Services to Project
34. Exhibit O: Consolidated Revenue Versus Expenses of Big Rock 2 Project to the County of Imperial

6. Statement of Independence

The County of Imperial has provided a joint contractual obligation with Development Management Group, Inc., regarding independence of conclusions contained in this report. Therefore, neither project proponent (applicant) nor the County of Imperial (including those associated directly working on the entitlement process for the 90FI 8ME LLC (Big Rock 2)) have provided editorial comment or direction regarding the conclusions contained herein.

7. Scope and References of Analysis:

Development Management Group, Inc. has utilized information contained from the following sources in completing this analysis:

1. 90FI 8ME LLC (Big Rock 2) (Project Developer for Big Rock 2)
2. California Department of Conservation
3. California Department of Industrial Labor Relations
4. California Department of Tax and Fee Administration
5. California Economic Strategy Panel (RIMS II)
6. California Employment Development Department
7. California Energy Commission
8. California Independent System Operator
9. California Public Utilities Commission
10. California State Department of Finance
11. Confidential Sources (Unnamed Active Farmers)
12. County of Imperial, California
13. County of Kern, California
14. County of Riverside, California

© 2025 Development Management Group, Inc. All Rights Reserved

15. County of San Bernardino, California
16. Environics Analytics
17. Environmental Management Associates
18. Imperial County Farm Bureau
19. Imperial Irrigation District
20. Implan Group, Inc.
21. Regional Analysis & Information Data Sharing (Raidsonline.com)
22. The Hoyt Report
23. United States Bureau of Economic Analysis
24. United States Census Bureau (American Community Survey)
25. United States Department of Labor
26. Western Farm Press

8. Qualifications of Consultant

Development Management Group, Incorporated (DMG, Inc.) specializes in services related to economic development and redevelopment. Such services include site selection and analysis, economic development strategic planning and implementation, development management, market/development feasibility, economic analysis, entitlement/permit processing and project financing. DMG has completed over two hundred (200) Fiscal and Economic Impact Analysis projects for both the private and public sector and serves as a contract economist for the Southern California Association of Governments.

Over the past twenty (20) years, DMG, Inc. has assisted over five dozen companies with their site selection and entitlement/permit processing. These companies have created over 2,500 new jobs and invested tens of millions of dollars within the communities where they are located. In addition, DMG, Inc. has assisted a number of public agencies and economic development corporations with economic impact analysis, strategic planning, marketing and other business recruitment projects creating the administrative and operational infrastructure to enable them to grow their economies.

© 2025 Development Management Group, Inc. All Rights Reserved

The company founder, Michael Bracken, brings over 30 years of local, regional and state government experience in the fields of economic development, redevelopment, housing and sales and use tax administration. Before founding Development Management, Inc., Bracken completed four years as the President and Chief Executive Officer of the Coachella Valley Economic Partnership where he led a regional business recruitment team that generated tens of millions of dollars of economic investment for the Palm Springs Region of Southern California.

Bracken holds a Bachelor's Degree in Business Administration and a Master's Degree in Public Administration from The California State University San Bernardino (CSUSB). He co-designed CSUSB's Master's level course titled *Management of Local Economic Development*, which trains economic development professionals in business recruitment and effective use of financial and tax incentives.

He is also a former City Councilman and Vice-Chairman of a Community Redevelopment Agency providing unique and beneficial prospective to local governments.

9. Description of Economic Multipliers

There are two types of multipliers that are generally utilized by economists. These include spending multipliers and job creation multipliers. Simply stated, spending multipliers is the calculation of the number of times a dollar is expected to be spent through the regional economy. Economic multipliers differ based on the origination of that particular dollar. For example, labor multipliers are higher than material multipliers as labor dollars are paid directly to personnel and generally spent more locally. Dollars spent on materials (for example, construction materials) are more likely to leave the regional economy as they are used to pay suppliers located elsewhere.

Economists often provide the example of a gold mining town when describing the concept of economic multipliers. Imagine a gold miner with money paying various people within the town for a place to sleep, equipment to mine, food and entertainment. The recipients of these dollars then utilize the money they received for their own purchases (including a place to sleep, supplies for their businesses, food and entertainment). Economic multipliers are the basis of understanding how a particular business or use will impact a regional economy.

© 2025 Development Management Group, Inc. All Rights Reserved

There is disagreement between individual economists and government authorities regarding appropriate economic multipliers. More aggressive economists often argue for higher economic multipliers stating that dollars continually circulate through an economy. Conservative economists believe that multipliers are lower, and that the circulation has an ending point (and therefore a new beginning point) in the spending cycle. In an effort to provide the greatest amount of accuracy to an analysis of this nature, Development Management Group, Inc. utilizes the RIMS II model, which most economists consider to be a more conservative estimate of economic multipliers.

The RIMS II model is based on work by the United States Bureau of Economic Analysis. DMG, Inc. is utilizing the latest RIMS II Model 2012/2020. Use is also made of the California Economic Strategy Panel 2009. They published a study titled "Using Multipliers to Measure Economic Impacts". This publication looks at hundreds of industry types. Multipliers for Imperial County typically are in the range of 1.0 to 2.0.

Employment multipliers help predict the number of additional jobs that are created elsewhere in the economy for each job of a certain type. For example, if a certain type of job (let's say one involving full-service restaurants which has a multiplier of 1.1346, for each job directly attached to retail, an additional .13 (or about 1/7) of a job is created elsewhere in the economy). DMG, Inc. applies the use of economic multipliers in the following pages to help present potential economic, employment and fiscal impacts.

10. Need for Renewable Energy Generation

As the Renewable Portfolio Standard (RPS) requirements continue to increase, so will investment in the region. California has essentially met the RPS standard of a minimum of 33% (SBX1-2) and is now working toward the implementation of SB350 which increases the RPS standard to 50% by 2030. Most recently (September 2018) California Governor Jerry Brown signed SB 100 into law, which sets the bar for California to generate 100% of energy through renewable sources by the year 2045.

© 2025 Development Management Group, Inc. All Rights Reserved

The Imperial Valley Economic Development Corporation (IVEDC) and the County of Imperial sponsored the development of an Economic Development Strategic Plan in 2006. The plan, which has been adopted by IVEDC, the County of Imperial and most of the incorporated communities listed the recruitment of renewable energy generators as one of seven industries in which the region should focus its economic investment attraction efforts.

The plan won a statewide award from the California Association for Local Economic Development in 2007. For purposes of disclosure, Development Management Group, Inc. was the firm that produced the plan under contract with the County of Imperial.

11. Host Region, Location and Project Description

The County of Imperial, California (Imperial County) is located in the southeast corner of California. The population of the County is approximately 186,499 (2025 California Department of Finance) The California Employment Development Department (EDD) shows as of July, 2025 that the unemployment rate for Imperial County is 20.2% with 73,200 available in the workforce, 58,400 employed and 14,800 currently unemployed.

90FI 8ME LLC (Big Rock 2) is proposing to construct a 500 MW Photovoltaic Energy Production Facility and 500 MW Battery Energy Storage System (BESS) in the Imperial Valley portion of Southern California the project would comprise the development of a portion of approximately 1,841 acres of land in areas that are generally located about three (3) miles south-southwest (SSW) of the unincorporated community of Seeley in Imperial County.

It is estimated each megawatt (MW) of power will generate sufficient electricity for approximately 325 homes. This means that it is reasonable to assume that the proposed facility will help deliver power to approximately 162,500 homes or about 568,750 people (at 3.5 persons per household).

The facility is scheduled to be built over an 18–24-month period from the time construction starts. For financial modeling purposes, DMG, Inc. will use two (2) years as the construction period. The project developer states that that about 78.125 FTE construction jobs lasting about two (2) years (construction period)

© 2025 Development Management Group, Inc. All Rights Reserved

The subject parcel numbers are provided below (within one (1) of four (4) CUP's:

CUP 24-0006

051-300-011
051-300-016
051-300-026
051-270-020
051-270-028
051-270-041
051-300-035
051-300-037
051-280-054
051-270-036
051-300-032
051-300-036

CUP 24-0007

051-330-003
051-350-004
051-350-007
051-350-008
051-350-006

CUP 24-0008

051-310-027
051-310-028

CUP 24-009

051-290-019
051-320-005
051-320-007
051-320-006
051-290-018

Total Acreage:1,841 (approximate)

12. Description of Analyses Contained and Limitations

Development Management Group, Inc. is presenting three types of analysis. These include an Economic Impact Analysis, an Employment or Jobs Impact Analysis and a Fiscal Impact Analysis. Each serves a distinct purpose in evaluating the overall economic impacts of a project.

An ***Economic Impact Analysis*** is designed to provide calculations regarding the potential overall economic impact of a project for a region. It gives an understanding of the quantity of dollars that will flow through an economy as a result of a project. In the case of a solar energy generation project this includes such items as labor, construction materials, local purchases and operations. Additionally, calculations are presented regarding the amount of money that will be generated for governmental

© 2025 Development Management Group, Inc. All Rights Reserved

purposes (through taxes and fees). A combination of the two calculations (and associated multipliers) provides a full understanding of the potential economic impact.

An Employment Impact Analysis (or in this case what we term as a ***Jobs Impact Analysis***) provides calculations regarding the number of direct and indirect jobs that are generated as a result of construction and operation of the project. Additionally, it provides a comparison to the direct and indirect jobs that are currently in place as a result of existing land use(s).

Finally, a ***Fiscal Impact Analysis*** provides a financial picture of what it may cost a governmental authority (such as the County of Imperial) to provide essential goods and services to a community as a result of a specific development project and compares it to the revenue stream that is expected as a result of the same project. The consolidation of the two calculations provides analysis for which to determine if a project is fiscally viable for a governmental agency. This report does have certain limitations, which are disclosed below:

1. 90FI 8ME LLC (Big Rock 2) has stated that their intention (if market conditions (demand and financing) prevail, is to build their project in (essentially) a single phase over an 18–24-month period.
2. 90FI 8ME LLC (Big Rock 2) has indicated that they will store power in the BESS system from on and off-site energy production sources. As such the project is calculated at a 75% exemption for property tax purposes on the battery equipment.
3. 90FI 8ME LLC (Big Rock 2) has indicated that the battery facilities will be in a storage container type unit, rather than a permanent building structure (such as block construction or concrete tilt-up). As such the only appreciating portion of the project (for property tax purposes) is purchased land.
4. DMG, Inc. calculates impacts based on a 30-year period, though the actual Conditional Use Permit (CUP) may be for a period of time longer (or shorter) than what is calculated. Nothing in this report shall be construed as an entitlement, permit or right to construct.
5. DMG, Inc. does not provide an analysis of the highest and best use of the subject property. Our analysis is limited to analyzing the current use and projected use.
6. DMG, Inc. does not provide civil engineering services or construction cost estimation. Therefore, to the extent that we recommend public improvement mitigation, we are able to provide a potential formula for use by a qualified civil or traffic engineer but not the calculations itself.

© 2025 Development Management Group, Inc. All Rights Reserved

7. DMG, Inc. endeavors to utilize as much third-party data as possible, but as with any projection, certain assumptions must be made for which to provide appropriate calculations and conclusions.
8. DMG, Inc. recognizes that some of the data provided directly by the project proponent is considered proprietary in nature. This said, it is not possible to protect all such information in relation to completing this analysis without utilizing some of the specific numbers and calculations.
9. DMG, Inc. has copyrighted each and every page of this report. The purpose of the Copyright is to protect our analysis and report structure as it is considered the intellectual property of DMG, Inc. This said, the County of Imperial does have unlimited use of this report (in Final Report status) for which to analyze the project, print/publish for public comment and make public policy decisions. Any use by any other person or entity of this analysis and/or system without the express written and/or licensed permission of Development Management Group, Inc., is prohibited.

13. Economic Impact Analysis (Exhibits A through G)

Construction and Operation

Initial construction of Big Rock 2 is anticipated to cost approximately $478 million (this includes the construction of 500 MW of Solar Photovoltaic Energy Production and 500 MW BESS (both are maximum figures). In general, this includes $375.75 million in material purchases and $102.25 million in labor inclusive of a $25 million for a substation/gen-tie/switchyard. Not included but part of the project is site (land) acquisition, which is said to be a combination of land purchase and long-term land leases (under 35 years in length).

The construction phase of the project is scheduled to include the following types of expenditure:

1. Site Acquisition (land lease and/or leasing costs)
2. Engineering
3. Project Management (including Overhead and Profit to an EPC)
4. Installation of Solar Panels, BESS and Ancillary Equipment
5. Site Work (clearing & grubbing, grading and fencing)
6. Project Substation (for which to "collect" the energy and prepare it for transmission)
7. Interior Roads & Landscaping
8. Operations Facilities

© 2025 Development Management Group, Inc. All Rights Reserved

In terms of construction, the project developer states that 78.125 full time equivalent jobs (325,000 craft hours) lasting about two (2) years. In total, about $102.25 million is projected in direct construction labor (on site). The economic multiplier for construction labor is 1.1331. This means that for each dollar spent on labor to construct the facility it is anticipated that an additional 13 cents are spent within the economy as that dollar circulates. In total, it is projected that the economic impact of construction labor will be about $115.86 million.

Additionally, $375.75 million in material purchases are anticipated to construct the Big Rock 2 facility. Obviously only a small portion of the material purchases will come from within the Imperial Valley as such items as support beams (mounting posts), solar panels and storage batteries are manufactured outside the region. DMG, Inc. has examined what materials may come directly from Imperial Valley vendors and we have determined that such items as aggregate and cement/concrete will likely come from within the region. Thus, for the purpose of calculating the potential impact of the development of the project, we are estimating that 5% of the overall materials purchased may come from within the region. This would equate to about $18.79 million dollars being spent within the region on materials during the construction period. In applying an economic multiplier of 1.1517 for construction material purchases, the overall economic impact of material purchases within the region is anticipated to be about $21.64 million over the same period.

Long term operational impacts will take the form of operational labor, facility security and maintenance as well as replacement of batteries used for energy storage. Information from the developer suggests some additional local material purchases to be made as part of the operation of the facility. It is estimated that the economic impact of material purchases (during the thirty (30) year life of the facility) will have an economic impact of about $20.39 million on the regional economy. This is based on 5% of material purchases coming from local sources. Major component purchases, such as solar panels and batteries, are sourced from outside the region.

At build-out the project developer states that the solar facility will employ a projected full time equivalent of 6 persons. Over the life of the facility, operational labor is estimated to have a $69.63 million economic impact on the regional economy. It is also anticipated that there will be some

© 2025 Development Management Group, Inc. All Rights Reserved

additional contract services required for the operation and maintenance of the facility. Exhibit B provides the scheduled calculations along with scheduled and multipliers.

It is calculated that the construction and operation of 90FI 8ME LLC (Big Rock 2) (Big Rock 2) project will have an overall economic impact to the Imperial Valley Region of about ***$227.52 million*** over the thirty (30) year period of construction and operation.

Conclusion Regarding Economic Impact to the Imperial Valley Region

Development Management Group, Inc. projects that the Big Rock 2 project will have approximately ***$227.52 million in economic impact to the regional economy*** over the thirty (30) year life of the project.

Governmental Revenues

The Big Rock 2 project will provide certain and specific tax revenues to the County of Imperial and other region-based taxing organizations. By way of background, California Law provides a property tax exemption for qualified solar energy systems. Below is the verbiage from the California Revenue and Taxation Code, section 73. Note that this project may or may not include some of these exemptions and the language below is provided as a courtesy and is standard in analysis we complete that may include potential exemptions.

73. (a) Pursuant to the authority granted to the Legislature pursuant to paragraph (1) of subdivision (c) of Section 2 of Article XIII A of the California Constitution, the term "newly constructed," as used in subdivision (a) of Section 2 of Article XIIIA of the California Constitution, does not include the construction or addition of any active solar energy system, as defined in subdivision (b).

(b) (1) "Active solar energy system" means a system that uses solar devices, which are thermally isolated from living space or any other area where the energy is used, to provide for the collection, storage, or distribution of solar energy.

(2) "Active solar energy system" does not include solar swimming pool heaters or hot tub heaters.

(3) Active solar energy systems may be used for any of the following:

(A) Domestic, recreational, therapeutic, or service water heating.

© 2025 Development Management Group, Inc. All Rights Reserved

(B) Space conditioning.

(C) Production of electricity.

(D) Process heat.

(E) Solar mechanical energy.

(c) For purposes of this section, "occupy or use" has the same meaning as defined in Section 75.12.

(d) (1) (A) The Legislature finds and declares that the definition of spare parts in this paragraph is declarative of the intent of the Legislature, in prior statutory enactments of this section that excluded active solar energy systems from the term "newly constructed," as used in the California Constitution, thereby creating a tax appraisal exclusion.

(B) An active solar energy system that uses solar energy in the production of electricity includes storage devices, power conditioning equipment, transfer equipment, and parts related to the functioning of those items. In general, the use of solar energy in the production of electricity involves the transformation of sunlight into electricity through the use of devices such as solar cells or other solar collecting equipment. However, an active solar energy system used in the production of electricity includes only equipment used up to, but not including the stage of conveyance or use of the electricity. For the purpose of this paragraph, the term "parts" includes spare parts that are owned by the owner of, or the maintenance contractor for, an active solar energy system that uses solar energy in the production of electricity and which spare parts were specifically purchased, designed, or fabricated by or for that owner or maintenance contractor for installation in an active solar energy system that uses solar energy in the production of electricity, thereby including those parts in the tax appraisal exclusion created by this section.

(2) An active solar energy system that uses solar energy in the production of electricity also includes pipes and ducts that are used exclusively to carry energy derived from solar energy. Pipes and ducts that are used to carry both energy derived from solar energy and from energy derived from other sources are active solar energy system property only to the extent of 75 percent of their full cash value.

(3) An active solar energy system that uses solar energy in the production of electricity does not include auxiliary equipment, such as furnaces and hot water heaters that use a source of power other than solar energy to provide usable energy. An active solar energy system that uses solar energy in the production of electricity does include equipment, such as ducts and hot water tanks, which is utilized by both auxiliary equipment and solar energy equipment, that is, dual use equipment. That equipment is active solar energy system property only to the extent of 75 percent of its full cash value.

© 2025 Development Management Group, Inc. All Rights Reserved

(e) (1) Notwithstanding any other law, for purposes of this section, "the construction or addition of any active solar energy system" includes the construction of an active solar energy system incorporated by the owner-builder in the initial construction of a new building that the owner-builder does not intend to occupy or use. The exclusion from "newly constructed" provided by this subdivision applies to the initial purchaser who purchased the new building from the owner-builder, but only if the owner-builder did not receive an exclusion under this section for the same active solar energy system and only if the initial purchaser purchased the new building prior to that building becoming subject to reassessment to the owner-builder, as described in subdivision (d) of Section 75.12. The assessor shall administer this subdivision in the following manner:

(A) The initial purchaser of the building shall file a claim with the assessor and provide to the assessor any documents necessary to identify the value attributable to the active solar energy system included in the purchase price of the new building. The claim shall also identify the amount of any rebate for the active solar energy system provided to either the owner-builder or the initial purchaser by the Public Utilities Commission, the State Energy Resources Conservation and Development Commission, an electrical corporation, a local publicly owned electric utility, or any other agency of the State of California.

(B) The assessor shall evaluate the claim and determine the portion of the purchase price that is attributable to the active solar energy system. The assessor shall then reduce the new base year value established as a result of the change in ownership of the new building by an amount equal to the difference between the following two amounts:

(i) That portion of the value of the new building attributable to the active solar energy system.

(ii) The total amount of all rebates, if any, described in subparagraph (A) that were provided to either the owner-builder or the initial purchaser.

(C) The extension of the new construction exclusion to the initial purchaser of a newly constructed new building shall remain in effect only until there is a subsequent change in ownership of the new building.

(2) The State Board of Equalization, in consultation with the California Assessors' Association, shall prescribe the manner, documentation, and form for claiming the new construction exclusion required by this subdivision.

(f) This section applies to property tax lien dates for the 1999-2000 fiscal year to the 2015-16 fiscal year, inclusive.

© 2025 Development Management Group, Inc. All Rights Reserved

(g) The amendments made to this section by the act that added this subdivision apply beginning with the lien date for the 2008-09 fiscal year.

(h) This section shall remain in effect only until January 1, 2017 (since extended to expire December 31, 2024), and as of that date is repealed. ***(It has since been extended).***

Essentially this means that the actual solar energy generation equipment is exempt from property taxes but there are elements of the project that are subject to property taxes. These include the land itself and non-solar equipment improvements to the land which includes such items as fencing, project substation, interconnection facilities and common service facilities. Solar panels and component parts are considered subject to property tax in California, in most cases. Further, the battery components are subject to a 75% exemption as the batteries are expected to receive power from both on-site and off-site sources.

It is estimated that the project will generate approximately $31.34 million in gross property taxes over a thirty (30) year period to the County of Imperial. Note that County will only net a small portion of this or about $8.30 million. This projection (found in Exhibit C-1, C-2 and C-3) is based on real property (land) assessed valuation (expected to increase by 2% per annum) and substation valuation (set on a C-20 depreciation schedule). Exhibits D & E provide the calculations for net to County property taxes, which includes General Fund, Fire Protection and County Library. The Exhibit (D) also shows that 46% of the funds previously allocated to the County General Fund have been recaptured as part of the Education Revenue Augmentation Fund.

The subject properties also include a number of add-on taxes (or benefit taxes) that were passed by local voters. Such add-on taxes benefit Imperial Community College District, Central Union High School District and Seeley Union School District. Over the thirty-year life of the project, these add-on property taxes are projected to generate an additional $4.54 million in direct dollars to the above-named organizations. Exhibit F provides a full allocation of all local property taxes by taxing agency.

The second revenue stream comes from Sales Taxes. In the State of California sales tax is applicable when construction materials are purchased by a construction contractor. An example would be a contractor that purchases roofing materials from a roofing supply company. At the time the contractor purchases the materials, he or she pays sales tax on the amount purchased. The point of sale is the place where the purchase was "principally negotiated" which is typically the location of the roofing supply

© 2025 Development Management Group, Inc. All Rights Reserved

business. The point of sale is important because local jurisdictions receive a portion of the sales tax collected.

In the case of a solar photovoltaic energy production facility that is scheduled to have tens of millions of dollars of materials, the point of sale provides substantial financial benefit to the retailer (supplier) of the materials. The following paragraphs provide guidance regarding the applicability of sales tax on solar equipment and the appropriate structure so that the County of Imperial may maximize its ability to receive financial benefit as the designated point of sale.

There are two (2) documents which are worthy of review and understanding relative to how sales and use tax can and should be handled for the Imperial County project. The first is Regulation 1521, which governs Construction Contractors and defines Construction Contracts. The second is Publication 9 (formerly known as Publication 28) entitled "Tax Information for City and County Officials" (relative to Sales and Use Tax). Both documents are available through the California State Board of Equalization.

Regulation 1521 states that photovoltaic panels (PV) are considered fixtures. DMG, Inc. believes this also applies to energy storage batteries. Further, 90FI 8ME LLC (Big Rock 2) or anyone else that would be installing them on real property would be a Construction Contractor and the "retailer" of the product. This means that 90FI 8ME LLC (Big Rock 2) would be responsible for reporting and paying sales and use tax to the State of California. A section under Regulation 1521 deals directly with Construction Contractors that are also the manufacturer of the product. Simply stated, there are various methods for which 90FI 8ME LLC (Big Rock 2) to determine the retail price or value of the product. Such methods are described in detail on Page 3 of Regulation 1521 (Measure of Tax: Determining Cost Price).

Sales and Use Tax applies to fixtures utilized in the construction process. The law provides the option for a Construction Contractor to obtain a "Sales Tax Jobsite Sub-Permit" that allows the reporting of sales and use taxes at the jobsite itself (rather than where the fixtures were purchased). Essentially this means that the County of Imperial (under the Jobsite Sub-Permit) would receive the maximum financial benefit of a project such as the one proposed by 90FI 8ME LLC (Big Rock 2). Publication 28 Exhibits A and B provide greater detail as to both the qualification and application to obtain a "Jobsite Sub-Permit".

© 2025 Development Management Group, Inc. All Rights Reserved

Essentially, at such time as construction commences, 90FI 8ME LLC (Big Rock 2) would file for a "Sales Tax Jobsite Sub-Permit for Construction Contractors (Exhibit A of Publication 9). Sales Tax will then be reported to the California Department of Tax and Fee Administration (formerly the Board of Equalization) and paid by 90FI 8ME LLC (Big Rock 2). Since the Sub-Permit will be specific to the job site, the County of Imperial will receive the maximum amount of sales tax as the local entity. Below are some excerpts from Regulation 1521 reporting of sales and use tax for photovoltaic (PV):

Regulation 1521

This regulation describes how Construction Contractors are to report sales and use tax for Construction Contracts. First, Section 13 states, "A contract to furnish and install a solar energy system onto a structure or realty is a construction contract which involves furnishing and installing both materials and fixtures. A solar energy system is defined as any solar collector or other solar energy device that provides for the collection and distribution of solar energy and, where applicable, the storage of solar energy."

Subsection 13 (B) Fixtures: "Photovoltaic (PV) cells, solar panels and solar modules, including both solar thermal panels and solar electric PV panels, are considered fixtures when they are accessory to a building or other structure and do not lose their identity as accessories when installed. Examples of these types of solar panels include, but are not limited to, rack mounted solar panels installed on roofs and solar panels used in free-standing solar arrays." (DMG Analysis: The PV panels are deemed to be Fixtures under Subsection 13 (B))

1521 (b)(2)(B)(1) In General

In General, Construction Contractors are retailers of fixtures which they furnish and install in the performance of construction contracts and tax applies to their sales of fixtures.

© 2025 Development Management Group, Inc. All Rights Reserved

1521 (b)(2)(B)(2) Measure of Tax

(a) In General, if the contract states the sale price at which the fixture is sold, tax applies to that price. If the contract does not state the sale price of the fixture, the sale price shall be deemed to be the cost price of the fixture to the contractor.

(b) Determining Cost Price. If the contractor purchases the fixtures in a completed condition, the cost price is deemed to be the sale price of the fixture to him or her and shall include any manufacturer's excise tax or import duty imposed with respect to the fixture prior to its sale by the contractor.

If the contractor is the manufacturer of the fixture, the cost price is deemed to be the price at which similar fixtures in similar quantities ready for installation are sold by him or her to other contractors.

(If neither of these sections fall within the general operating framework of 90FI 8ME LLC (Big Rock 2), the Regulation goes further into other tests that can be applied to determine the sales price (which is applicable to sales and use tax).

Sales Tax/Point of Sale Conclusions:

1. PV is fixtures under Sales and Use Tax Law.
2. The Construction Contractor is the retailer of fixtures.
3. The retailer (Construction Contractor) is responsible for reporting and paying sales and use tax to the State of California
4. Where the Construction Contractor (retailer) is also the manufacturer, there are various methods of determining the sale price.
5. It is important that the contract between the Construction Contractor and 90FI 8ME LLC (Big Rock 2) clearly separate labor, materials and fixtures.
6. The Construction Contractor can apply for and receive a Job Site Sub-Permit from the California Department of Tax and Fee Administration, thus allowing the maximum financial benefit (sales and use taxes) to be allocated to the County of Imperial.

© 2025 Development Management Group, Inc. All Rights Reserved

Sales and Use Tax Designated for the County of Imperial:

In total, the County of Imperial would receive a total of 2.5% of the cost or value of tangible personal property sold within the County. More specifically, the County will receive 2.5% of the cost or value of the photovoltaic panels installed on projects within its jurisdiction. Keep in mind that the sales tax rate in Imperial County is 7.75%. The following is a list of the breakdown of how the County receives 2.5%:

1: 1.00% local sales tax for County General Fund
2: .50% local health programs
3: .50% local public safety funding
4: .50%* Measure D Transportation Projects

* Measure D is a locally approved Transportation Funding in Imperial County. It is represented by a ½ of 1% additional tax placed upon taxable sales originating within the County. About 2/3 of the funds received are placed into a pool that is used for regional transportation projects throughout the region (across the seven cities) while the other 1/3 is available directly to the County of Imperial for transportation projects. Measure D is in addition to the .25% that is included as part of the general 1.00% sales tax listed above.

In terms of application to the 90FI 8ME LLC (Big Rock 2), if the County of Imperial were to require as part of the Conditions of Approval (or similar project governing document) that the site location be designated as the "Point of Sale", the County of Imperial (and region through Measure D) will be the beneficiary of $8.13 million in sales tax over the construction period (Years 1-2). In order for the County of Imperial to benefit from Point of Sale, the County MUST place said requirement in the Conditions of Approval. This action is included in our analysis and will be part of our recommendations. Further, if said Condition of Approval were to be placed for the life of the project, the County of Imperial will receive additional Sales & Use Tax revenues in Years 5, 10, 15, 20, 25 and 30 as partial replacement of battery components occurs. In total (construction and repower years), the County will receive $13.67 million in Sales & Use Tax.

© 2025 Development Management Group, Inc. All Rights Reserved

It is projected that the County of Imperial (and associated regional taxing agencies) will garner approximately $45.01 million in gross revenues (sales and property taxes) over the life of the project (Years 1-30). The accepted multiplier for dollars generated (and spent) by local governments is 1.2844 which mean that the overall economic impact of the tax revenue received by the County of Imperial and other taxing organizations is approximately $57.81 million over the thirty (30) year life of the project.

14. Employment/Job Impact Analysis

As previously stated, Big Rock 2 has projected a total of 78.125 construction jobs lasting approximately two (2) years. In addition, the project is projecting between 6 full-time operating jobs. These jobs will be geared toward preventative and corrective maintenance and plant/facility operation. The projected operating payroll is while the other job will be for records/accounting. The payroll is projected at $675,000 per year (inclusive of 30% for benefits/burden).

Exhibit G provides calculations (with appropriate economic multipliers) for both construction and operation jobs. The overall economic impact to the region based on the jobs the Big Rock 2 project is creating is $95.98 million while the economic impact of wages (without construction) over the thirty-year life of the project is expected to be $69.63 million. Note that these figures include economic multipliers. Finally, the six (6) direct operation jobs are expected to generate an additional 2.7 jobs elsewhere in the regional economy.

15. Impacts of Agriculture: Imperial County Economy (Economic and Jobs) (Exhibits H-L)

As the subject site currently hosts agriculture (grow) operations, it is important to calculate the difference between current and proposed uses in terms of economic and job (employment) impacts. Exhibits H, I & J articulate the economic impacts of agriculture on the Imperial County economy based on the crop history on the site itself. Exhibit H calculates that over the last five years, an average of $5.37 million of crops have been produced on the subject site. The crops grown on the subject land include Bermuda Grass, Alfalfa, Forage Hay, Broccoli, Spinach, Onion, Sudan Grass, Alfalfa Seed, Oats, Wheat, Cauliflower, Dill and Cabbage. Next, using the County of Imperial Agriculture Commission Crop Reports, we have calculated that over the last twenty (20) years, crop production

© 2025 Development Management Group, Inc. All Rights Reserved

(valley wide) has increased by an average of 4.51% per year. This figure (and calculation) is shown on Exhibit I.

Next, the thirty-year projected economic impact of agriculture (on the subject site) is calculated as Exhibit J. Utilizing the five-year site average as the Year 1 figure while applying an average increase of 4.51% annually and the RIMS II economic multiplier of 1.2391, the projected economic impact of agriculture on the subject site on the County economy is estimated to be $406.74 million over a thirty (30) year period.

The next portion of the analysis is to determine the impact on jobs as a result of the potential conversion of the subject property from its current use to solar energy production. Agriculture production has historically been the economic engine that drives the Imperial Valley. As of the end of 2023 (full year) it was estimated that 14.62% of the overall workforce was directly employed in agriculture (8,992 workers out of 61,500 that were employed). The mean hourly wage of all employees engaged in agriculture was reported to be $22.83. With a 30% benefit allowance, the estimated total average wage is about $29.68 per hour. Additional information regarding the agriculture industry is scheduled as part of Exhibit K.

Development Management Group, Inc. completed a potential comparison of agriculture use to a potential solar energy production use. The first model (Exhibit L) utilizes the concept of the "average agriculture use" meaning we modeled what the 1,782 total acres would look like in terms of employment if it were producing a proportional mix all agriculture and livestock products in line with the 2023 Imperial County Agriculture Crop and Livestock Report.

Exhibit L shows if the subject property were the "average farm" in the Imperial Valley with 1,743 (out production acres (out of 1,841 total acres), it would likely employ 27.09 full-time equivalent employees based on the County average of about 1.55 per 100 acres. The average wage (all inclusive) of $61,732 would generate about $1.67 million in annual payroll.

The economic multiplier for farming/agriculture wages is 1.311. Therefore, the economic impact of the payroll is expected to be about $2.19 million in Year 1. In terms of overall jobs, the economic multiplier for agriculture jobs is 1.3662 meaning that for each job directly tied to agriculture there is approximately

© 2025 Development Management Group, Inc. All Rights Reserved

.3662 (or 1/3) of a job elsewhere in the economy. Therefore, if the subject site were the "average farm" in the Imperial Valley, we estimate that such farm would generate a total (direct and indirect) of 37.00 full-time equivalent jobs.

Regarding jobs associated with solar energy production, the Big Rock 2 is facility anticipated to generate 78.125 full-time equivalent jobs for each of the first two (2) years (construction phase). The operation of the facility is slated to generate six (6) full-time equivalent jobs.

Table 1 below graphically displays the comparisons for all of the exhibits presented and described.

Table 1

Comparison of Employment Impacts from Agriculture and Proposed Solar/Battery Use

Item	*Historic Agriculture Use of Specific Site*	*Commercial Solar w/o Construction*	*Commercial Solar w/Construction*
Construction FTE*	0	0	156.25
Projected Direct Jobs	27.09	6.00	6.00
Projected Total Jobs **/***	37.00	8.70	8.70
Projected 30-Year Employment Impact	$67,061,556	$69,633,626	$95,982,450

*Construction FTE is total one-year equivalent

**Projected total jobs include both direct and indirect jobs based on RIMS II Modeling

*** Projected Total Jobs only include permanent jobs (average number of jobs over 30 years)

16. Fiscal Impact Upon the County of Imperial (Single Phase Development) Exhibits M-O

A Fiscal Impact Analysis was completed to determine if the revenues scheduled were sufficient for which to allow the County of Imperial to provide essential goods and services to the project site and the additional population within the County as a result of the construction and/or operation of the energy production facility. It is estimated that the County will receive a net of approximately $70.91 million in tax revenues over the thirty (30) year life of the project (net of $8.37 million in property tax revenue, $13.67 million in sales tax revenue and $48.86 million in public benefit fees from solar development on

© 2025 Development Management Group, Inc. All Rights Reserved

agriculture land). This figure is a base figure for which to better understand the aggregate fiscal impacts of the proposed Big Rock 2 project on the County.

There are multiple ways of conducting a Fiscal Impact Analysis. DMG, Inc. has chosen to utilize the following assumptions/methodology:

1. Land in and of itself has very little call for service from the County of Imperial.
2. Persons employed (to construct, operate or secure) at the facility do require various general governmental services.
3. For purposes of evaluating the potential demand by persons for services, it is assumed that each full-time equivalent job (construction, operation or security) shall support an average countywide household size of 3.81 persons (meaning the employee and an additional 2.81 persons).

To generate a Fiscal Impact Analysis, a schedule of costs for County of Imperial General Government Services was generated as Exhibit N. This was extrapolated from Schedule 8 of the 2024-25 County of Imperial "Actual Estimated" Budget as presented to the County Board of Supervisors in June 2024. Exhibit N shows approximately $661.56 million for General Government expenditures by the County of Imperial. This equates to approximately $3,617.41 per person (based on a population of 182,881).

For purposes of disclosure, it is estimated that about 66% of the County General Fund comes from outside sources (State and Federal Government) while 34% of the revenues come from within the County (taxes and fees). Development Management Group, Inc. recognizes that the revenue climate (at the State and Federal level) is ever changing and in order to provide a conservative analysis, it is expected that new projects into the County provide sufficient revenue for which to support 100% of the costs (without expectation of additional reimbursement from State or Federal sources).

Utilizing project level data, we have generated a schedule that calculates the estimated costs to provide General Government services as a result of the proposed project. For example, in years 1-2, the project developer states that 156.25 FTE construction employees (78.125 per year) will be needed plus 6 operational employees, generating a total population demand for government services of 2,247 persons. This equates to a need for $2.24 million to be generated in County revenues for which to support this number of people.

© 2025 Development Management Group, Inc. All Rights Reserved

To adjust for inflation through the life of the project, the annual cost per person to provide General Government Services has been increased by 2.5467% per annum. This represents the average Consumer Price Index Adjustment for the last thirty (30) years (1995-2024) (Exhibit A).

In total, it is estimated it will cost the County of Imperial approximately $5.81 million over the thirty (30) year life of the project for which to provide General Government Services to the employees and their families/dependents. These calculations are found on Exhibit N.

Exhibit O provides a comparison on a year-by-year basis of the anticipated revenues to the County of Imperial as a result of the project and compares it to the anticipated expense to provide General Government Services to the employees and their families/dependents. The exhibit accounts for approximately 2.33% of sales tax that is anticipated to be received along with an allocation of (approximately) 27% of the overall property taxes paid being available to provide General Government Services. It should be noted that a majority of property taxes paid go to taxing agencies other than the County of Imperial.

Analysis of Exhibit O shows that hosting the Big Rock 2 facility in Imperial County, based on the information the developer has provided, will generate $65.10 million more than what it will cost the County to support the proposed project. The 90FI 8ME LLC (Big Rock 2) (Big Rock 2) project is estimated to produce $70.91 million in tax revenue to the County while costing the County $5.81 million to support. Based on the information the developer has provided and stated to be true, ***the project does create sufficient local tax revenue (in the form of net to the County of Imperial property tax and sales & use tax) to support the level of services anticipated to be needed by the persons constructing and operating the facility.***

© 2025 Development Management Group, Inc. All Rights Reserved

17. Statement Regarding Urban Decay (as a Result of Big Rock 2 Solar Energy Production Project)

The State CEQA Guidelines discuss and define the parameters for which the consideration of socioeconomic impacts should be included in an environmental evaluation. State CEQA Guidelines Section 15131 states that "economic or social information may be included in an EIR or may be presented in whatever form the agency desires." Section 15131(a) of the Guidelines states that "economic or social effects of a project shall not be treated as significant effects on the environment." An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus on the analysis shall be on the physical changes." State CEQA Guidelines Section 15131(b) also state that "economic or social effects of a project may be used to determine the significance of physical changes caused by the project." One example that has been used by others has been the physical division of a community if rail lines were installed thereby bisecting the community. It is possible that the impacts upon the community could be measured.

In recent years, California Courts have generally defined the term "urban decay" to mean the physical changes that a project's potential socioeconomic impacts could bring to other parts in a community. The case that brought the concept of urban decay to light is Bakersfield Citizens for Local Control v. City of Bakersfield (204) 124 Cal.App.4th 1184 in which the court set aside two EIR's for proposed Wal-Mart projects that would have been located less than five (5) miles from each other. This appears to be the first time the courts used the words "urban decay" rather than "blight". In essence, the courts ruled that the two (2) Wal-Mart projects could result in a chain reaction of store-closures and vacancies as a result of new retail growth that may or may not be supported by other changes in market conditions (i.e., the downtowns would become ghost towns because the Wal-Mart(s) moved the retail business away from the urban center).

© 2025 Development Management Group, Inc. All Rights Reserved

Based on this case and work that DMG, Inc. (and others have completed relative to "urban decay" analysis), it appears that the core question to ask (and answer) are the following:

Would the construction of the Big Rock 2 photovoltaic energy production facility at the proposed site result in substantial and adverse physical changes to surrounding areas (i.e., will the project cause such a shift in the marketplace that other portions of the community become visually blighted "urban decay"?

Commercial scale renewable energy projects (by their very nature) are built to generate/store power at a specific location to export it to another location for use by various consumers (residents and businesses). Each power generation facility is a stand-alone project that is built as a result of a contractual obligation (power purchase agreement) in which a power provider contracts with a power producer.

It can be argued that most (if not all) of the renewable power generation constructed in the Imperial Valley (Imperial County) over the last fifteen years has been a direct result of action by the State of California Legislature commonly known as Renewable Portfolio Standard (RPS). The RPS has essentially created a new market or industry for renewable energy in the State of California.
It would appear as though power production (overall) is increasing faster than the general population which would create a situation on the surface whereby urban decay could be occurring elsewhere as a result of these new projects. This urban decay would be as a result of the new power projects coming on-line replacing other power generation sources.

DMG, Inc. concludes that said power generation facilities that are being replaced as a result of legislative action in California whereby it has been determined that the greater public good is being served by utilizing a larger percentage of renewable power generation sources (solar, wind and geothermal) than more traditional sources (namely coal and nuclear). This means that ***even if*** another non-renewable energy power generation facility in the Imperial Valley were being "put out of business" and the property were to become "visually blighted" that the decision of the legislature (again in which they determined the greater good for California is reached by a greater percentage of energy coming from renewable sources), that urban decay would not have occurred.

© 2025 Development Management Group, Inc. All Rights Reserved

Further, the decision to close the San Onofre Nuclear Power Plant in North County San Diego means that a greater amount of overall power generation must be developed to replace the power that was being generated by that specific nuclear source.

We have further determined that the development of the Big Rock 2 solar energy production facility WILL ***NOT*** cause physical blight (urban decay) because the facility is a stand-alone and will have its own contracts based on power purchase demand, meaning that there is not another commercial scale energy facility that will cease to operate as a result of the 90FI 8ME LLC (Big Rock 2).

18. Recommendations Regarding Fiscal Impacts and Mitigation(s)

A. Development Management Group, Inc. recommends that the County of Imperial consider entering into a formal agreement that requires the project developer to provide certified (and independently audited) payroll records at the conclusion of the project to insure that craft hour estimates (provided by the developer) are accurate and to the extent that the actual craft hours exceeds the estimated craft hours that the County of Imperial is reimbursed for the cost of services needed to support the construction of the facility. If this is a mitigation measure that the County determines is viable, DMG, Inc. will assist the County in drafting the specific condition of approval appropriate to address this recommendation.

B. Development Management Group, Inc. recommends that the County of Imperial requires the applicant to have a qualified civil or traffic engineer calculate a) the average life of regional and surface streets from Interstate 8, Highway 111 and/or Highway 98 to the project site(s) b) the potential accelerated impact of street resurfacing based on the construction traffic (equipment and employees) over the first five (5) years of the project c) cost to resurface said streets d) calculate the proportional share for which 90FI 8ME LLC (Big Rock 2) should be responsible for as part of a direct mitigation payment to the County of Imperial prior to commencing construction. This recommendation is in the event that project construction will utilize surface streets outside of Interstate 8 and/or Highway 111.

© 2025 Development Management Group, Inc. All Rights Reserved

C. Development Management Group, Inc. recommends that the County of Imperial require Big Rock 2 to enter into a specific cost reimbursement agreement for direct police and fire protection services whereas for each call made to the project site for such public safety services that the project is responsible for reimbursing the County of Imperial. Such agreement can be created using a "Contract Cities Service Rate" for both police (Sheriff) and fire protection services. This will ensure that if there is a fire or similar significant incident that the residents of Imperial County are not subsidizing the facility.

D. Development Management Group, Inc. recommends that the County of Imperial require 90FI 8ME LLC (Big Rock 2) to enter into a specific cost reimbursement agreement for direct judicial and prosecutory services whereas if a person(s) is tried in a court of law for potential crimes at the project site, that the project itself is required to reimburse the County for such costs.

E. Development Management Group, Inc. recommends that the County of Imperial require 90FI 8ME LLC (Big Rock 2) or any other landowner associated with the project sites (parcels) to enter into a Development Agreement or similar document that calls for the remuneration for estimated deficits to the County of Imperial budget as a result of the 90FI 8ME LLC (Big Rock 2) project. Said Agreement may include such items as predetermination in regard to project valuation and property tax depreciation in order to protect County revenues. An example could include assessed land values shall increase by 2% per annum and non-solar improvements increase by 2% per annum irrespective of the Consumer Price Index or any other factor to ensure that the County of Imperial and other regional taxing authorities receive the scheduled revenue contained within this analysis. Such agreement should contain a provision which prohibits said property owner(s) from appealing their assessed value for the duration of the project operation (or 30 years) whichever comes first. Agreement shall be in full compliance with Proposition 13 in all other aspects. This is necessary to mitigate the fiscal costs to the County to host this facility. In short, DMG, Inc. does not subscribe to the aggressive depreciation schedules that the project developer is proposing relative to the non-solar improvements and believes that a Development Agreement requiring an income approach, or a guaranteed assessed valuation is needed.

© 2025 Development Management Group, Inc. All Rights Reserved

F. Development Management Group, Inc. recommends that the County of Imperial require the project developer through Conditions of Approval, Development Agreement or similar document to designate the project site as the "Point of Sale/Point of Use" in compliance with State Board of Equalization Regulation 1521 and file for a "Sales Tax Jobsite Sub-Permit for Construction Contractors" as outlined in California Department of Tax and Fee Administration (formerly the State Board of Equalization) Publication 9 (formerly SBOE Publication 28), Exhibit A.

G. Development Management Group, Inc. recommends that the County of Imperial enter into some type of agreement with the project proponent that recognizes the taxable material cost estimates contained in Exhibit B of this report and provides a formal guarantee (bond or otherwise) in order to provide greater certainty of these figures.

H. Development Management Group, Inc. recommends that the County of Imperial condition the project so that if solar energy generation equipment is replaced with new equipment after the original construction period (most likely for purposes of utilizing newer technology) that the project site again designated as the "Point of Sale/Point of Use" as to create an additional local tax funding source for the County of Imperial. This requirement is similar to Item E but extends said condition in such cases as a substantial portion of the solar equipment, including the battery components are "upgraded", "replaced" or "repowered".

I. Development Management Group, Inc. recommends that the County of Imperial enter into some type of agreement with the project proponent that denotes that their non-solar improvements estimates are both correct and valid and that they (the project proponent) will guarantee that some minimum percentage of their proposed non-solar improvements will actually be placed into service.

J. Development Management Group, Inc. recommends that the County of Imperial receive a formal statement from the project proponent regarding local job creation specific to the permanent jobs. This will enable policy makers to better compare the job losses from agriculture land conversion to incoming jobs.

© 2025 Development Management Group, Inc. All Rights Reserved

19. Certification

I certify that my engagement to prepare this report was not contingent upon developing or reporting predetermined results. The statements of fact contained herein and the substance of this report are based on public records, data provided by the 90FI 8ME LLC (Big Rock 2) (Big Rock 2) and other sources as described in the reference section of this report. This report reflects my personal, unbiased professional analyses, opinions and conclusions. If any of the underlying assumptions related to this report change after the date of this report (September 12, 2025), then the undersigned reserves the professional privilege to modify the contents and/or conclusions of this report.

Michael J. Bracken

Michael J. Bracken, Managing Partner
Development Management Group, Inc.
41-625 Eclectic Street, Suite D-2
Palm Desert, CA 92260
(760) 346-8820 / (760) 272-9136 (mobile)
Michael@dmgeconomics.com
www.dmgeconomics.com

© 2025 Development Management Group, Inc. All Rights Reserved

Exhibit A			
Consumer Price Index Calculation (30-Years) 1995-2024			
	#	Year	CPI %
	1	1995	2.8
	2	1996	3.0
	3	1997	2.3
	4	1998	1.6
	5	1999	2.2
	6	2000	3.4
	7	2001	2.8
	8	2002	1.6
	9	2003	2.3
	10	2004	2.7
	11	2005	3.4
	12	2006	3.2
	13	2007	2.8
	14	2008	3.8
	15	2009	-0.4
	16	2010	1.6
	17	2011	3.2
	18	2012	2.1
	19	2013	1.5
	20	2014	1.6
	21	2015	0.1
	22	2016	1.3
	23	2017	2.1
	24	2018	1.9
	25	2019	2.3
	26	2020	1.4
	27	2021	7.0
	28	2022	6.5
	29	2023	3.4
	30	2024	2.9
	Gross		76.4
	Average		2.5467
Average Increase in Consumer Prices = 2.5467% annually			

Exhibit B

Construction/Operational Economic Impacts: (Years 1-30)

90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Short Term Economic Impacts										
Construction Labor	$51,125,000	$51,125,000								
Economic Multiplier Rate	1.1331	1.1331								
Economic Impact of Labor (Annually)	$57,929,738	$57,929,738								
Construction Materials	$187,875,000	$187,875,000								
Local Purchase Materials (5%)	0.05	0.05								
Projected Purchase of Materials Locally	$9,393,750	$9,393,750								
Economic Multiplier Rate	1.1517	1.1517								
Local Impact (Annually)	$10,818,782	$10,818,782								
Long Term Economic Impacts										
Operational Materials (Ongoing)	$2,000,000	$2,050,734	$2,102,755	$2,156,096	$2,210,789	$2,266,870	$2,324,374	$2,383,336	$2,443,795	$2,505,786
Battery Material Replacement					$31,405,455					$35,613,409
Local Material Purchase (5%)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Projected Local Purchases of Materials	$100,000	$102,537	$105,138	$107,805	$1,680,812	$113,344	$116,219	$119,167	$122,190	$1,905,960
Economic Multiplier Rate	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517
Local Impact of Material Purchases	$115,170	$118,092	$121,087	$124,159	$1,935,791	$130,538	$133,849	$137,244	$140,726	$2,195,094
Operational Labor	$877,500	$921,375	$967,444	$1,015,816	$1,066,607	$1,119,937	$1,175,934	$1,234,731	$1,296,467	$1,361,291
Economic Multiplier Rate	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944
Economic Impact of Labor (Annually)	$1,048,086	$1,100,490	$1,155,515	$1,213,291	$1,273,955	$1,337,653	$1,404,535	$1,474,762	$1,548,500	$1,625,925
Aggregate of Impacts (Annual)	$69,911,775	$69,967,101	$1,276,602	$1,337,449	$3,209,747	$1,468,191	$1,538,385	$1,612,007	$1,689,226	$3,821,019
Cumulative of Impacts (Cumulative)	$69,911,775	$139,878,877	$141,155,479	$142,492,928	$145,702,674	$147,170,865	$148,709,249	$150,321,256	$152,010,482	$155,831,502
	Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
Operational Materials (Ongoing)	$2,637,432	$2,704,336	$2,772,937	$2,843,278	$2,915,403	$2,989,358	$3,065,189	$3,142,944	$3,222,671	$3,304,420
Battery Material Replacement					$40,385,177					$45,796,304
Local Material Purchase (5%)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Projected Local Purchases of Materials	$131,872	$135,217	$138,647	$142,164	$2,165,029	$149,468	$153,259	$157,147	$161,134	$2,455,036
Economic Multiplier Rate	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517
Local Impact of Material Purchases	$151,877	$155,729	$159,680	$163,730	$2,493,464	$172,142	$176,509	$180,986	$185,578	$2,827,465
Operational Labor	$1,429,355	$1,500,823	$1,575,864	$1,654,657	$1,737,390	$1,824,259	$1,915,472	$2,011,246	$2,111,808	$2,217,399
Economic Multiplier Rate	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944
Economic Impact of Labor (Annually)	$1,707,222	$1,792,583	$1,882,212	$1,976,322	$2,075,139	$2,178,896	$2,287,840	$2,402,232	$2,522,344	$2,648,461
Aggregate of Impacts (Annual)	$1,859,098	$1,948,312	$2,041,891	$2,140,053	$4,568,602	$2,351,038	$2,464,349	$2,583,219	$2,707,921	$5,475,926
Cumulative of Impacts (Cumulative)	$157,690,600	$159,638,912	$161,680,803	$163,820,856	$168,389,458	$170,740,496	$173,204,845	$175,788,064	$178,495,985	$183,971,912
	Year 21	**Year 22**	**Year 23**	**Year 24**	**Year 25**	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**
Operational Materials (Ongoing)	$3,388,244	$3,474,193	$3,562,323	$3,652,689	$3,745,346	$3,840,354	$3,937,773	$4,037,662	$4,140,086	$4,245,107
Battery Material Replacement					$51,932,458					$58,890,782
Local Material Purchase (5%)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Projected Local Purchases of Materials	$169,412	$173,710	$178,116	$182,634	$2,783,890	$192,018	$196,889	$201,883	$207,004	$3,156,794
Economic Multiplier Rate	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517	1.1517
Local Impact of Material Purchases	$195,112	$200,061	$205,136	$210,340	$3,206,206	$221,147	$226,757	$232,509	$238,407	$3,635,680
Operational Labor	$2,328,269	$2,444,682	$2,566,916	$2,695,262	$2,830,025	$2,971,526	$3,120,103	$3,276,108	$3,439,913	$3,611,909
Economic Multiplier Rate	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944
Economic Impact of Labor (Annually)	$2,780,884	$2,919,928	$3,065,925	$3,219,221	$3,380,182	$3,549,191	$3,726,651	$3,912,983	$4,108,632	$4,314,064
Aggregate of Impacts (Annual)	$2,975,996	$3,119,990	$3,271,061	$3,429,561	$6,586,388	$3,770,338	$3,953,407	$4,145,492	$4,347,039	$7,949,744
Cumulative of Impacts (Cumulative)	$186,947,908	$190,067,898	$193,338,959	$196,768,520	$203,354,908	$207,125,246	$211,078,654	$215,224,146	$219,571,185	**$227,520,930**
Notes:										
1. Construction based on 500MW Solar /500MW Battery in Years 1-2 and Substation/Gen-Tie/Switchyard										
2. Annual Material Purchase include replacement reserve for replacement of 10% of batteries every 5 years										
3. Operational Labor full burdened (includes 30% benefits/taxes)										

Exhibit C-1

Governmental Revenues: (Years 1-30)

90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Construction Phase										
2	Construction Materials (Total Amount)	$187,875,000	$187,875,000								
3	Base 1% Local Sales Tax	$1,878,750	$1,878,750								
4	Public Health Allocation of Sales Tax .50%	$939,375	$939,375								
5	Public Safety Allocation of Sales Tax .50%	$939,375	$939,375								
6	Transportation-Regional Measure D Sales Tax (.50%) 33% to County	$309,994	$309,994								
7	Total Sales Taxes Collected Benefit of County of Imperial	$4,067,494	$4,067,494								
8	Property & Sales Taxes (During Construction and Operation)										
9	Projected Assessed Valuation (Land)	$24,246,900	$24,731,838	$25,226,475	$25,731,004	$26,245,624	$26,770,537	$27,305,948	$27,852,067	$28,409,108	$28,977,290
10	Substation/Gen-Tie/Switchyard	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000
11	Depreciation (C-20)	0.96	1.03	1.05	1.01	0.98	0.95	0.91	0.85	0.80	0.74
12	Assessed Valuation Substation	$24,000,000	$25,750,000	$26,250,000	$25,250,000	$24,500,000	$23,750,000	$22,750,000	$21,250,000	$20,000,000	$18,500,000
13	Battery Value Original Construction	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000
14	Battery Assessed Valuation (25% of Valuation)	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000
15	Depreciation (C-20)	0.96	1.03	1.05	1.01	0.98	0.95	0.91	0.85	0.8	0.74
16	Assessed Valuation of Batteries at Construction	$68,160,000	$73,130,000	$74,550,000	$71,710,000	$69,580,000	$67,450,000	$64,610,000	$60,350,000	$56,800,000	$52,540,000
17	Projected Value Battery Replacement Year 5					$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455
18	Battery Assessed Valuation (25% of Valuation)					$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364
19	Depreciation (C-20)					0.96	1.03	1.05	1.01	0.98	0.95
20	Assessed Valuation of Batteries (Replacement Year 5)					$7,537,309	$8,086,905	$8,243,932	$7,929,877	$7,694,336	$7,458,796
21	Projected Assessed Valuation Battery Replacement Year 10										$35,613,409
22	Battery Assessed Valuation (25% of Valuation)										$8,903,352
23	Depreciation (C-20)										0.96
24	Assessed Valuation of Batteries (Replacement Year 10)										$8,547,218
25	Total Assessed Valuation of Facility for Property Tax Purposes	$116,406,900	$123,611,838	$126,026,475	$122,691,004	$127,862,934	$126,057,441	$122,909,880	$117,381,944	$112,903,444	$116,023,304
26	Base 1% Property Tax Amount	$1,164,069	$1,236,118	$1,260,265	$1,226,910	$1,278,629	$1,260,574	$1,229,099	$1,173,819	$1,129,034	$1,160,233
27	Sales & Use Tax (Battery Repower Years 5 & 10)					$658,572					$746,813
	Years 1-10 Sales & Use Tax (Construction and Repower)	***$9,540,373***									
	Years 1-10 Property Tax (Gross 1% Amount)	***$12,118,752***									

Exhibit C-2

Governmental Revenues: (Years 1-30)

90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

		Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
28	Projected Assessed Valuation (Land)	$29,556,836	$30,147,973	$30,750,932	$31,365,951	$31,993,270	$32,633,135	$33,285,798	$33,951,514	$34,630,544	$35,323,155
29	Substation/Gen-Tie/Switchyard	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000
30	Depreciation (C-20)	0.70	0.65	0.62	0.56	0.51	0.47	0.44	0.41	0.37	0.34
31	Assessed Valuation Substation	$17,150,000	$17,150,000	$15,925,000	$15,190,000	$13,720,000	$12,495,000	$11,515,000	$10,780,000	$10,045,000	$9,065,000
32	Battery Valuation Original Construction	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000
33	Battery Assessed Valuation (25% of Valuation)	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000
34	Depreciation (C-20)	0.70	0.65	0.62	0.56	0.51	0.47	0.44	0.41	0.37	0.34
35	Assessed Valuation of Batteries	$49,700,000	$46,150,000	$44,020,000	$39,760,000	$36,210,000	$33,370,000	$31,240,000	$29,110,000	$26,270,000	$24,140,000
36	Projected Value Battery Replacement Year 5	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455
37	Battery Assessed Valuation (25% of Valuation)	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364
38	Depreciation (C-20)	0.91	0.85	0.80	0.74	0.70	0.65	0.62	0.56	0.51	0.47
39	Assessed Valuation of Batteries (Replacement Year 5)	$7,144,741	$6,673,659	$6,281,091	$5,810,009	$5,495,955	$5,103,386	$4,867,846	$4,396,764	$4,004,196	$3,690,141
40	Projected Value Battery Replacement Year 10	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409
41	Battery Assessed Valuation (25% of Valuation)	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352
42	Depreciation (C-20)	1.03	1.05	1.01	0.98	0.95	0.91	0.85	0.80	0.74	0.70
43	Assessed Valuation of Batteries (Replacement Year 10)	$9,170,453	$9,348,520	$8,992,386	$8,725,285	$8,458,185	$8,102,051	$7,567,849	$7,122,682	$6,588,481	$6,232,347
44	Projected Value Battery Replacement Year 15					$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177
45	Battery Assessed Valuation (25% of Valuation)					$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294
46	Depreciation (C-20)					0.96	1.03	1.05	1.01	0.98	0.85
47	Assessed Valuation of Batteries (Replacement Year 15)					$9,692,442	$10,399,183	$10,601,109	$10,197,257	$9,894,368	$8,581,850
48	Projected Value Battery Replacement Year 20										$45,796,304
49	Battery Assessed Valuation (25% of Valuation)										$11,449,076
50	Depreciation (C-20)										0.96
51	Assessed Valuation of Batteries (Replacement Year 20)										$10,991,113
52	Total Assessed Valuation of Facility for Property Tax Purposes	$112,722,030	$109,470,152	$105,969,409	$100,851,245	$105,569,851	$102,102,755	$99,077,602	$95,558,216	$91,432,588	$98,023,605
53	Base 1% Property Tax Amount	$1,127,220	$1,094,702	$1,059,694	$1,008,512	$1,055,699	$1,021,028	$990,776	$955,582	$914,326	$980,236
54	Sales & Use Tax (Battery Repower Years 15 & 20)					$846,877					$960,348
	Years 11-20 Sales & Use Tax (Construction and Repower)	***$1,807,226***									
	Years 11-20 Property Tax (Gross 1% Amount)	***$10,207,775***									

Exhibit C-3

Governmental Revenues: (Years 1-30)

90FI 8ME, LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

		Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
55	Projected Assessed Valuation (Land)	$36,029,618	$36,750,210	$37,485,215	$38,234,919	$38,999,617	$39,779,610	$40,575,202	$41,386,706	$42,214,440	$43,058,729
56	Substation/Gen-Tie/Switchyard	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$25,000,000
57	Depreciation (C-20)	0.29	0.25	0.22	0.21	0.17	0.15	0.15	0.15	0.15	0.15
58	Assessed Valuation Substation	$7,250,000	$6,250,000	$5,500,000	$5,250,000	$4,250,000	$3,750,000	$3,750,000	$3,750,000	$3,750,000	$3,750,000
59	Battery Valuation Original Construction	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000	$284,000,000
60	Battery Assessed Valuation (25% of Valuation)	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000	$71,000,000
61	Depreciation (C-20)	0.29	0.25	0.22	0.21	0.17	0.15	0.15	0.15	0.15	0.15
62	Assessed Valuation of Batteries at Construction	$20,590,000	$17,750,000	$15,620,000	$14,910,000	$12,070,000	$10,650,000	$10,650,000	$10,650,000	$10,650,000	$10,650,000
63	Projected Value Battery Replacement Year 5	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455	$31,405,455
64	Battery Assessed Valuation (25% of Valuation)	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364	$7,851,364
65	Depreciation (C-20)	0.44	0.41	0.37	0.34	0.29	0.25	0.22	0.21	0.17	0.15
66	Assessed Valuation of Batteries (Replacement Year 5)	$3,454,600	$3,219,059	$2,905,005	$2,669,464	$2,276,895	$1,962,841	$1,727,300	$1,648,786	$1,334,732	$1,177,705
67	Projected Value Battery Replacement Year 10	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409	$35,613,409
68	Battery Assessed Valuation (25% of Valuation)	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352	$8,903,352
69	Depreciation (C-20)	0.65	0.62	0.56	0.51	0.47	0.44	0.41	0.37	0.34	0.29
70	Assessed Valuation of Batteries (Replacement Year 10)	$5,787,179	$5,520,078	$4,985,877	$4,540,710	$4,184,576	$3,917,475	$3,650,374	$3,294,240	$3,027,140	$2,581,972
71	Projected Value Battery Replacement Year 15	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177	$40,385,177
72	Battery Assessed Valuation (25% of Valuation)	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294	$10,096,294
73	Depreciation (C-20)	0.80	0.74	0.70	0.65	0.62	0.56	0.51	0.47	0.44	0.41
74	Assessed Valuation of Batteries (Replacement Year 15)	$8,077,035	$7,471,258	$7,067,406	$6,562,591	$6,259,702	$5,653,925	$5,149,110	$4,745,258	$4,442,369	$4,139,481
75	Projected Value Battery Replacement Year 20	$45,796,304	$45,796,304	$45,796,304	$45,796,304	$45,796,304	$45,796,304	$45,796,304	$45,796,304	$45,796,304	$45,796,304
76	Battery Assessed Valuation (25% of Valuation)	$11,449,076	$11,449,076	$11,449,076	$11,449,076	$11,449,076	$11,449,076	$11,449,076	$11,449,076	$11,449,076	$11,449,076
77	Depreciation (C-20)	1.03	1.05	1.01	0.98	0.95	0.91	0.85	0.80	0.74	0.70
78	Assessed Valuation of Batteries (Replacement Year 20)	$11,792,548	$12,021,530	$11,563,567	$11,220,094	$10,876,622	$10,418,659	$9,731,715	$9,159,261	$8,472,316	$8,014,353
79	Projected Value Battery Replacement Year 25					$51,932,458	$51,932,458	$51,932,458	$51,932,458	$51,932,458	$51,932,458
80	Battery Assessed Valuation (25% of Valuation)					$12,983,115	$12,983,115	$12,983,115	$12,983,115	$12,983,115	$12,983,115
81	Depreciation (C-20)					0.96	1.03	1.05	1.01	0.98	0.95
82	Assessed Valuation of Batteries (Replacement Year 25)					$12,463,790	$13,372,608	$13,632,270	$13,112,946	$12,723,452	$12,333,959
83	Projected Value Battery Replacement Year 30										$58,890,782
84	Battery Assessed Valuation (25% of Valuation)										$14,722,696
85	Depreciation (C-20)										0.96
86	Assessed Valuation of Batteries (Replacement Year 30)										$14,133,788
87	Total Assessed Valuation of Facility for Property Tax Purposes	$92,980,981	$88,982,136	$85,127,069	$83,387,778	$91,381,203	$89,505,117	$88,865,971	$87,747,197	$86,614,450	$99,839,986
88	Base 1% Property Tax Amount	$929,810	$889,821	$851,271	$833,878	$913,812	$895,051	$888,660	$877,472	$866,144	$998,400
89	Sales & Use Tax (Battery Repower Years 25 & 30)					$1,089,024					$1,234,940
	Years 21-30 Sales & Use Tax (Construction and Repower)	***$2,323,963***									
	Years 21-30 Property Tax (Gross 1% Amount)	***$8,944,319***									
	Years 11-20 Sales & Use Tax (Construction and Repower)	***$1,807,226***									
	Years 11-20 Property Tax (Gross 1% Amount)	***$10,207,775***									
	Years 1-10 Sales & Use Tax (Construction and Repower)	***$9,540,373***									
	Years 1-10 Property Tax (Gross 1% Amount)	***$12,188,752***									
90	**Total Projected Sales Taxes to County of Imperial**	**$13,671,562**									
91	**Total Projected Gross Property Taxes to County of Imperial***	**$31,340,846**									
92	**Total Gross Income to the County of Imperial**	**$45,012,408**									

Notes:

1. 500 MW Solar & 500 MW Battery Storage
2. Land Assessed Value scheduled to increase in value 2% per year
3. Substation/Gen-Tie/Switchyard uses C-20 Schedule (Start Value $25,000,000)
4. Sales Tax from Battery Repower (Years 5, 10, 15, 20, 25 & 30)
5. 24 Total Parcels, 89.89% of Land in TRA 69-007, 10.11% of Land in TRA 85-001
6.* Projected Gross Property Taxes to County is NOT Net Amount to County

Exhibit D

County of Imperial Taxing Organization Benefit Chart

90FI 8ME LLC (Big Rock 2): Imperial County, CA (Solar/Battery Project)

Taxing Entity	Tax Percentage	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	*Total (Years 1-10)*
Total Assessed Valuation (Exhibit C)		$116,406,900	$123,611,838	$126,026,475	$122,691,004	$127,862,934	$126,057,441	$122,909,880	$117,381,944	$112,903,444	$116,023,304	
Gross Base (1%) Property Tax		$1,164,069	$1,236,118	$1,260,265	$1,226,910	$1,278,629	$1,260,574	$1,229,099	$1,173,819	$1,129,034	$1,160,233	*$12,118,752*
County of Imperial-General Fund	0.36617832	$426,257	$452,640	$461,482	$449,268	$468,206	$461,595	$450,069	$429,827	$413,428	$424,852	$4,437,624
County General Fund- Net of ERAF	0.19773629	$230,179	$244,425	$249,200	$242,605	$252,831	$249,261	$243,037	$232,107	$223,251	$229,420	$2,396,317
County Library	0.01382476	$16,093	$17,089	$17,423	$16,962	$17,677	$17,427	$16,992	$16,228	$15,609	$16,040	$167,539
Fire Protection	0.05620918	$65,431	$69,481	$70,838	$68,964	$71,871	$70,856	$69,087	$65,979	$63,462	$65,216	$681,185
Total County Property Tax Income (Net)		$311,703	$330,996	$337,461	$328,530	$342,379	$337,544	$329,116	$314,314	$302,322	$310,676	$3,245,041
Taxing Entity	**Tax Percentage**	**Year 11**	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**	***Total (Years 11-20)***
Total Assessed Valuation (Exhibit C)		$112,722,030	$109,470,152	$105,969,409	$100,851,245	$105,569,851	$102,102,755	$99,077,602	$95,558,216	$91,432,588	$98,023,605	
Gross Base (1%) Property Tax		$1,127,220	$1,094,702	$1,059,694	$1,008,512	$1,055,699	$1,021,028	$990,776	$955,582	$914,326	$980,236	*$10,207,775*
County of Imperial-General Fund	0.36617832	$412,764	$400,856	$388,037	$369,295	$386,574	$373,878	$362,801	$349,913	$334,806	$358,941	$3,737,866
County General Fund- Net of ERAF	0.19773629	$222,892	$216,462	$209,540	$199,420	$208,750	$201,894	$195,912	$188,953	$180,795	$193,828	$2,018,447
County Library	0.01382476	$15,584	$15,134	$14,650	$13,942	$14,595	$14,115	$13,697	$13,211	$12,640	$13,552	$141,120
Fire Protection	0.05620918	$63,360	$61,532	$59,565	$56,688	$59,340	$57,391	$55,691	$53,712	$51,394	$55,098	$573,771
Total County Property Tax Income (Net)		$301,836	$293,128	$283,755	$270,050	$282,685	$273,401	$265,300	$255,876	$244,829	$262,478	$2,733,338
Taxing Entity	**Tax Percentage**	**Year 21**	**Year 22**	**Year 23**	**Year 24**	**Year 25**	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**	***Total (Years 21-30)***
Total Assessed Valuation (Exhibit C)		$92,980,981	$88,982,136	$85,127,069	$83,387,778	$91,381,203	$89,505,117	$88,865,971	$87,747,197	$86,614,450	$99,839,986	
Gross Base (1%) Property Tax		$929,810	$889,821	$851,271	$833,878	$913,812	$895,051	$888,660	$877,472	$866,144	$998,400	$8,944,319
County of Imperial-General Fund	0.36617832	$340,476	$325,833	$311,717	$305,348	$334,618	$327,748	$325,408	$321,311	$317,163	$365,592	$3,275,216
County General Fund- Net of ERAF	0.19773629	$183,857	$175,950	$168,327	$164,888	$180,694	$176,984	$175,720	$173,508	$171,268	$197,420	$1,768,616
County Library	0.01382476	$12,854	$12,302	$11,769	$11,528	$12,633	$12,374	$12,286	$12,131	$11,974	$13,803	$123,653
Fire Protection	0.05620918	$52,264	$50,016	$47,849	$46,872	$51,365	$50,310	$49,951	$49,322	$48,685	$56,119	$502,753
Total County Property Tax Income (Net)		$248,975	$238,268	$227,945	$223,288	$244,692	$239,668	$237,957	$234,961	$231,928	$267,342	$2,395,022
Total Property Taxes (1% Base)	**$31,270,845**											
Total Net Property Tax to County	**$8,373,401**											
Percentage of Gross to Net Property Taxes	**26.78%**											

Notes:

1. Allocations for TRA's 69-007 & 85-001 (Weighted Allocation based on Gross Acreage)
2. ERAF reduces net to County (General Fund) by about 46% (County nets 54%)
3. Land is combination of leased and purchased, Depreciation based on Developer information (C-20 Substation/Gen-Tie/Switchyard and Battery, Inclusive of 75% Exemption)
4. Gross Property Taxes to County are inclusive of all 1% Base Level Property Taxes
5. Net to County is post ERAF plus County Library and Fire Share

TRA Allocation		General Fund	Library	Fire
69-007	0.8989	0.37184102	0.01403855	0.05707841
85-001	0.1011	0.31583014	0.01192391	0.04848065
Weighted Percentage		0.36617832	0.01382476	0.05620918

Exhibit E

County of Imperial Taxing Organization Benefit Chart

Consolidated Property Tax Revenues (by allocation) Years 1-30

90FI 8ME LLC (Big Rock 2): Imperial County, CA (Solar/Battery Project)

	Taxing Entity	Est. Total Property Tax Generation	Approximate % to Taxing Entity	Total Property Taxes
1	County of Imperial-General Fund (Gross)	$31,270,845	0.36617832	$11,450,705
2	County of Imperial-General Fund (Net)*	$31,270,845	0.19773629	$6,183,381
3	County Library*	$31,270,845	0.01382476	$432,312
4	Fire Protection*	$31,270,845	0.05620918	$1,757,709
5	Total Net Property Taxes to County			***$8,373,401***

Notes:

1. County General Fund Amounts are Reduced by about 46% to Account for ERAF (Education Revenue Augmentation Fund)
2. Total Property Tax Generation taken from Exhibit C-1, C-2 & C-3
3. Tax Rate Area Schedules 69-007 & 85-001 (Weighted Allocation based on Gross Acreage)

* Denotes those items that are part of funding available to pay for General County Services

Exhibit F

Local Taxing Jurisdiction Tax Allocation Estimate

90FI 8ME LLC (Big Rock 2): Imperial County, CA

	TRA 69-007	Percentage	Amount		TRA 85-001	Percentage	Amount
	Allocated Base Tax Amount (Exhibit D)	100%	$28,109,363		**Allocated Base Tax Amount (Exhibit D)**	100%	$3,161,482
1	County General Fund*	0.37184102	$10,452,214	1	County General Fund*	0.31583014	$998,491
2	County Library	0.01403855	$394,615	2	County Library	0.01192391	$37,697
3	County Fire Protection	0.05707841	$1,604,438	3	County Fire Protection	0.04848065	$153,271
4	Central Valley Cemetary	0.02642244	$742,718	4	Central Valley Cemetery	0.02244238	$70,951
5	Imperial Community College	0.09203595	$2,587,072	5	Central Union	0.16408307	$518,746
6	Imperial Unified	0.41642335	$11,705,395	6	Imperial Community College	0.07817246	$247,141
7	Childrens Inst Tuition	0.00128791	$36,202	7	Seeley Union	0.34024509	$1,075,679
8	Physically Handicalpped	0.00681693	$191,620	8	Children's Institution Tuition	0.00109392	$3,458
9	Trainable SMR	0.00251166	$70,601	9	Physically Handicapped	0.0057901	$18,305
10	Juvenile Hall	0.00042532	$11,955	10	Trainable Severely Mentally Retarded	0.00213333	$6,744
11	Aurally Handicapped	0.00331131	$93,079	11	Juvenile Hall	0.00036125	$1,142
12	Superintendent of Schools	0.00495214	$139,201	12	Aurally Handicapped	0.00281255	$8,892
13	Development Center	0.00285501	$80,253	13	County Superintendent of Schools	0.0042062	$13,298
				14	Development Center	0.00242495	$7,666
	Add-On Allocations (Special Taxes Voter Approved) Same Figures Apply to Both TRA's (Percentage Shown in Calculation of Assessed Valuation)						
14	Imperial Community College Bond 2004	0.067	$1,883,327	15	CUHSD 1993 Bond & Int	0.0023	$7,271
15	Imperial USD 2016 REF BD	0.0267	$750,520	16	CUHSD 2016 Bond & Int	0.0055	$17,388
16	Imperial USD 2016 SER A	0.0291	$817,982	17	CUHSD 2016 REF Bond & Int	0.001	$3,161
17	Imperial USD Elec 2016 SER B	0.0133	$373,855	18	CUHSD Series 2019 Bond	0.001	$3,161
18	Imperial USD Elec 2016 SER C	0.0022	$61,841	19	Seeley Union ESD 2016 SER A	0.1112	$351,557
19	Imperial USD Elec 2016 SER D	0.002	$56,219	20	Imperial Community College Bond 2004	0.067	$211,819
20	Total of Add-On Taxes		$3,943,744	21	Total of Add-On Taxes		$594,359
	Projected Total Benefit to Local Taxing Jurisdictions (Combined TRA and Add-On Allocations)						
1	County General Fund*		$11,450,705				
2	County Library		$432,312				
3	County Fire Protection		$1,757,708				
4	Central Valley Cemetary		$813,669				
5	Imperial Community College		$4,929,359				
6	Imperial Unified		$13,765,811				
7	Childrens Inst Tuition		$39,661				
8	Physically Handicalpped		$209,925				
9	Trainable SMR		$77,346				
10	Juvenile Hall		$13,098				
11	Aurally Handicapped		$101,971				
12	Superintendent of Schools		$152,499				
13	Development Center		$87,919				
14	Seeley Union		$1,427,236				
15	Central Union High School District		$549,728				
	Total Estimated Property Taxes (Including Add-On's)		***$35,808,947***				
	Notes:						
1	Gross Base Level (1%) Property Tax Amount:	$31,270,845					
2	Project is deemed to be 89.89% in TRA 69-007 & 10.11% in TRA 85-001						
3	Shown in full 30 years, though tax issue/bonds likely expire prior to end of 30-year life of project						

Exhibit G

Projected Employment Impacts of Subject Site

90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Construction Craft Hours (Annual)*	162500	162500								
2	Number of FTE (1-Year) Labor Staff (2080 hours)*	78.13	78.13								
3	Average Craft Pay Per Hour	$54.20	$54.20								
4	Average Craft Fully Burdened Payroll Per Hour	$71.55	$71.55								
5	Annualized Wage/Benefit Per Construction Emp.	$148,824	$148,824								
6	Total Construction Wages/Benefits*	$11,626,875	$11,626,875								
7	Number of Projected Operational Employees	6	6	6	6	6	6	6	6	6	6
8	Operational Wage (inclusive of 30% benefits)	$877,500	$921,375	$967,444	$1,015,816	$1,066,607	$1,119,937	$1,175,934	$1,234,731	$1,296,467	$1,361,291
9	Total All Wages/Benefits	$12,504,375	$12,548,250	$967,444	$1,015,816	$1,066,607	$1,119,937	$1,175,934	$1,234,731	$1,296,467	$1,361,291
10	RIMS II Payroll Multiplier Construction Jobs	1.1331	1.1331	1.1331	1.1331	1.1331	1.1331	1.1331	1.1331	1.1331	1.1331
11	RIMS II Payroll Multiplier Utility Operation Jobs	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944
12	RIMS II Jobs Multiplier Construction Jobs	1.1859	1.1859	1.1859	1.1859	1.1859	1.1859	1.1859	1.1859	1.1859	1.1859
13	RIMS II Jobs Multiplier Utility Operation Jobs	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498
14	Projected Payroll in Region (Construction) w/Multiplier	$13,174,412	$13,174,412	$0	$0	$0	$0	$0	$0	$0	$0
15	Projected Payroll in Region (Utility Operation) w/Multiplier	$1,048,086	$1,100,490	$1,155,515	$1,213,291	$1,273,955	$1,337,653	$1,404,535	$1,474,762	$1,548,500	$1,625,925
16	Projected total Jobs (Construction) with Multiplier	92.65	92.65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
17	Projected total Jobs (Utility Operation) with Multiplier	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70
18	Total Projected Payroll (Complete Project) w/Multipliers	$14,222,498	$14,274,902	$1,155,515	$1,213,291	$1,273,955	$1,337,653	$1,404,535	$1,474,762	$1,548,500	$1,625,925
19	Total Projected Jobs (Complete Project) w/Multipliers	101.35	101.35	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70
		Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
20	Number of Projected Operational Employees	6	6	6	6	6	6	6	6	6	6
21	Operational Wage (inclusive of 30% benefits)	$1,429,355	$1,500,823	$1,575,864	$1,654,657	$1,737,390	$1,824,259	$1,915,472	$2,011,246	$2,111,808	$2,217,399
22	RIMS II Payroll Multiplier Utility Operation Jobs	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944
23	RIMS II Jobs Multiplier Utility Operation Jobs	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498
24	Projected Payroll in Region (Utility Operation) w/Multiplier	$1,707,222	$1,792,583	$1,882,212	$1,976,322	$2,075,139	$2,178,896	$2,287,840	$2,402,232	$2,522,344	$2,648,461
25	Projected total Jobs (Utility Operation) with Multiplier	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70
26	Total Projected Payroll (Complete Project) w/Multipliers	$1,707,222	$1,792,583	$1,882,212	$1,976,322	$2,075,139	$2,178,896	$2,287,840	$2,402,232	$2,522,344	$2,648,461
27	Total Projected Jobs (Complete Project) w/Multipliers	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70
		Year 21	**Year 22**	**Year 23**	**Year 24**	**Year 25**	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**
28	Number of Projected Operational Employees	6	6	6	6	6	6	6	6	6	6
29	Operational Wage (inclusive of 30% benefits)	$2,328,269	$2,444,682	$2,566,916	$2,695,262	$2,830,025	$2,971,526	$3,120,103	$3,276,108	$3,439,913	$3,611,909
30	RIMS II Payroll Multiplier Utility Operation Jobs	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944	1.1944
31	RIMS II Jobs Multiplier Utility Operation Jobs	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498	1.4498
32	Projected Payroll in Region (Utility Operation) w/Multiplier	$2,780,884	$2,919,928	$3,065,925	$3,219,221	$3,380,182	$3,549,191	$3,726,651	$3,912,983	$4,108,632	$4,314,064
33	Projected total Jobs (Utility Operation) with Multiplier	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70
34	Total Projected Payroll (Complete Project) w/Multipliers	$2,780,884	$2,919,928	$3,065,925	$3,219,221	$3,380,182	$3,549,191	$3,726,651	$3,912,983	$4,108,632	$4,314,064
35	Total Projected Jobs (Complete Project) w/Multipliers	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70
36	**Total Project Impact of Wages (W/Construction)**	**$95,982,450**									
37	**Total Projected Impact of Wages (W/O Construction)**	**$69,633,626**									

Notes:

1. Market Wage is based on Electrician Rate (Projects $500k+) IMP2022-2 hourly wage of $54.20 and fully burdened of $71.55 (not inclusive of weekends/overtime)
2. Market Wage is estimated as average of non-tunnel electrical positions (Imperial County)
3. Operational Wages based budget figures provided by Big Rock 2
4. Wages scheduled to increase by CPI of 5.0% per annum (fully burdened)

Exhibit H

Economic Value to County of Imperial Agriculture of Subject Site

91FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

#	Crop	2020			2021			2022			2023			2024		
		Acres	Price	Value	Acres	Price	Value	Acres	Price	Value	Acres	Price	Value	Acres	Price	Value
1	Bermuda Grass	309.71	$1,184.17	$366,749	220.71	$1,326.30	$292,728	91.71	$1,584.91	$145,352	91.71	$1,074.02	$98,498	91.71	$1,292.35	$118,521
2	Alfalfa	325.82	$1,392.31	$453,642	454.82	$1,666.95	$758,162	376.15	$1,827.86	$687,550	347.39	$1,266.74	$440,053	672.26	$1,538.47	$1,034,248
3	Forage Hay*	518.37	$1,288.24	$667,785	450.55	$1,496.63	$674,307	518.37	$1,706.39	$884,541	548.55	$1,170.38	$642,012	702.18	$1,415.41	$993,873
4	Broccoli	243.86	$7,330.90	$1,787,713	217.94	$10,501.79	$2,288,760	292.55	$7,760.79	$2,270,419	167	$9,572.82	$1,598,661	73.04	$8,791.58	$642,137
5	Spinach	31.03	$6,631.71	$205,782	144.64	$8,097.91	$1,171,282	79.72	$11,932.62	$951,268	64.21	$11,289.61	$724,906	0	$0.00	$0
6	Onion	146.08	$4,767.31	$696,409	197.9	$4,221.42	$835,419	160.4	$4,575.61	$733,928	48.69	$5,837.27	$284,217	0	$0.00	$0
7	Sudan Grass	0	$0.00	$0	0	$0.00	$0	38.82	$1,283.89	$49,841	155.27	$685.03	$106,365	0	$0.00	$0
8	Alfalfa Seed	0	$0.00	$0	0	$0.00	$0	38.82	$3,288.56	$127,662	129	$2,570.91	$331,647	163.06	$2,929.74	$477,723
9	Oats**	0	$0.00	$0	0	$0.00	$0	51.22	$2,057.91	$105,406	51.22	$1,223.09	$62,647	0	$0.00	$0
10	Wheat	160.4	$634.88	$101,835	0	$0.00	$0	38.82	$1,359.03	$52,758	0	$0.00	$0	0	$0.00	$0
11	Cauliflower	0	$0.00	$0	0	$0.00	$0	48.69	$10,563.22	$514,323	48.69	$11,735.66	$571,409	73.04	$11,149.44	$814,355
12	Dill***	0	$0.00	$0	0	$0.00	$0	0	$0.00	$0	83.54	$8,551.51	$714,393	0	$8,551.51	$0
13	Cabbage***	0	$0.00	$0	48.69	$7,769.34	$378,289	0	$0.00	$0	0	$0.00	$0	0	$0.00	$0
14	***Total Active Agriculture***	***1735.27***	***N/A***	***$4,279,915***	***1735.25***	***N/A***	***$6,398,947***	***1735.27***	***N/A***	***$6,523,048***	***1735.27***	***N/A***	***$5,574,808***	***1775.29***	***N/A***	***$4,080,857***
	Five Year Average Output			***$5,371,515***												
	Total Acres (1):		1841.28													
	Average Acres Actively Farmed:		1743.27													

2024 Based on Average of Crop Prices for Years 2020-2023 whereby land used for specific crop

*Forage Hay Price is Annual Average of Alfalfa Hay and Bermuda Grass Gay

**Oats is Misc. Field Crop

*** Dill & Cabbage is Per Acre Average of all Vegetable Crops

Source: 2020-2024 County of Imperial Agriculture Commission Crop Reports and Crop Information

Notes: (1) Total Acres is per applicant

Exhibit I

Calculation of Value Increase Factor for Agriculture Production in Imperial County

91FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

	Total (All) Crops		Field/Grass Crops				Vegetable Crops			
Year	Gross Crop Value (in millions of $)	Yr/Yr Increase/Decrease %	Field/Grass Crop Value (in millions of $)	Field/Grass Crop Acreage (in thousands of acres)	Average Crop/Acre (in millions of $)	Increase/Decrease % Yr/Yr	Vegetable Crop Value (in millions of $)	Vegetable Crop Acreage (in thousands of acres)	Average Crop/Acre (millions of $ per acre)	Increase/Decrease % Yr/Yr
2001	$1,010.00	N/A	$284.90	388.1	$0.7341	N/A	$403.40	89.25	$4.52	N/A
2002	$1,220.00	20.79%	$272.90	398.77	$0.6844	-6.78%	$556.19	90.44	$6.15	36.06%
2003	$1,070.00	-12.30%	$244.53	376.29	$0.6498	-5.04%	$442.93	94.6	$4.68	-23.87%
2004	$1,190.00	11.21%	$255.30	370.02	$0.6900	6.17%	$505.25	104.18	$4.85	3.58%
2005	$1,290.00	8.40%	$269.03	351.87	$0.7646	10.81%	$571.79	100.05	$5.72	17.84%
2006	$1,370.00	6.20%	$298.93	361.38	$0.8272	8.19%	$526.65	107.28	$4.91	-14.10%
2007	$1,370.00	0.00%	$308.75	352.16	$0.8767	5.99%	$558.02	100.3	$5.56	13.33%
2008	$1,680.00	22.63%	$482.59	412.34	$1.1704	33.49%	$675.24	116.58	$5.79	4.11%
2009	$1,450.00	-13.69%	$312.54	353.13	$0.8851	-24.38%	$690.31	114.01	$6.05	4.54%
2010	$1,600.00	10.34%	$360.14	352.76	$1.0209	15.35%	$809.13	115.5	$7.01	15.70%
2011	$1,960.00	22.50%	$518.26	365.02	$1.4198	39.07%	$903.96	109.8	$8.23	17.52%
2012	$1,950.00	-0.51%	$587.98	396.84	$1.4817	4.36%	$718.22	118.9	$6.04	-26.63%
2013	$2,160.00	10.77%	$470.46	332.73	$1.4139	-4.57%	$865.40	121.37	$7.13	18.04%
2014	$1,859.00	-13.94%	$530.85	332.59	$1.5961	12.88%	$723.26	122.28	$5.91	-17.05%
2015	$1,925.00	3.55%	$422.32	349.69	$1.2077	-24.33%	$805.02	121.28	$6.64	12.22%
2016	$2,063.00	7.17%	$381.18	333.76	$1.1421	-5.43%	$1,006.34	133.59	$7.53	13.49%
2017	$2,066.00	0.15%	$365.85	326.67	$1.1199	-1.94%	$1,018.76	128.77	$7.91	5.02%
2018	$2,226.00	7.74%	$507.85	341.23	$1.4883	32.89%	$984.17	132.6	$7.42	-6.19%
2019	$2,016.00	-9.43%	$498.17	344.44	$1.4463	-2.82%	$799.42	120.42	$6.64	-10.56%
2020	$2,026.00	0.50%	$444.69	331.17	$1.3428	-7.16%	$895.98	104.24	$8.60	29.48%
2021	$2,287.00	12.88%	$516.63	348.55	$1.4822	10.38%	$1,039.09	125.62	$8.27	-3.77%
2022	$2,613.00	14.25%	$640.10	366.09	$1.7485	17.96%	$1,115.59	127.25	$8.77	5.99%
2023	$2,693.00	3.06%	$478.67	366.62	$1.3056	-25.33%	$1,219.35	137.92	$8.84	0.84%
Total Increase		***112.29%***				***89.78%***				***95.61%***
22-Yr Average Increase		***5.10%***				***4.08%***				***4.35%***
Forecast Value Increase based on average of total crop value, field/grass crops and vegetable crop:						**4.51%**				

Source: 2001-2023 County of Imperial Agriculture Commissioner Crop Reports

Exhibit J

Thirty Year Projected Economic Impacts of Agriculture (Site Specific)

90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

	Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Projected Agriculture Production	$5,371,515	$5,613,770	$5,866,951	$6,131,551	$6,408,084	$6,697,088	$6,999,127	$7,314,788	$7,644,685	$7,989,460
2	Economic Multiplier Rate	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391
3	Projected Economic Impact	$6,655,844	$6,956,023	$7,269,739	$7,597,605	$7,940,257	$8,298,362	$8,672,618	$9,063,753	$9,472,529	$9,899,740
		Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
4	Projected Agriculture Production	$8,349,785	$8,726,360	$9,119,919	$9,531,227	$9,961,085	$10,410,330	$10,879,836	$11,370,517	$11,883,327	$12,419,265
5	Economic Multiplier Rate	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391
6	Projected Economic Impact	$10,346,218	$10,812,832	$11,300,491	$11,810,143	$12,342,781	$12,899,440	$13,481,205	$14,089,207	$14,724,631	$15,388,711
		Year 21	**Year 22**	**Year 23**	**Year 24**	**Year 25**	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**
7	Projected Agriculture Production	$12,979,374	$13,564,744	$14,176,514	$14,815,875	$15,484,070	$16,182,402	$16,912,228	$17,674,970	$18,472,111	$19,305,203
8	Economic Multiplier Rate	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391	1.2391
9	Projected Economic Impact	$16,082,742	$16,808,074	$17,566,118	$18,358,350	$19,186,312	$20,051,614	$20,955,942	$21,901,055	$22,888,793	$23,921,077
	Total Estimated Economic Impact	***$406,742,209***									
	Annual Increases based on calculation found on Exhibit I (4.51%)										

Exhibit K

Impact of Agriculture Employment In Imperial County, California

90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

#	Item	Figure									
1	Total Population in County	182,881									
2	Total Workforce in County	74,800									
3	Current Number Employed	61,500									
4	Estimated Direct Employment in Agriculture	8,992									
5	Percentage of Total Employed Directly in Agriculture	14.62%									
6	Hourly Mean (All Farm Direct) Based on NAICS	$22.83									
11	Add on for Benefits (30% of Wage)	$6.85									
12	Total Estimated Average Wage for Agriculture	$29.68									
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**
13	Projected Employees	8992	8992	8992	8992	8992	8992	8992	8992	8992	8992
14	Average (Mean) of Hourly Wage	$22.83	$23.97	$25.17	$26.43	$27.75	$29.14	$30.59	$32.12	$33.73	$35.42
15	Add on for Benefits (30% of Wage)	$6.85	$7.19	$7.55	$7.93	$8.33	$8.74	$9.18	$9.64	$10.12	$10.63
16	Total Wage	$29.68	$31.16	$32.72	$34.36	$36.08	$37.88	$39.77	$41.76	$43.85	$46.04
17	Annualized Average (Mean) Wage with Benefits	$61,732	$64,819	$68,060	$71,463	$75,036	$78,788	$82,727	$86,864	$91,207	$95,767
18	Estimated Projected Payroll Agriculture	$555,097,021	$582,851,873	$611,994,466	$642,594,189	$674,723,899	$708,460,094	$743,883,099	$781,077,253	$820,131,116	$861,137,672
19	Aggregate of Payroll (Direct)	$555,097,021	$1,137,948,894	$1,749,943,360	$2,392,537,550	$3,067,261,448	$3,775,721,542	$4,519,604,641	$5,300,681,894	$6,120,813,011	$6,981,950,682
20	RIMS II Impact of Wages (1.3110 Factor)	$721,681,638	$757,765,719	$795,654,005	$835,436,706	$877,208,541	$921,068,968	$967,122,416	$1,015,478,537	$1,066,252,464	$1,119,565,087
21	Aggregate of Total Payroll Impact with RIMS II Model	$721,681,638	$1,479,447,357	$2,275,101,362	$3,110,538,068	$3,987,746,609	$4,908,815,577	$5,875,937,994	$6,891,416,531	$7,957,668,995	$9,077,234,082
		2035	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**
22	Projected Employees	8992	8992	8992	8992	8992	8992	8992	8992	8992	8992
23	Average (Mean) of Hourly Wage	$37.19	$39.05	$41.00	$43.05	$45.20	$47.46	$49.84	$52.33	$54.94	$57.69
24	Add on for Benefits (30% of Wage)	$11.16	$11.71	$12.30	$12.91	$13.56	$14.24	$14.95	$15.70	$16.48	$17.31
25	Total Wage	$48.34	$50.76	$53.30	$55.96	$58.76	$61.70	$64.79	$68.02	$71.43	$75.00
26	Annualized Average (Mean) Wage with Benefits	$100,555	$105,583	$110,862	$116,405	$122,226	$128,337	$134,754	$141,492	$148,566	$155,994
27	Estimated Projected Payroll Agriculture	$904,194,556	$949,404,283	$996,874,498	$1,046,718,222	$1,099,054,134	$1,154,006,840	$1,211,707,182	$1,272,292,541	$1,335,907,168	$1,402,702,527
28	Aggregate of Payroll (Direct)	$7,886,145,238	$8,835,549,521	$9,832,424,019	$10,879,142,241	$11,978,196,375	$13,132,203,215	$14,343,910,397	$15,616,202,938	$16,952,110,107	$18,354,812,634
29	RIMS II Impact of Wages (1.3110 Factor)	$1,185,399,062	$1,244,669,015	$1,306,902,466	$1,372,247,590	$1,440,859,969	$1,512,902,967	$1,588,548,116	$1,667,975,522	$1,751,374,298	$1,838,943,013
30	Aggregate of Total Payroll Impact with RIMS II Model	$10,262,633,145	$11,507,302,160	$12,814,204,626	$14,186,452,216	$15,627,312,185	$17,140,215,152	$18,728,763,268	$20,396,738,790	$22,148,113,088	$23,987,056,100
	Notes:										
	1. Total Projected Employees not anticipated to increase nor decrease over period for modeling purposes										
	2. Average (Mean) of Hourly Wage is weighted and calculated with 5% annual increase										
	3. Add on for Benefits (30% of Base Year Wage) calculated with 5% annual increase										
	4. Based on 2,080 working hours annually										
	5. RIMS II Model shows that the real economic impact of agriculture payroll is 1.3110 of the actual payroll dollar										
	6. Aggregate Impact of Total Payroll with RIMS II shows the projected impact across entire regional economy										
	7. Over a 20-year period (2025-2044) it is projected that agriculture wages will have a $23.99 billion impact on the economy of Imperial County										
	8. County Population from State of CA DOF E-2 (5/1/24)										
	9. Unemployment as of December, 2024										
	10. Employment and Wage Figures from State of CA EDD Full Year 2023										

Exhibit L

Projected Agriculture Impacts of Subject Site 90FI 8ME LLC (Big Rock 2): Imperial County, California (Solar/Battery Project)

Statistical Impact (Based on Industry Average of All Agriculture Across County)

	Item	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	Total Acres of Production	578,659	578,659	578,659	578,659	578,659	578,659	578,659	578,659	578,659	578,659
2	Total Direct Employment in Agriculture in County	8,992	8,992	8,992	8,992	8,992	8,992	8,992	8,992	8,992	8,992
3	Projected Employees Per Acre	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554
4	Projected Employees Per 100 Acres	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
5	Projected Employees Per 1,743 Acres	27.09	27.09	27.09	27.09	27.09	27.09	27.09	27.09	27.09	27.09
6	Average Wage Per Employee (Fully Burdened)	$61,732	$64,819	$68,060	$71,463	$75,036	$78,787	$82,727	$86,863	$91,206	$95,767
7	Projected Payroll for 2025	$1,672,019	$1,722,180	$1,773,845	$1,827,061	$1,881,873	$1,938,329	$1,996,479	$2,056,373	$2,118,064	$2,181,606
8	Projected RIMS II Payroll Factor	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311
9	Projected Total Impact of Payroll	$2,192,017	$2,257,778	$2,325,511	$2,395,277	$2,467,135	$2,541,149	$2,617,384	$2,695,905	$2,776,782	$2,860,086
10	Projected RIMS II Employment Factor	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662
11	Projected Total Jobs as Result of Ag on Site	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
		2035	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**
12	Total Acres of Production	578,659	578,659	578,659	578,659	578,659	578,659	578,659	578,659	578,659	578,659
13	Total Direct Employment in Agriculture in County	8,992	8,992	8,992	8,992	8,992	8,992	8,992	8,992	8,992	8,992
14	Projected Employees Per Acre	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554	0.01554
15	Projected Employees Per 100 Acres	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
16	Projected Employees Per 1743 Acres	27.09	27.09	27.09	27.09	27.09	27.09	27.09	27.09	27.09	27.09
17	Average Wage Per Employee (Fully Burdened)	$100,555	$105,583	$110,862	$116,405	$122,225	$128,336	$134,753	$141,491	$148,565	$155,994
18	Projected Payroll for 2022	$2,723,543	$2,805,250	$2,889,407	$2,976,089	$3,065,372	$3,157,333	$3,252,053	$3,349,615	$3,450,103	$3,553,606
19	Projected RIMS II Payroll Factor	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311
20	Projected Total Impact of Payroll	$3,570,565	$3,677,682	$3,788,013	$3,901,653	$4,018,703	$4,139,264	$4,263,442	$4,391,345	$4,523,086	$4,658,778
21	Projected RIMS II Employment Factor	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662	1.3662
22	Projected Total Jobs as Result of Ag on Site	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
23	**Total Projected Impact of Payroll (20 Years)**	**$66,061,556**									
24	Average Projected Annual Direct Jobs from Site	27.09									
25	Average Projected Annual Jobs w/RIMS II from Site *	37.00									

Notes:

1. 2023 Acreage Average Used for Base Year for Crop Production
2. Crop Production (for this example) Projected Stable
3. Total Direct Employees Projected Stable
4. Fully Burdened Wages Projected to Rise by 5% per Annum
5. Based on Projection of 1743 Acre Site (Average Acres Actively Farmed 2020-2024)
6. RIMS II Refers to Total Job Impacts Including Direct/Indirect (Multiplier)

Exhibit M

Projected Costs for County to Provide General Government Services to Population

County of Imperial, California

#	Department/Unit	Item	2024-25 Adopted Budget
	General Government		
1	Administration	Entire Section	$10,285,723
2	Legislative and Admin	Entire Section	$7,263,735
3	Finance	Entire Section	$8,200,281
4	County Counsel	Entire Section	$2,885,326
5	Personnel	Entire Section	$2,897,297
6	Equal Employment Opportunity	Entire Section	$142,297
7	Elections	Entire Section	$1,802,673
8	Property/Facility Management	Entire Section	$7,879,759
9	Plant Acquisition	Entire Section	$1,661,325
10	Other General	Entire Section	$4,465,692
11	Other Protection	Entire Section	$10,435,467
12	Recreational Facilities	Entire Section	$724,742
13	Other Assistance	Entire Section	$3,983,652
	Public Protection		
14	Administration	Entire Section	$52,450
15	Judicial	Entire Section	$24,054,818
16	Police Protection	Entire Section w/Adjustment	$25,654,202
17	Detention and Correction	Entire Section	$31,250,554
18	Fire Protection	Entire Section w/Adjustment	$8,051,425
19	Protective Inspection	Entire Section	$7,896,732
20	Other Protection	Entire Section	$38,902,079
21	Resource Conservation	Entire Section	$23,175
	Public Ways & Facilities		
22	Public Ways & Facilities	Entire Section	$19,209,396
	Health and Sanitation		
24	Administrative	Entire Section	$1,239,446
25	Health	Entire Section	$197,818,450
26	Sanitation	Entire Section	$11,225,700
	Public Assistance		
27	Administration-Workforce Development	Entire Section	$9,527,116
28	Security-Sheriff	Entire Section	$2,693,098
29	Health	Entire Section	$385,269
30	Administration-Social Services	Entire Section	$61,743,325
31	Categorical AIDS	Entire Section	$81,431,241
32	General Relief	Entire Section	$248,562
33	Veterans Services	Entire Section	$340,484
34	Other Assistance	Entire Section	$72,680,241
35	**Education**		
36	Health	Entire Section	$421,992
37	Agriculture Education	Entire Section	$461,506
38	Library Services	Entire Section	$1,561,776
39	Other Education	Entire Section	$110,510
	Recreation		
40	Recreation Facilities	Entire Section	$891,957
	Contingency		
41	Contingency	Entire Section	$326,010
	Personnel		
42	Officer Wellness	Entire Section	$3,904
	Special Districts		
43	Administration	Entire Section	$722,169
Total of Governmental Expenditures/Responsibilities			$661,555,556
Total Number of Residents of Imperial County (2024 CA Dept. of Finance E-1)			182,881
Total Spending Per Resident of Imperial County			$3,617.41

Notes:	
A	Item 16 Net of City of Holtville Police Contract ($967,000) Pre Adjustment Figure: $26,621,202
B	Item 18 Net of City of Imperial Fire Contract ($1,450,000) Pre Adjustment Figure: $9,501,425
C	Based on Schedule 8 of County of Imperial Government Funds Detail of Financing Uses by Function, Activity and Budget Unit

Exhibit N

Projected Costs for County of Imperial to Provide General Government Services as Result of:

90FI 8ME LLC (Big Rock 2): Imperial County, Califronia (Solar/Battery Project)

	Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Number of Projected Construction Jobs (FTE)	78.13	78.13								
2	Number of Projected Operational Jobs (FTE)	6	6	6	6	6	6	6	6	6	6
3	Total Jobs (construction & Operational) (FTE)	84.13	84.13	6	6	6	6	6	6	6	6
4	Ave. Number of Persons Per Household	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81
5	Estimated Persons Supported by Gen Govt.	320.54	320.54	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86
6	Cost Per Person (General Govt.)	$3,617	$3,710	$3,804	$3,901	$4,000	$4,102	$4,207	$4,314	$4,424	$4,536
7	Estimated Cost to Provide General County Govt. Services	$1,159,508	$1,189,037	$86,960	$89,174	$91,445	$93,774	$96,162	$98,611	$101,122	$103,698
		Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
8	Number of Projected Operational Jobs (FTE)	6	6	6	6	6	6	6	6	6	6
9	Ave. Number of Persons Per Household	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81
10	Estimated Persons Supported by Gen Govt.	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86
11	Cost Per Person (General Govt.)	$4,652	$4,770	$4,892	$5,016	$5,144	$5,275	$5,409	$5,547	$5,688	$5,833
12	Estimated Cost to Provide General County Govt. Services	$106,339	$109,047	$111,824	$114,672	$117,592	$120,587	$123,658	$126,807	$130,036	$133,348
		Year 21	**Year 22**	**Year 23**	**Year 24**	**Year 25**	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**
13	Number of Projected Operational Jobs (FTE)	6	6	6	6	6	6	6	6	6	6
14	Ave. Number of Persons Per Household	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81
15	Estimated Persons Supported by Gen Govt.	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86	22.86
16	Cost Per Person (General Govt.)	$5,982	$6,134	$6,290	$6,451	$6,615	$6,783	$6,956	$7,133	$7,315	$7,501
17	Estimated Cost to Provide General County Govt. Services	$136,744	$140,226	$143,797	$147,460	$151,215	$155,066	$159,015	$163,065	$167,217	$171,476
18	***Total Cost to Provide General Government Services***	***$5,838,679***									

Notes:

Cost Per Person for General Government is adjusted by the 30 year average Consumer Price Index of 2.5467 (1995-2024)

Persons Per Household based on 2019 American Community Survey

Exhibit O

Projected Revenue Versus Expenses

90FI 8ME, LLC (Big Rock 2): Imperial County, Califronia (Solar/Battery Project)

Years 1-30

	Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Projected Sales Tax Income	$4,067,494	$4,067,494			$658,572					$746,813
2	Projected Property Tax Income (Net)	$311,703	$330,996	$337,461	$328,530	$342,379	$337,544	$329,116	$314,314	$302,322	$310,676
3	Public Benefit Fee (Solar)	$1,104,768	$1,132,903	$1,161,755	$1,191,341	$1,221,681	$1,252,794	$1,284,699	$1,317,416	$1,350,967	$1,385,372
4	Total Projected Income for General Government Services	$5,483,965	$5,531,393	$1,499,216	$1,519,871	$2,222,632	$1,590,338	$1,613,815	$1,631,730	$1,653,288	$2,442,860
5	Projected Costs to Provide General Government Services	$2,236,183	$84,800	$86,960	$89,174	$91,445	$93,774	$96,162	$98,611	$101,122	$103,698
6	Estimated Revenue Surplus (Deficit) (Annual)	$3,247,782	$5,446,593	$1,412,257	$1,430,697	$2,131,187	$1,496,564	$1,517,652	$1,533,119	$1,552,166	$2,339,163
7	Aggregate Revenue Surplus (Deficit)	$3,247,782	$8,694,375	$10,106,631	$11,537,328	$13,668,515	$15,165,079	$16,682,731	$18,215,850	$19,768,016	$22,107,179
		Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
8	Projected Sales Tax Income					$846,877					$960,348
9	Projected Property Tax Income (Net)	$301,836	$293,128	$283,755	$270,050	$282,685	$273,401	$265,300	$255,876	$244,829	$262,478
10	Public Benefit Fee (Solar)	$1,420,653	$1,456,833	$1,493,934	$1,531,980	$1,570,995	$1,611,003	$1,652,031	$1,694,103	$1,737,247	$1,781,489
11	Total Projected Income for General Government Services	$1,722,489	$1,749,961	$1,777,688	$1,802,029	$2,700,556	$1,884,404	$1,917,331	$1,949,979	$1,982,076	$3,004,315
12	Projected Costs to Provide General Government Services	$106,339	$109,047	$111,824	$114,672	$117,592	$120,587	$123,658	$126,807	$130,036	$133,348
13	Estimated Revenue Surplus (Deficit) (Annual)	$1,616,150	$1,640,914	$1,665,864	$1,687,358	$2,582,964	$1,763,817	$1,793,673	$1,823,173	$1,852,040	$2,870,967
14	Aggregate Revenue Surplus (Deficit)	$23,723,329	$25,364,243	$27,030,108	$28,717,466	$31,300,430	$33,064,247	$34,857,921	$36,681,093	$38,533,133	$41,404,100
		Year 21	**Year 22**	**Year 23**	**Year 24**	**Year 25**	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**
15	Projected Sales Tax Income					$1,089,024					$1,234,940
16	Projected Property Tax Income (Net)	$248,975	$238,268	$227,945	$223,288	$244,692	$239,668	$237,957	$234,961	$231,928	$267,342
17	Public Benefit Fee (Solar)	$1,826,858	$1,873,383	$1,921,092	$1,970,017	$2,020,187	$2,071,635	$2,124,394	$2,178,496	$2,233,975	$2,290,868
18	Total Projected Income for General Government Services	$2,075,834	$2,111,651	$2,149,037	$2,193,304	$3,353,903	$2,311,303	$2,362,350	$2,413,457	$2,465,903	$3,793,150
19	Projected Costs to Provide General Government Services	$136,744	$140,226	$143,797	$147,460	$151,215	$155,066	$159,015	$163,065	$167,217	$171,476
20	Estimated Revenue Surplus (Deficit) (Annual)	$1,939,090	$1,971,424	$2,005,240	$2,045,845	$3,202,688	$2,156,237	$2,203,335	$2,250,392	$2,298,686	$3,621,674
21	Aggregate Revenue Surplus (Deficit)	$43,343,190	$45,314,614	$47,319,854	$49,365,699	$52,568,387	$54,724,624	$56,927,960	$59,178,351	$61,477,037	$65,098,711
22	**Net Revenues (Deficits) to County of Imperial**	***$65,098,711***									

Notes:

Sales Tax Income applicable in Years 1, 5, 10, 15, 20, 25 & 30 (Construction and Re-Power Years)

Property Tax available for General Government Services includes General Fund, Library and Fire Protection

Public Benefit Fee based on $600 (Year 1) on all land in project as land has been actively used as farmland (increases by 30-Year CPI (Exhibit A))

Recap	
Local Sales/Use Tax Revenue	$13,671,562
Net to County Property Tax Revenue	$8,373,401
Public Benefit Fee (Solar)	$48,864,867
Total Projected Revenue to County (Sales/Use Tax + Property Tax)	$70,909,830
Cost of County Government Services	$5,811,119
Projected Revenue to County over Expenses	***$65,098,711***

ATTACHMENT "Q"

PC PACKAGE ON CD

PROJECT REPORT

TO: PLANNING COMMISSION
FROM: PLANNING & DEVELOPMENT SERVICES

AGENDA DATE: September 24, 2025
AGENDA TIME: 9:00AM / NO. 7a-7m

PROJECT TYPE: Big Rock 2 Cluster Solar and Battery Storage WSA, FEIR, GPA #24-0002, ZC #24-0003, CUP #24-0006 through CUP #24-0009, V #24-0002 through V #24-0005 SUPERVISOR DIST # 2

LOCATION: 1520 Jessup Rd El Centro CA. APN: (24 Parcels) 051-300-036-000 et al PARCEL SIZE: +/-1,849 AC TOTAL

GENERAL PLAN (existing) Agriculture GENERAL PLAN (proposed) Agriculture – Renewable Energy

ZONE (existing): A-2, A-2-R, A-2-RE, A-3, A-3-RE ZONE (proposed): Renewable Energy Overlay (A-2-RE, A-3-RE)

GENERAL PLAN FINDINGS ☒ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE:

☐ APPROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 09-26-2024

INITIAL STUDY: #24-0009

☐ NEGATIVE DECLARATION ☐ MITIGATED NEG. DECLARATION ☒ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☒ NONE	☐ ATTACHED
AG	☒ NONE	☐ ATTACHED
APCD	☒ NONE	☐ ATTACHED
E.H.S.	☒ NONE	☐ ATTACHED
FIRE / OES	☐ NONE	☒ ATTACHED
SHERIFF	☒ NONE	☐ ATTACHED

OTHER IID, CEERT, Defenders of Wildlife,

REQUESTED ACTION:

STAFF RECOMMENDS THAT THE PLANNING COMMISSION CONDUCT A PUBLIC HEARING AND HEAR ALL THE OPPONENTS AND PROPONENTS OF THE PROPOSED PROJECT, AND THEN TAKE THE FOLLOWING ACTIONS:

A. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE THE WATER SUPPLY ASSESSMENT; AND,**
B. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE THE FINAL EIR (SCH #2024090063); AND,**
C. **RECOMMEND THE BOARD OF SUPERVISORS ADOPT THE MITIGATION, MONITORING AND REPORTING PROGRAM; AND,**
D. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE GENERAL PLAN AMENDMENT #24-0002; AND,**
E. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE ZONE CHANGE #24-0003; AND,**
F. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE CONDITIONAL USE PERMIT #24-0006; AND,**
G. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE VARIANCE #24-0002; AND,**
H. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE CONDITIONAL USE PERMIT #24-0007; AND,**
I. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE VARIANCE #24-0003; AND,**
J. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE CONDITIONAL USE PERMIT #24-0008; AND,**
K. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE VARIANCE #24-0004; AND,**
L. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE CONDITIONAL USE PERMIT #24-0009; AND,**
M. **RECOMMEND THE BOARD OF SUPERVISORS APPROVE VARIANCE #24-0005.**

PC ORIGINAL PKG

STAFF REPORT
Planning Commission
September 24, 2025

Subject:

- **A.** Water Supply Assessment (WSA) for Big Rock 2 Cluster Solar project
- **B.** General Plan Amendment (GPA #24-0002)
- **C.** Zone Change (ZC #24-0003)
- **D.** Final Environmental Impact Report (IS#24-0009/ FEIR SCH#2024090063)
- **E.** Conditional Use (CUP #24-0006)
- **F.** Variance (V #24-0002)
- **G.** Conditional Use (CUP #24-0007)
- **H.** Variance (V #24-0003)
- **I.** Conditional Use (CUP #24-0008)
- **J.** Variance (V #24-0004)
- **K.** Conditional Use (CUP #24-0009)
- **L.** Variance (V #24-0005)

Project Name: Big Rock 2 Cluster Solar and Battery Storage project

Applicant/Owner: 90FI 8ME LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

Project Location:

The Big Rock 2 Cluster Solar and Battery Storage Project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico, west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately-owned land, in the unincorporated area of Imperial County, California, comprising 24 Assessor Parcel Numbers (APN) 051-300-036-000 et al.

Project Summary:

The project applicant, 90FI 8ME LLC, is seeking approval of a General Plan amendment, Zone Change, four (4) Conditional Use Permits (CUPs) and four (4) Variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility. The project would generate up to a combined 500 megawatt (MW) of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 1,849 acres. The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications are described below:

- Big Rock 2 Cluster North: CUP #24-0006
- Big Rock 2 Cluster South: CUP #24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP #24-0008
- Big Rock 2 Cluster West: CUP #24-0009

PC ORIGINAL PKG

The proposed project consists of three primary components:

1. Up to 500 MW of Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 500 MW of Battery Storage BESS; and,
3. Up to 200 in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

Implementation of the project would involve the following approvals by the County of Imperial:

1. Water Supply Assessment (WSA).

Water will be supplied by IID via the Westside Main canal and delivery gates 13 and 14A which are all assumed to be in adequate working condition. The proposed amortized 125 AFY water demand for the Project represents an estimated 98.3 percent reduction in historical water demand from the calculated historical 7,348 AFY water demand on the Project parcels. The Project is estimated to require up to 10 AFY over 30 years, which is a 99.9 percent decrease from the historical Project site demand of 7,348 AFY. The foreseeable planned demands for the sources of water for the Project have been noted in this Water Supply Assessment. The proposed water requests are for construction and operation of the project. Construction would primarily use water for dust suppression. Operation would primarily use water to supply the operation and maintenance building, fire flow storage, and for periodic panel washing. The anticipated construction start date is July of 2026. Construction activities would occur over an 18 to 24-month period.

2. General Plan Amendment (#24-0002).

An amendment to the County's General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the Renewable Energy (RE) Overlay would not be allowed without an amendment to the RE Overlay. APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay. However, the majority of the project site is located outside of the RE Overlay. Therefore, the applicant is requesting a General Plan Amendment to include the remaining portions of the project site into the RE Overlay. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

3. Zone Change (#24-0003)

The applicant is seeking a zone change to include the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE) as follows:

- **Big Rock 2 Cluster North**.

As shown in Table 1-1, the Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the

PC ORIGINAL PKG

RE Overlay Zone. As shown in Table 1-1, the applicant is requesting a Zone Change to include the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

Table 1-1. Big Rock 2 Cluster North Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-270-020	A-2-R	A-2-R-RE
2	051-270-028	A-2	A-2-RE
3	051-270-036	A-2	A-2-RE
4	051-270-041	A-2-R	A-2-R-RE
5	051-280-054	A-2	A-2-RE
6	051-300-011	A-2	A-2-RE
7	051-300-016	A-2	A-2-RE
8	051-300-026	A-2	A-2-RE
9	051-300-035	A-3	A-3-RE
10	051-300-037	A-3	A-3-RE
11	051-300-032 (northern portion)	A-2	A-2-RE
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	N/A
13	051-300-036 (to be re-entitled)	A-3-RE	N/A

- **Big Rock 2 Cluster South**.

As shown in Table 1-2, the Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). As shown in Table 1-2, the applicant is requesting a Zone Change to include the project parcels into the RE Overlay Zone (A-3-RE).

Table 1-2. Big Rock 2 Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-330-003	A-3	A-3-RE
2	051-350-004	A-3	A-3-RE
3	051-350-006	A-3	A-3-RE
4	051-350-007	A-3	A-3-RE
5	051-350-008	A-3	A-3-RE

- **Big Rock 2 Cluster East.**

As shown in Table 1-3, the Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.

PC ORIGINAL PKG

Table 1-3. Big Rock 2 Cluster East Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-310-027	A-2-R-RE	N/A
2	051-310-028	A-2-R-RE	N/A

- **Big Rock Cluster West.**
  As shown in Table 1-4, the Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). As shown in Table 1-4, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

Table 1-4. Big Rock 2 Cluster West Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-290-018	A-2-R	A-2-R-RE
2	051-290-019	A-3	A-3-RE
3	051-320-005	A-3	A-3-RE
4	051-320-006	A-3	A-3-RE
5	051-320-007	A-3	A-3-RE

4. Approval of the following CUPs:

- **Big Rock 2 Cluster North: #24-0006**
- **Big Rock 2 Cluster South: #24-0007**
- **Big Rock 2 Cluster East: #24-0008**
- **Big Rock 2 Cluster West: #24-0009**

Implementation of the project would require the approval of the four CUPs listed above to allow for the construction and operation of solar energy facility with an integrated battery storage system (BESS) per CUP. It is anticipated that all BESS facilities associated with the project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production needs, by allowing one CUP area to utilize "BESS allowances and/or credits" of another ; however in total, the overall project buildout would not exceed up to 500-MW for the PV portion, nor exceed 500-MWof associated BESS. With approval of the zone change, the project site would be amended to add the RE Overlay to the existing zones as General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone resulting in (A-2-RE, A-2-R-RE and A-3-RE).

- **Big Rock 2 Cluster North: #24-0006**

The Big Rock 2 Cluster North consists of the construction and operation of a utility-scale up to 100-megawatt (MW) in capacity photovoltaic (PV) solar energy generation and Battery Energy Storage System (BESS) facility (up to 140-MW in capacity), encompassing thirteen (13) parcels identified as Assessor's Parcel Numbers APNs 051-270-020-000 et al. comprising approximately 1,030 acres, of which approximately 120.3 acres are associated with the previously-approved CUP for Laurel Cluster 2 North. Approximately 80 acres of APN 051-300-032 and 40.3 acres of APN 051-300-036 associated with the previously-approved CUP for Laurel Cluster 2 North would be re-entitled as part of the proposed project. The

PC ORIGINAL PKG

project site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

- **Big Rock 2 Cluster South: #24-0007**

The Big Rock 2 Cluster South consists of the construction and operation of a utility-scale up to 120-megawatt (MW) in capacity photovoltaic (PV) solar energy generation and Battery Energy Storage System (BESS) facility (up to 240-MW in capacity) encompassing five parcels identified as Assessor's Parcel Numbers APNs 051-330-003-000, 051-350-004-000, 051-350-006-000, 051-350-007-000 and 051-350-008-000, totaling approximately 410 acres. The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

- **Big Rock 2 Cluster East: #24-0008**

The Big Rock 2 Cluster East/Laurel Cluster South consists of the construction and operation of a utility-scale up to 60-megawatt (MW) in capacity photovoltaic (PV) solar energy generation and Battery Energy Storage System (BESS) facility (also up to 60-MW in capacity). The project site is located on two parcels identified as Assessor's Parcel Numbers APNs 051-310-027-000 and 051-310-028-000, comprising approximately 160 acres. The 160-acre site is associated with the previously-approved CUP for Laurel Cluster 2 South and will be re-entitled as part of the proposed project.
The Big Rock 2 Cluster East site/Laurel Cluster South site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

- **Big Rock 2 Cluster West: #24-0009**

The Big Rock 2 Cluster West consists of the construction and operation of a utility-scale up to 80-megawatt (MW) in capacity photovoltaic (PV) solar energy generation and Battery Energy Storage System (BESS) facility (also up to 60-MW in capacity). The project site is located on five parcels identified as Assessor's Parcel Numbers APNs 051-290-018-000, 051-290-019-000, 051-320-005-000, 051-320-006-000 and 051-320-007-000, comprising approximately 249 acres. The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

5. Variance (#24-0002 through 24-0005).

The applicant seeks a variance to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a 80' height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height.

6. Certification of the EIR.

After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project. Subsequent ministerial approvals may include but are not limited to: Grading and clearing permits, Building permits, Reclamation plan, Encroachment permits, Transportation permit(s).

PC ORIGINAL PKG

Land Use Analysis:

Per Imperial County's General Plan, the land use designation for this project site is "Agriculture" and it's zoned as A-2 (General Agriculture Zone), A-2-R (General Agricultural / Rural Zone), A-2-RE (General Agriculture with Renewable Energy Overlay), A-3 (Heavy Agriculture), and A-3-RE (Heavy Agriculture with Renewable Energy Overlay) according to Zoning Map No. 40 of the Imperial County Title 9 Land Use Ordinance.

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally highwater table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

The proposed General Plan Amendment and Zone Change aim to incorporate twenty-two (22) parcels (APN:051-270-020-000 et al) into the Renewable Energy Overlay, for the implementation of the proposed Solar Energy Generation and Battery Storage project through approved Conditional Use Permits and Variances from the County of Imperial. This involves a zone change from A-2, A-2-R and A-3, to A-2-RE, A-2-R-RE, and A-3-RE. The underlying "Agriculture" General Plan designation would remain. This request is made to ensure alignment with the County's General Plan and Land Use Ordinances (Title 9), promoting consistency across regulatory frameworks.

Surrounding Land Uses, Zoning and General Plan Designations:

DIRECTION	CURRENT LAND USE	ZONING	GENERAL PLAN
Project Site	Agricultural	A-2, A-2-R, A-2-RE A-3, A-3-RE	Agriculture
North	Agricultural	A-2-R, A-2-RE	Agriculture
South	Agricultural / Solar Development	A-2, A-RE, A-3, A-3-RE	Agriculture
East	Agricultural	A-3, A-3-RE	Agriculture
West	Agricultural / Solar Development	A-2-R, A-3	Agriculture

PC ORIGINAL PKG

Environmental Review Process:

On September 4, 2024, the Imperial County Planning Department sent a Notice of Preparation (NOP) to the California State Clearinghouse (SCH #2024090063) for a 30-day public and agency review period ending October 7, 2024, to announce the preparation of the Big Rock 2 Cluster Solar Energy and Battery Storage project Draft Environmental Impact Report (DEIR). A public scoping meeting was held on September 26, 2024.

On April 22, 2025, and then on May 1, 2025, a Notice of Availability (NOA) for Big Rock 2 Cluster Solar Energy and Battery Storage project Draft EIR was published for review in the local newspaper IV Press. A Notice of Completion with DEIR was sent to State Clearinghouse for agency review for 50 days ending on June 20, 2025. All significant impacts were addressed in the DEIR.

A Final Environmental Impact Report and the Response to Comments received on the DEIR were completed.

RECOMMENDED ACTIONS

Staff recommends that the Planning Commission hold a public hearing and hear all proponents and opponents of the proposed project. Staff would then recommend the Planning Commission take the following actions:

A. Recommend the Board of Supervisors approve the Water Supply Assessment; and,
B. Recommend the Board of Supervisors approve the Final Environmental Impact Report; and,
C. Recommend the Board of Supervisors adopt the Mitigation Monitoring and Reporting Program; and,
D. Recommend the Board of Supervisors approve General Plan Amendment #24-0002; and,
E. Recommend the Board of Supervisors approve Zone Change #24-0003; and,
F. Recommend the Board of Supervisors approve Conditional Use Permit #24-0006; and,
G. Recommend the Board of Supervisors approve Variance #24-0002; and,
H. Recommend the Board of Supervisors approve Conditional Use Permit #24-0007; and,
I. Recommend the Board of Supervisors approve Variance #24-0003; and,
J. Recommend the Board of Supervisors approve Conditional Use Permit #24-0008; and,
K. Recommend the Board of Supervisors approve Variance #24-0004; and,
L. Recommend the Board of Supervisors approve Conditional Use Permit #24-0009; and,
M. Recommend the Board of Supervisors approve Variance #24-0005.

PC ORIGINAL PKG

PREPARED BY: _____

Rocio Yee
Planner II

REVIEWED BY: _____

Michael Abraham, AICP, Asst. Director
Planning & Dev. Services Department

APPROVED BY: _____

Jim Minnick, Director
Planning & Development Services Department

Attachments:

Attachment A.	Vicinity Map
Attachment B.	Site Plan
Attachment C.	Water Supply Assessment (WSA) Resolution
Attachment D.	FEIR Resolution and Findings
Attachment E.	MM&RP Resolution
Attachment F.	General Plan Amendment (GPA)24-0002
Attachment G.	Zone Change (ZC)24-0003 Resolution & Ordinance
Attachment H.	CUP 24-0006 Resolution & Conditions of Approval
Attachment I.	Variance (V)24-0002 Resolution
Attachment J.	CUP 24-0007 Resolution & Conditions of Approval
Attachment K.	Variance (V)24-0003 Resolution
Attachment L.	CUP 24-0008 Resolution & Conditions of Approval
Attachment M.	Variance (V)24-0004 Resolution
Attachment N.	CUP 24-0009 Resolution & Conditions of Approval
Attachment O.	Variance (V)24-0005 Resolution
Attachment P.	Comments
Attachment Q.	Draft EIR

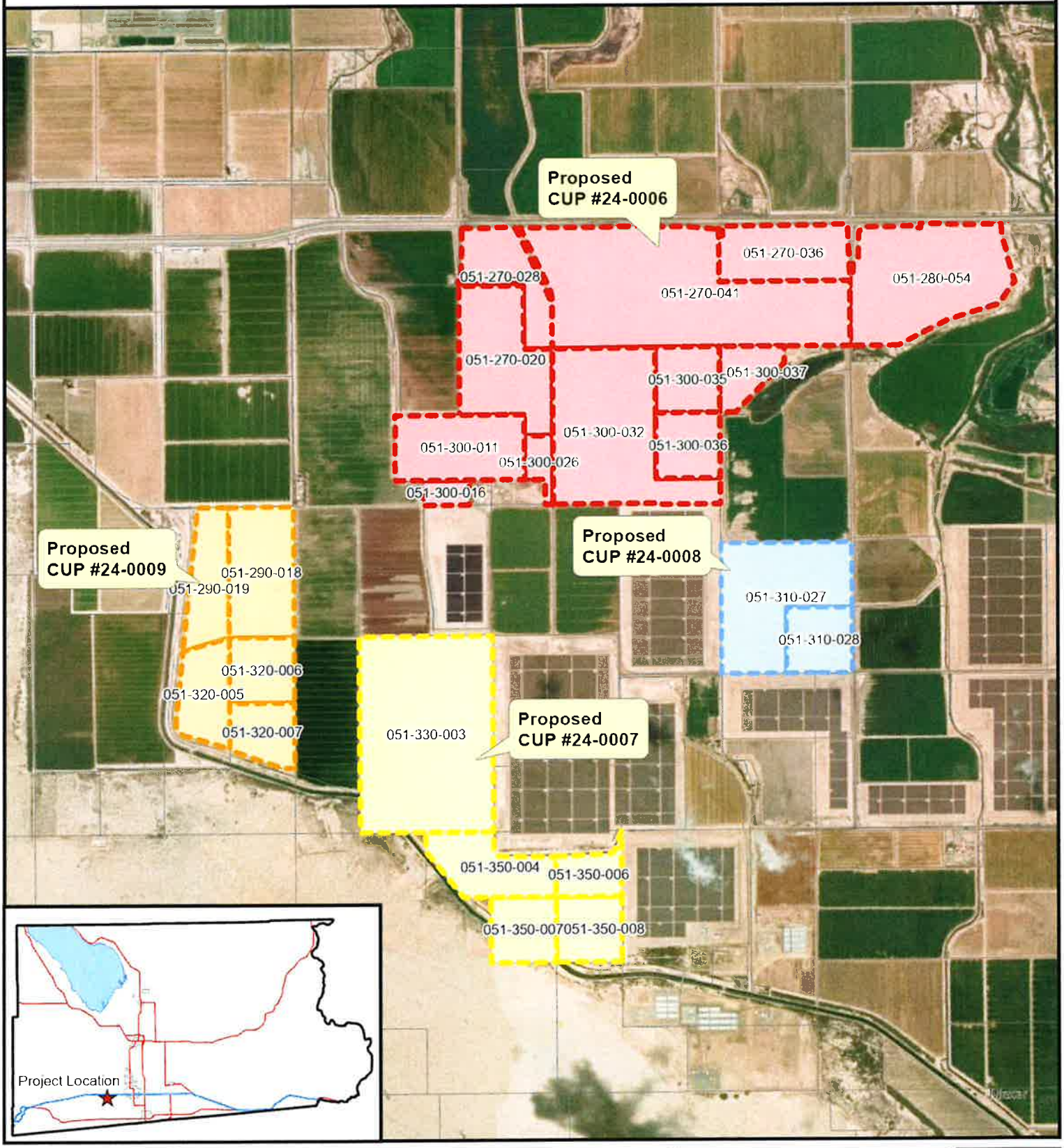
RY/ S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\2. STAFF REPORT\Big Rock 2 Clusster PC STAFF REPORT.docx

PC ORIGINAL PKG

ATTACHMENT "A"
VICINITY MAP

PC ORIGINAL PKG

PROJECT LOCATION MAP



BIG ROCK CLUSTER 2
CUP #24-0006, CUP #24-0007, CUP #24-0008, CUP #24-0009, APN 051-300-036-000 ET AL

Big Rock 2 Cluster North
Big Rock 2 Cluster South
Big Rock 2 Cluster East
Big Rock 2 Cluster West
Parcels

N

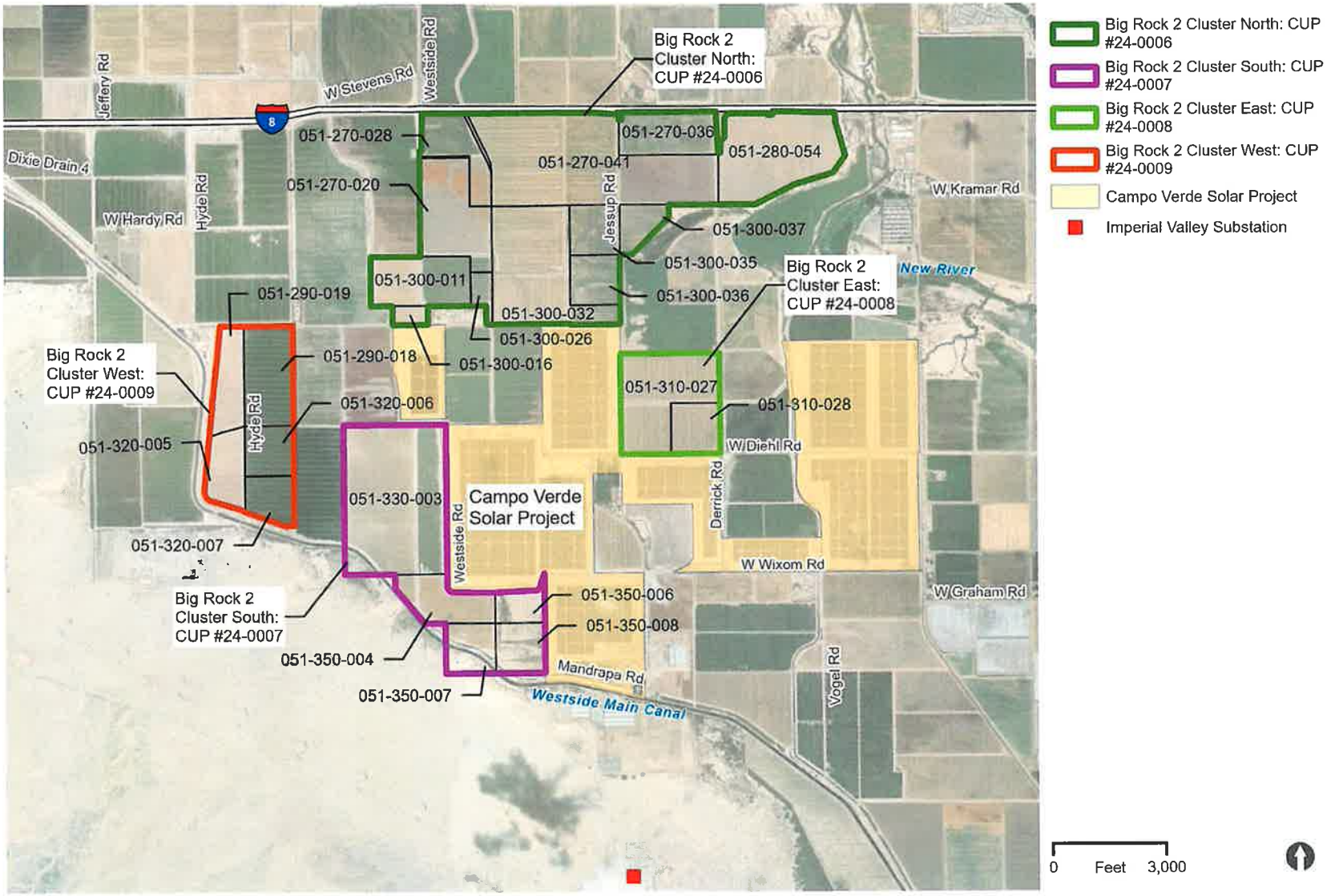
PC ORIGINAL PKG

ATTACHMENT "B"
SITE PLAN

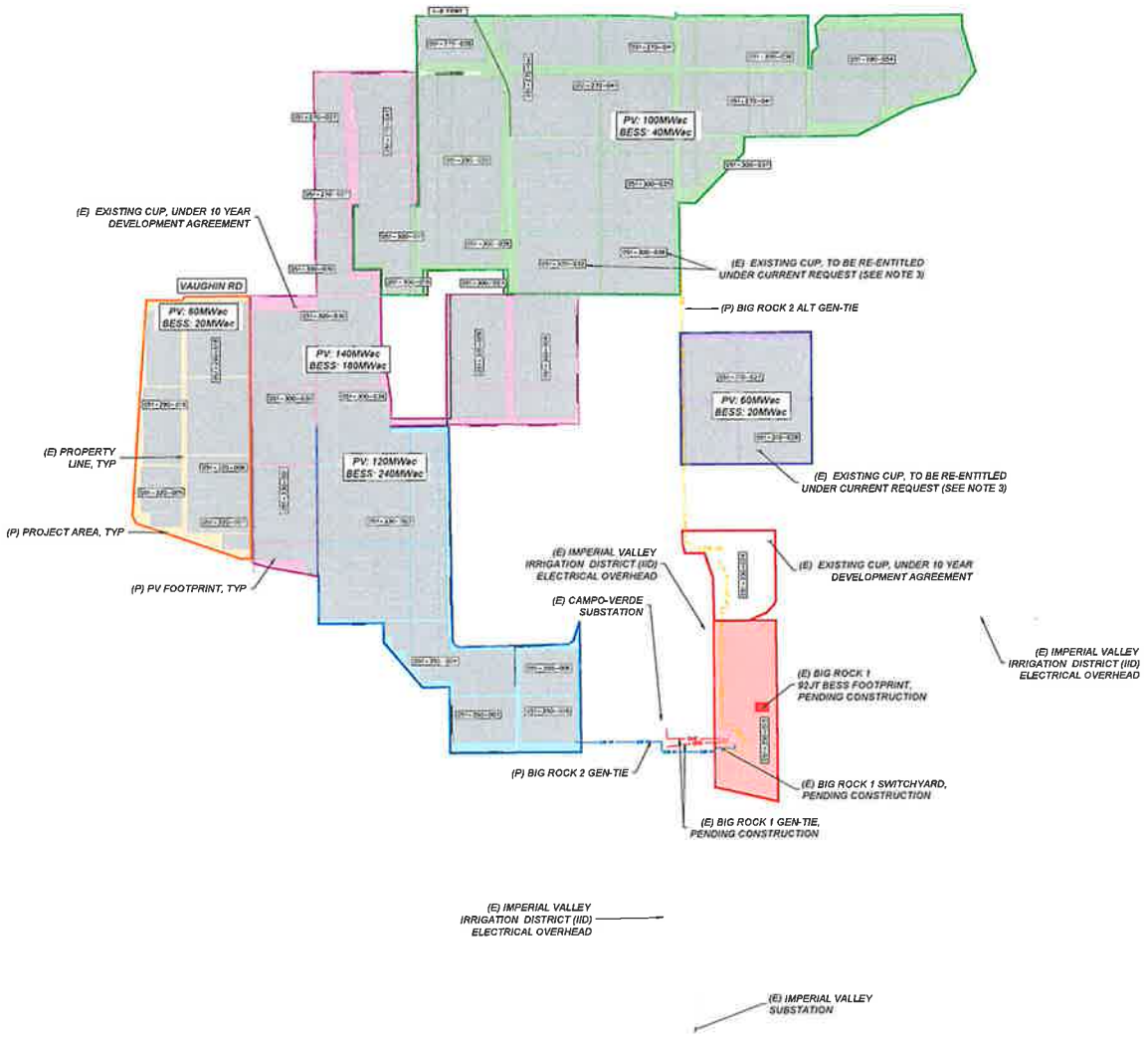
PC ORIGINAL PKG

PC ORIGINAL PKG

Figure 2-2. Project Site



PC ORIGINAL PKG





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
230 kV 230 kV	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
GEN GEN	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

REVISIONS		
#	DATE	COMMENT
1	07/13/2023	PRELIMINARY LAYOUT
2	11/17/2023	PRELIMINARY LAYOUT UPDATE
3	12/01/2023	PRELIMINARY LAYOUT UPDATE
4	03/13/2024	PRELIMINARY LAYOUT UPDATE

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.
3. APNS TO BE RE-ENTITLED INCLUDE:
   LAUREL 2 NORTH CUP # 21-0014:
   #051-300-032 (SOUTH) AND #051-300-036
   LAUREL 2 SOUTH CUP #21-0013:
   #051-310-027 AND #051-310-028

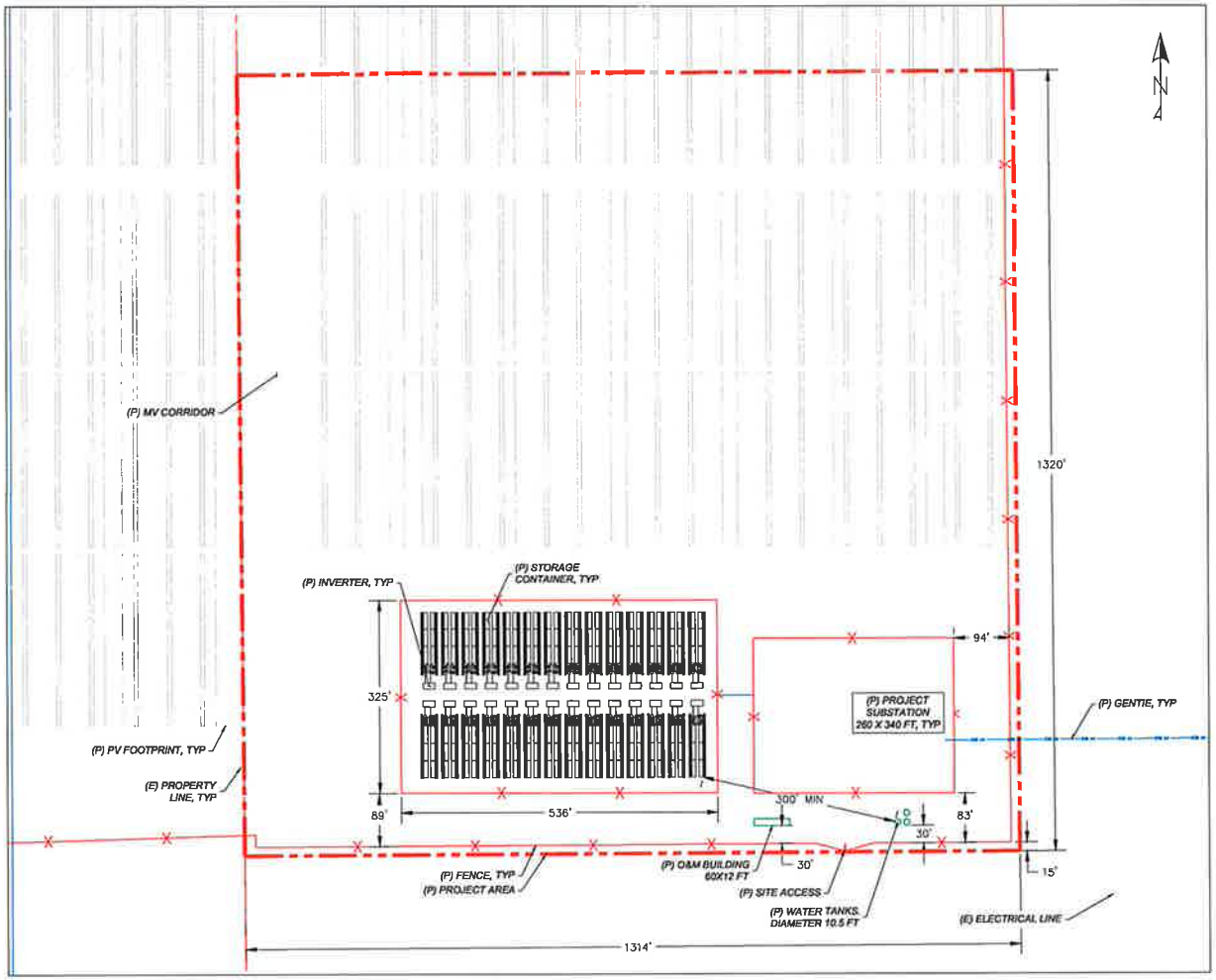
90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL SITE PLAN

DATE: April 12, 2024

SHEET EX-1

PC ORIGINAL PKG



AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

REVISIONS		
#	DATE	COMMENT
1	07/13/2023	PRELIMINARY LAYOUT
2	11/17/2023	PRELIMINARY LAYOUT UPDATE
3	12/01/2023	PRELIMINARY LAYOUT UPDATE
4	03/13/2024	PRELIMINARY LAYOUT UPDATE
5		

NOTES:

1. *CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.*
2. *FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER R QUIR MEN S. FINAL D SIGN SHALL E S J O R VI W AND ILDING P RMIT APPROVALS.*

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

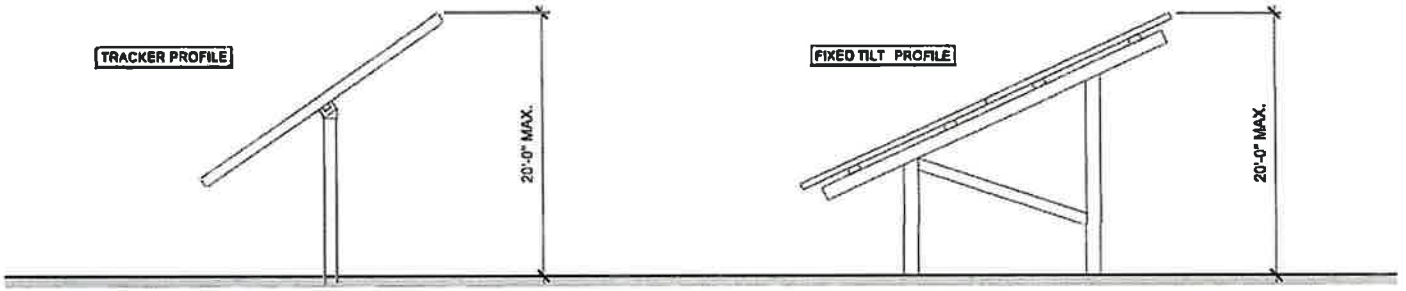
CONCEPTUAL BESS LAYOUT

DATE: March 13, 2024

SHEET: EX-2

1 TYPICAL PANEL & MOUNTING STRUCTURE

Scale: N.T.S



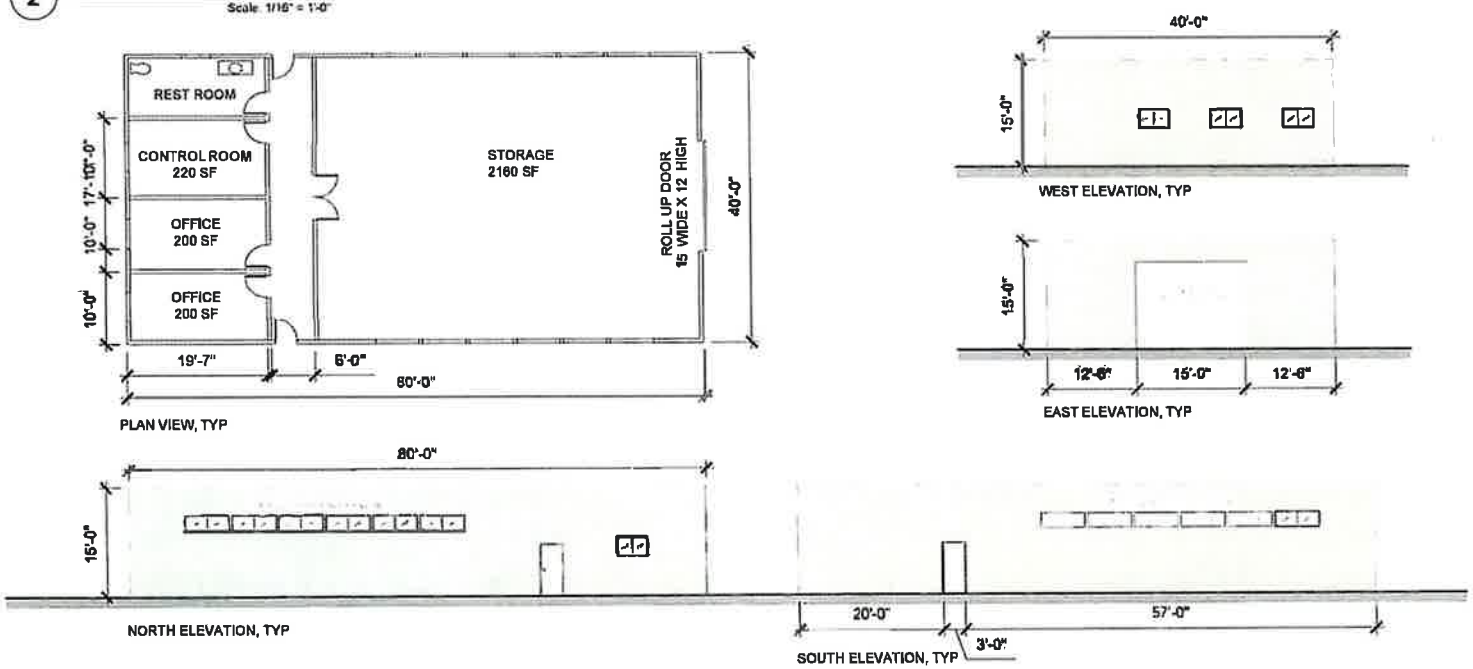
EAST ELEVATION, TYP

EAST ELEVATION, TYP

PRELIMINARY NOT FOR CONSTRUCTION

2 O&M BUILDING, TYP.

Scale: 1/16" = 1'-0"



PLAN VIEW, TYP

WEST ELEVATION, TYP

EAST ELEVATION, TYP

NORTH ELEVATION, TYP

SOUTH ELEVATION, TYP

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

TRACKER AND O&M BUILDING DETAILS, TYP.

DRAWN BY

DATE

SHEET

EX-3

SCALE

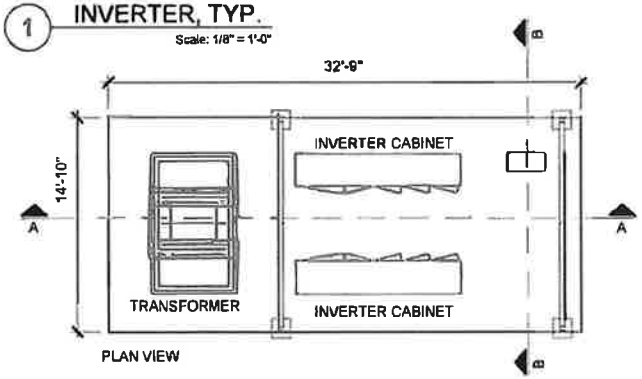
AS NOTED

PC ORIGINAL PKG

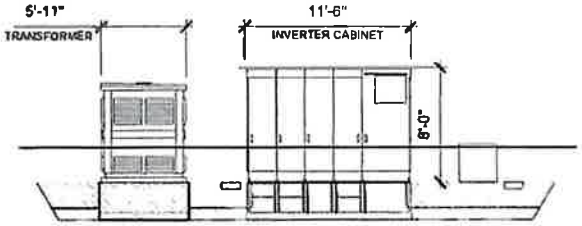
PC ORIGINAL PKG

1 INVERTER, TYP.

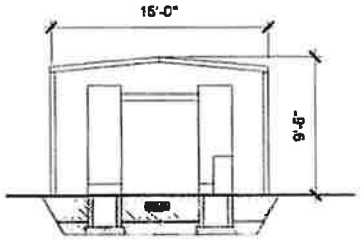
Scale: 1/8" = 1'-0"



PLAN VIEW



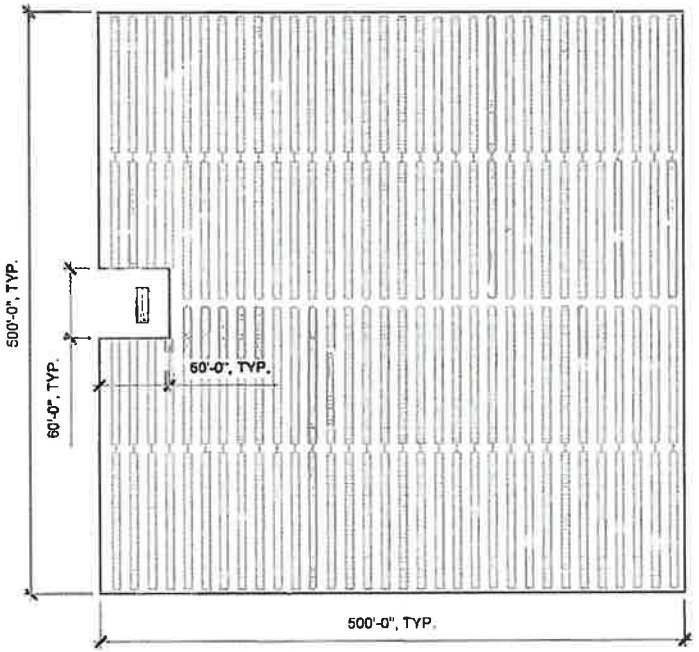
SECTION A-A



SECTION B-B

2 STANDARD SOLAR BLOCK

Scale: N.T.S.



MOUNTING STRUCTURE (BASE AREA)

INVERTER STATION

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

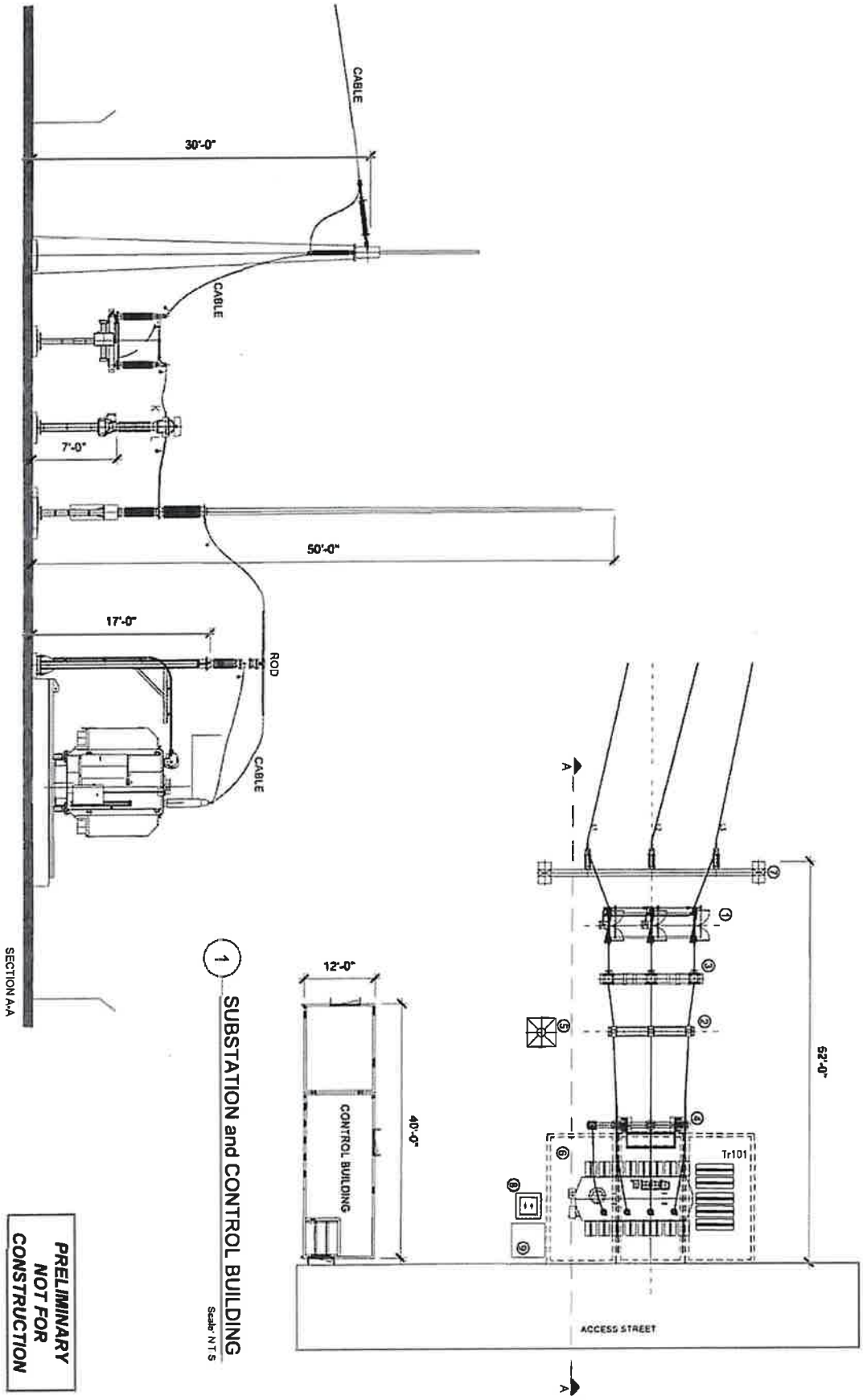
90FI 8me LLC Big Rock 2 Solar and Storage Project

INVERTER AND STANDARD BLOCK DETAILS, TYP.

EX-4

AS NOTED

PC ORIGINAL PKG



1 SUBSTATION and CONTROL BUILDING

Scale: NTS

PRELIMINARY NOT FOR CONSTRUCTION

SCALE: AS NOTED	90FI 8me LLC Big Rock 2 Solar and Storage Project	AVANTUS
EX-5	SUBSTATION DETAILS, TYP.	1801 Century Park East, Suite 700 Los Angeles, CA 90067

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project MONOPOL DETAILS, TYP.	EX-6 AS NOTED

PRELIMINARY NOT FOR CONSTRUCTION

2 66 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

1 230 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

PC ORIGINAL PKG

ATTACHMENT "C"

WATER SUPPLY ASSESSMENT (WSA) RESOLUTION

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL OF THE WATER SUPPLY ASSESSEMENT FOR THE BIG ROCK 2 CLUSTER SOLAR ENERGY GENERATION AND BATTERY STORAGE PROJECT TO THE BOARD OF SUPERVISORS.

WHEREAS, the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project qualifies as a "project" under the Water Code triggering the need to prepare a Water Supply Assessment because the proposed project includes a demand of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project and/or because it is a proposed industrial use occupying more than 40 acres of land. The Water Supply Assessment (WSA) has been prepared in accordance with Water Code 10912(c) (4); and

WHEREAS, the Imperial County Board of Supervisors has the authority and responsibility for approving the Water Supply Assessment; and

WHEREAS, the duty to prepare a Water Supply Assessment falls to the County of Imperial ("County") because the Imperial Irrigation District (IID) is not a public water system within the meaning of the Water Code 10912(c); and,

WHEREAS, the County, in consultation with an expert engineering firm prepared the Water Supply Assessment, which includes any and all Water Supply Assessment addendums; and

WHEREAS, the County has independently reviewed and considered the Water Supply Assessment and the entire administrative record, and

WHEREAS, public notice of said application has been given, and the Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at a public hearing held with respect to this item on September 24, 2025; and

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RECOMMEND APPROVAL TO THE BOARD OF SUPERVISORS BASED ON THE FOLLOWING FINDINGS FOR THE WSA** as follows:

SECTION 1. The Planning Commission has considered the proposed Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project WSA prior to making a decision to recommend approval to the Board of Supervisors. The Planning Commission finds and determines that the WSA is adequate and prepared in accordance with the requirements of Water Code, Section 10912(c)(4) and the analysis of the WSA demonstrates that the total projected water supplies, determined to be available by the County for the Project during normal, single dry, and multiple dry water years, will meet the projected water demand associated with the proposed project and based upon the following findings and determinations.

PC ORIGINAL PKG

SECTION 2. That in accordance with State Planning and Zoning law, the County Planning Commission makes the following findings for the approval of the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project:

1. This Water Supply Assessment (WSA) has determined that the Imperial Irrigation District (IID) has adequate policies, programs and projects in place to ensure water is available for non-agricultural projects, both currently and during normal water years. Adequate agreements, plans and policies are in place that enable the Imperial Unit water supply to be considered reliable for 30 years.

2. IID serves as the regional water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, and industrial water users within its Service Area.

3. IID is a raw water retailer and a domestic raw water wholesaler and does not supply potable drinking water.

4. This WSA has shown that IID water supply is adequate for the operations of this Project. IID's Interim Water Supply Policy (IWSP) for non-agricultural projects dedicates 25,000 AFY of IID's annual water supply to serve new projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID.

5. As urban growth continues in Imperial County, agricultural water use may decline due to the transfer of water consumption to other land uses.

6. In the case of a Supply-Demand Imbalance (SDI), IID's Equitable Distribution Plan (EDP) gives water delivery priority to municipal and industrial users over agricultural users.

NOW, THEREFORE, based on the above findings, the Planning Commission of the County of Imperial **DOES HEREBY** recommend approval to the Board of Supervisors for the proposed Water Supply Assessment for the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project.

Rudy Schaffner, Chairman
Imperial County Planning Commission

PC ORIGINAL PKG

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

PC ORIGINAL PKG

SB 610 – Draft Water Supply Assessment

For

Big Rock 2 Cluster Solar and Storage Project

April 2025 (Revised from November 2023)

Prepared For:

Imperial County
801 Main Street
El Centro, California 92243

PC ORIGINAL PKG

(This page Intentionally left blank)

PC ORIGINAL PKG

Contents

PURPOSE OF WATER SUPPLY ASSESSMENT 7
Project Determination According to SB 610 - Water Supply Assessment 7
EXECUTIVE SUMMARY 9
PROJECT DESCRIPTION 12
Water Use Efficiency Best Management Practice Incorporated Into Project 13
Additional Project Measures Under Potential Water Curtailment 13
Description of IID Service Area 17
Climate Factors 17
Imperial Valley Historic and Future Land and Water Uses 20
Imperial Integrated Regional Water Management Plan (October 2012) 21
IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009) 24
IID Temporary Land Conversion Fallowing Policy (May 2012) 25
IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS 26
California Law 26
Law of the River 26
IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND 36
WATER AVAILABILITY – NORMAL YEAR 36
EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS 39
Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP) 39
Equitable Distribution Plan (EDP) History 42
Projected Water Supplies 43
PROJECT WATER AVAILABILITY FOR A 20-YEAR PERIOD TO MEET PROJECTED DEMANDS 45
EXPECTED WATER DEMANDS FOR THE PROPOSED PROJECT 47
IID'S ABILITY TO MEET DEMANDS WITH WATER SUPPLY 51
Expanding Water Supply Portfolio 54
IID Near Term Water Supply Projections 57
COUNTY OF IMPERIAL FINDINGS 59
ASSESSMENT CONCLUSION 61
RESOURCES AND REFERENCES 62
ATTACHMENTS 64

PC ORIGINAL PKG

Figures

Figure 1. Project Site Regional Location 14
Figure 2. Aerial Map of Project Vicinity 15
Figure 3. Project Layout/Site Plan 16
Figure 4. IID Imperial Unit Boundary and Canal Network 18
Figure 5. Major Colorado River Reservoir Storage Facilities and Basin Location Map 32
Figure 6. Lake Mead Water Elevation Levels 02.11.24 35
Figure 7. Lake Mead Schematic (June 15, 2022) 41

Tables

Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024 19
Table 2. IID Areawide Annual Precipitation (In). (1990-2024) 19
Table 3. Monthly Mean Temperature (°F)- Imperial, CA 10- Year, 30- Year & 100- Year (2015-2024,1995-2024,1925-2024) 19
Table 4. Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024) 20
Table 5. Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY) 22
Table 6 Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY) 23
Table 7. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2020 24
Table 8. Interim Water Supply Policy 2024 Annual Non-Agricultural Water Supply Development Fee Schedule 24
Table 9. CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY) 30
Table 10. Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2022 33
Table 11. IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B) 37
Table 12. IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024 40
Table 13. IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024 41
Table 14. Project Operational Water Uses (AFY) 47
Table 15. Ten-Year Historic Delivery (AFY), 2012-2021 48
Table 16. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024 51
Table 17. IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2025 52
Table 18. 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam 52
Table 19. IID Capital Project Alternatives and Cost (May 2009 price levels $) 57

PC ORIGINAL PKG

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects
Attachment B: IID Equitable Distribution Plan

PC ORIGINAL PKG

Acronyms

AF	Acre-Foot or Acre-Feet
AFY	Acre-Feet per Year
AOP	Annual Operations Plan
CAP	Central Arizona Project
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CDWR	California Department of Water Resources
CEQA	California Environmental Quality Act
CRWDA	Colorado River Water Delivery Agreement
CUP	Conditional Use Permit
CVWD	Coachella Valley Water District
EDP	IID Equitable Distribution Plan
EIS	Environmental Impact Statement
ICPDS	Imperial County Planning and Development Services
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IOPP	Inadvertent Overrun Payback Policy
ISG	Interim Surplus Guidelines
IRWMP	Integrated Regional Water Management Plan
IWSP	Interim Water Supply Policy
KAF	Thousand Acre Feet
LAFCO	Local Agency Formation Commission
LCR	Lower Colorado Region
MCI	Municipal, commercial, industrial
MGD	Million Gallons per Day
MW	Megawatt
MWD	Metropolitan Water District of Southern California
NAF	Naval Air Facility
PVID	Palo Verde Irrigation District
QSA/	Quantification Settlement Agreement and Related Agreements Transfer Agreements
SB	Senate Bill
SDCWA	San Diego County Water Authority
SNWA	Southern Nevada Water Authority
TLCFP	Temporary Land Conversion Fallowing Policy
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
WSA	Water Supply Assessment

PC ORIGINAL PKG

PURPOSE OF WATER SUPPLY ASSESSMENT

This Water Supply Assessment (WSA) was prepared for the County of Imperial (Lead Agency) by Dudek, regarding the Big Rock 2 Cluster Solar and Storage Project (Big Rock 2 Solar or Project) proposed by 90 FL 8ME LLC (the "Applicant"). This study is a requirement of California law, specifically Senate Bill 610 (referred to as SB 610). SB 610 is an act that amended Section 21151.9 of the Public Resources Code, and Sections 10631, 10656, 10910, 10911, 10912, and 10915 of the Water Code. SB 221 is an act that amended Section 11010 of the Business and Professions Code, while amending Section 65867.5 and adding Sections 66455.3 and 66473.7 to the Government Code. SB 610 was approved by the Governor and filed with the Secretary of State on October 9, 2001, and became effective January 1, 2002.[1] SB 610 requires that a lead agency determine that a project (as defined in CWC Section 10912) that is subject to the California Environmental Quality Act (CEQA), to identify any public water system that may supply water for the project and to request the applicants to prepare a specified water supply assessment.

This study has been prepared pursuant to the requirements of CWC Section 10910, as amended by SB 610 (Costa, Chapter 643, Stats. 2001). The purpose of SB 610 is to advance water supply planning efforts in the State of California; therefore, SB 610 requires the Lead Agency, to identify any public water system or water purveyor that may supply water for the project and to prepare the WSA after a consultation. Once the water supply system is identified and water usage is established for construction and operations for the life of the project, the lead agency is then able to coordinate with the local water supplier and make informed land use decisions to help provide California's cities, farms and rural communities with adequate water supplies.

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in California Water Code (CWC) Section 10912 [a]) that are subject to the California Environmental Quality Act (CEQA). Due to increased water demands statewide, this water bill seeks to improve the link between information on water availability and certain land use decisions made by cities and counties. This bill takes a significant step toward managing the demand placed on California's water supply. It provides further regulations and incentives to preserve and protect future water needs. Ultimately, this bill will coordinate local water supply and land use decisions to help provide California's cities, farms, rural communities and industrial developments with adequate long-term water supplies. The WSA will allow the lead agency to determine whether water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Project Determination According to SB 610 - Water Supply Assessment

With the introduction of SB 610, any project under the California Environmental Quality Act (CEQA) shall provide a Water Supply Assessment if the project meets the definition of CWC Section 10912. Water Code

[1] SB 610 amended Section 21151.9 of the California Public Resources Code, and amended Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Section 10913, and added and amended Section 10657 of the Water Code. SB 610 was approved by California Governor Gray Davis and filed with the Secretary of State on October 9, 2001.

PC ORIGINAL PKG

section 10911(c) requires that the lead agency "determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." Specifically, Water Code section 10910(c)(3) states that "If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses."

After review of CWC Section 10912a, and Section 10912 (a)(5)(B), it was determined that the proposed Big Rock 2 Solar is deemed a project as it is considered an industrial use that will occupy 1,849 acres of privately owned agricultural land.

PC ORIGINAL PKG

EXECUTIVE SUMMARY

The County of Imperial in coordination with Imperial Irrigation District (IID) has requested a WSA as part of the environmental review for the proposed Big Rock 2 Solar Project ("Project"). This study is intended for use by Imperial County and Imperial Irrigation District in its evaluation of water supplies for existing and future land uses. The evaluation examines the following water elements:

- Water availability during a normal year
- Water availability during a single dry year, and multiple dry water years
- Water availability during a 30-year projection to meet existing demands
- Expected 30-year water demands of the Project
- Reasonably foreseeable planned future water demands to be served by the Imperial Irrigation District under Equitable Distribution Plan apportionment

The proposed Project site is located within unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. Existing land uses surrounding the Project site consist largely of agricultural parcels sparsely occupied by farm or rural residential uses. The Project site is located across multiple U.S. Geological Survey 7.5-minute quadrangles, including the Seeley, Plaster City, Mount Signal, and Yuha Basin quadrangles. The Project site is within IID's Imperial Unit and district boundary and as such is eligible to receive water service. Water infrastructure capacity is not a part of this assessment. 90FL 8ME LLC is responsible for contacting IID Water Engineering Department for an infrastructure capacity assessment. Any infrastructure improvements, costs and environmental compliance associated with improvements to accommodate the Project's water supply or for the conservation of the water supply needed for the Project is the sole responsibility of 90FL 8ME LLC.

IID adopted an Interim Water Supply Policy (IWSP) in 2009 for new Non-Agricultural Projects, under which water supplies may be contracted to serve new developments within IID's water service area. For applications processed under the IWSP, applicants shall be required to pay a processing fee and, after IID board approval of the corresponding water supply agreement, will be required to pay a reservation fee(s) and annual water supply development fees. The water supply development fees are collected for the development of water supply projects, such as water conservation projects, water storage projects and/or water augmentation projects.

Under the IWSP, IID may set aside up to 25,000 acre-feet annually (AFY) of IID's Colorado River water supply to serve new non-agricultural projects with water created from IID efficiency conservation projects and programs. As of March 2025, a balance of 18,620 AFY remains available under the IWSP for new non-agricultural projects, providing a mechanism for the development of reasonably sufficient water supplies for such projects. The proposed Project water demand of approximately 10 AFYrepresents 0.054 percent of the annual unallocated supply that may be created and set aside for new non-agricultural projects.

The County of Imperial anticipates non-agricultural project water supply demand within their jurisdiction, as the land use authority, is likely to exhaust the 18,620 AFY available under the IWSP within the

PC ORIGINAL PKG

foreseeable 30-year planning period. Thus, the proposed Project's estimated water demand, combined with other development anticipated in the area is likely to adversely affect IID's ability to provide water to other users in IID's water service area unless mitigation is incorporated. This industrial water use project may need to enter into a water supply agreement with IID under which water conservation and augmentation commitments may be required of the Big Rock 2 Solar facility.

IID has a proven record of successful development and implementation of water conservation programs and projects in response to fully executed water supply agreements with public and private entities for water conservation efforts that are fully funded by the party requesting the conserved water supply. IID will continue to meet all existing and new water supply and conservation agreement obligations consistent with the terms and conditions set forth in those agreements, including any environmental requirements and cost provisions.

In efforts to address any potential water supply/demand imbalances, IID adopted a revised Equitable Distribution Plan for the apportionment of water to all water user categories including for commercial/industrial water uses such as the proposed Project. Implementation of the EDP initiates every January 1st and continues throughout the year unless the IID Board of Directors takes specific action. The latest revisions to the EDP were made in July of 2023 (IID EDP). Under the EDP, water supplies may be restricted to Big Rock 2 as described under the IID Water Supply & Demand Section, Equitable Distribution Plan sub-section of this WSA.

In June 2022, U.S. Bureau of Reclamation Commissioner Camille Touton testified before a congressional committee and called for the Basin states to develop a plan before the end of the year to reduce demands by 2-4 million acre-feet per year, through 2026, or the Secretary of the Interior would take regulatory action to force these reductions in order to protect the Colorado River system in light of the prolonged drought conditions.

In 2023, California submitted a voluntary conservation proposal to Reclamation to conserve up to 400,000 AFY through 2026 as their commitment to Lake Mead and the Colorado River System. Post 2026, new operating guidelines would come into effect, potentially affecting all River contractors. IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community while simultaneously ramping up water conservation programs in an effort to augment local water supplies, to some degree, should Basin-wide cuts be unavoidable. In the interim, IID has entered into a System Conservation Implementation Agreement (SCIA) with the U.S. Bureau of Reclamation for its share of the California proposal under a voluntary plan that would not exceed 250,000 AFY (through 2026) and result in compensation from Reclamation for local water conservation efforts.

IID's Lake Mead contributions for 2022 and 2023 were 25,000 AF and 56,111 AF, respectively, which were over and above IID's transfer obligation schedule. For 2024, IID conserved an estimated 195,000 AF for Lake Mead above its transfer obligation schedule. Provisional conservation numbers indicate IID saved a total of 661,000 AF in 2024 for all commitments combined. Consequently, California's 2024 water use, are the lowest in decades and IID's, in particular, is the lowest since 1941. Despite these historic contributions,

PC ORIGINAL PKG

Lake Mead elevation had increased by only 17 feet by the end of 2024, and continues to operate under shortage conditions. It is unknown, as of April 2025, what post 2026 conservation measures may need to be considered by the district. Nonetheless, IID's conservation capacity remains reliable.

PC ORIGINAL PKG

PROJECT DESCRIPTION

90FL 8ME LLC is proposing to construct and operate a 500-megawatt (MW) utility-scale photovoltaic solar energy generation and a 500 MW battery energy storage system (BESS) on approximately 1,849 acres of private lands in Imperial County. More specifically, the Project is located within unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The Project site is located across multiple U.S. Geological Survey 7.5-minute quadrangles, including the Seeley, Plaster City, Mount Signal, and Yuha Basin quadrangles. Existing land uses surrounding the Project site consist largely of agricultural parcels sparsely occupied by farm or rural residential uses. Affected parcels are noted as follows: 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-300-011, 051-300-016, 051-300-026, 051-300-035, 051-300-037, 051-300-032, 051-300-036, 051-330-003, 051-350-004, 051-350-006, 051-350-007, 051-350-008, 051-310-027, 051-310-28, 051-290-018, 051-290-019, 051-320-005, 051-320-006, and 051-320-007.

Please refer to **Figure 1** for the Project's Regional Location (**Figure 1.** Project Site Regional Location), and **Figure 2** for the Project Site and Vicinity **(Figure 2.** Aerial View of Project Site and Vicinity).

In general, the project can be described as follows: the Project's permanent facilities would include service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, energy storage system(s), and operations and maintenance (O&M) facilities, none of which is expected to adversely affect any of the existing IID laterals or drains. Power generated by the Project would be collected using up to 66-kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead gen-tie line would then link the Project substation to the planned Liebert Switchyard, which will be connected via an overhead 230-kilovolt gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation. Please refer to **Figure 3** for the conceptual project layout and tentative site plan. (**Figure 3.** Project Layout/Site Plan).

The solar facility involves seeking approval of a total of four Conditional Use Permits (CUPs) that will allow for 90FL 8ME LLC to secure the CUPs from the Lead Agency along with permits and approvals from other relevant agencies as required by law.

Water services for the Project will be provided by Imperial Irrigation District (IID). The Project is anticipated to require 700 AF of water to support construction over a 1.5 to 2-year period, and up to 10 AFY to support Project O&M over a 30-year operational period. The construction water demand, would primarily be for dust suppression, whereas operational demands would be for the operation and maintenance O&M building, fire flow storage, and periodic panel washing.

The Project's O&M water demand is conservatively assumed to be up to 10 AFY for long-term planning purposes. However, the actual O&M demand will likely be much lower, possibly as little as approximately 1 AFY. This estimate is based on the sanitary demands of 15 employees at 55 gallons per capita per day

PC ORIGINAL PKG

(approximately 0.9 AFY)[2], a one-time demand to fill one or more water storage tanks totaling 100,000 gallons for fire supply (approximately 0.01 AFY over the life of the Project)[3], and annual panel washing requiring approximately 16,500 gallons per panel washing event (0.05 AFY)[4]. It is assumed that no water for dust control during operation will be necessary.

The proposed Project will need to contract with IID to deliver up to 350 AFY of untreated water for construction, and up to 10 AFY for O&M via the IID Westside Main Canal and delivery gates listed in Table 15..

Water Use Efficiency Best Management Practice Incorporated Into Project

The Project proposes to incorporate the following Best Management Practices for water use efficiency under the requested operational water supply amount of 10 AFY: 1) limit panel washing to the minimum frequency required to maintain output from solar facility, 2) install low flow fixtures in O&M building, and 3) repair water leaks immediately.

Additional Project Measures Under Potential Water Curtailment

Should reductions to IID's water supply be ordered or directed from a governmental authority having appropriate jurisdiction, Big Rock 2 Solar may be required to reduce its water supply demand by a proportionate reduction of the total volume of water available to IID. Additional, operational changes that may be implemented by the Project under these unpredictable conditions are as follows: 1) use portable toilets and 2) no panel washing

Incorporation of these additional measures is anticipated to conserve approximately 100 percent of overall water supply demand for the Project if operating under curtailment.

[2] 55 gpd/person * 15 persons = 825 gpd; 825 gpd * 365 days = 301,125 gallons per year.
[3] 100,000 gallons / 33 years = 3,030 gallons per year.
[4] 33 gal/MW * 500 MW = 16,500 gallons per annual panel washing event (Klise et al., 2013; Macknick et al., 2011).

PC ORIGINAL PKG



Figure 1. Project Site Regional Location

PC ORIGINAL PKG

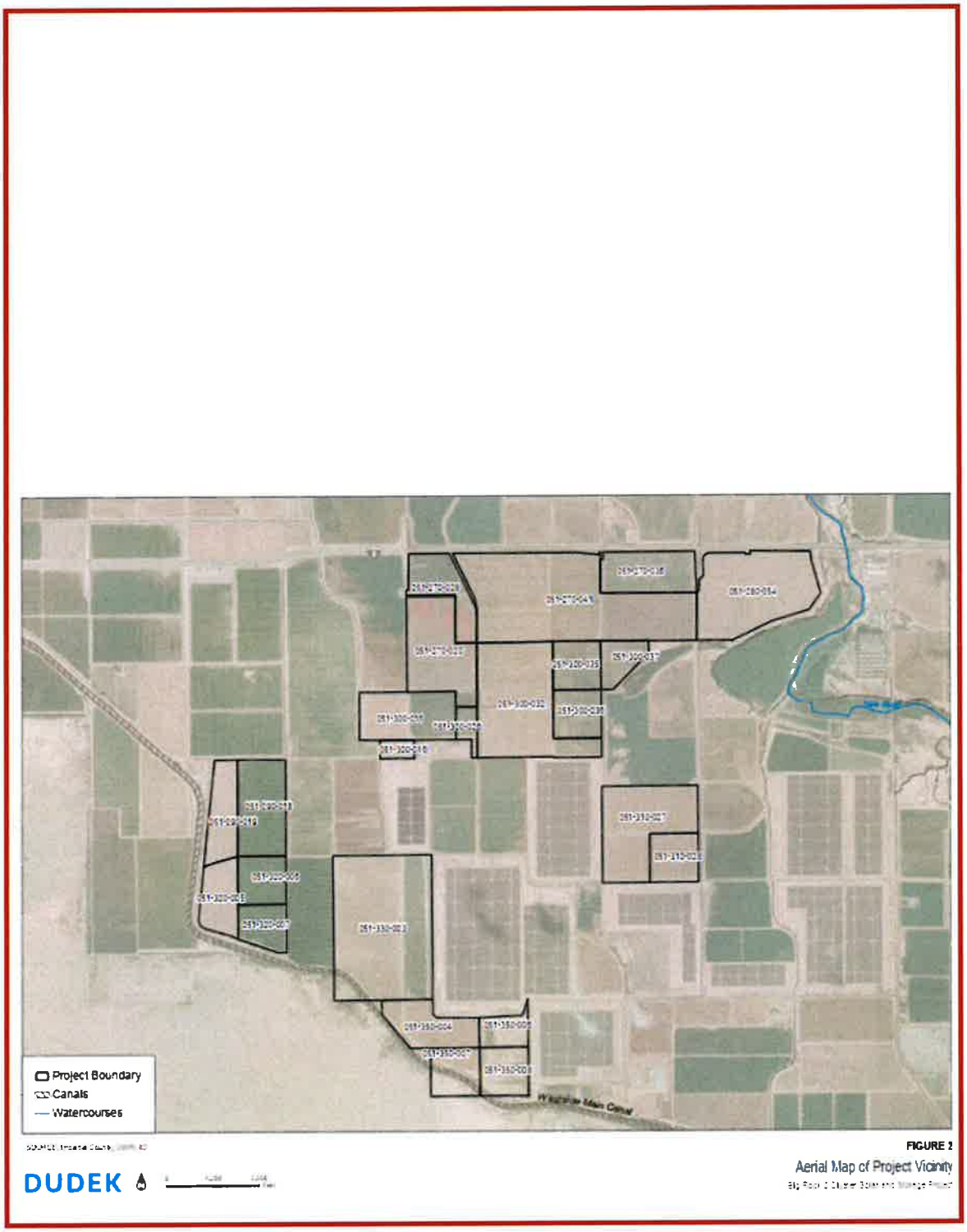


Figure 2. Aerial Map of Project Vicinity

PC ORIGINAL PKG

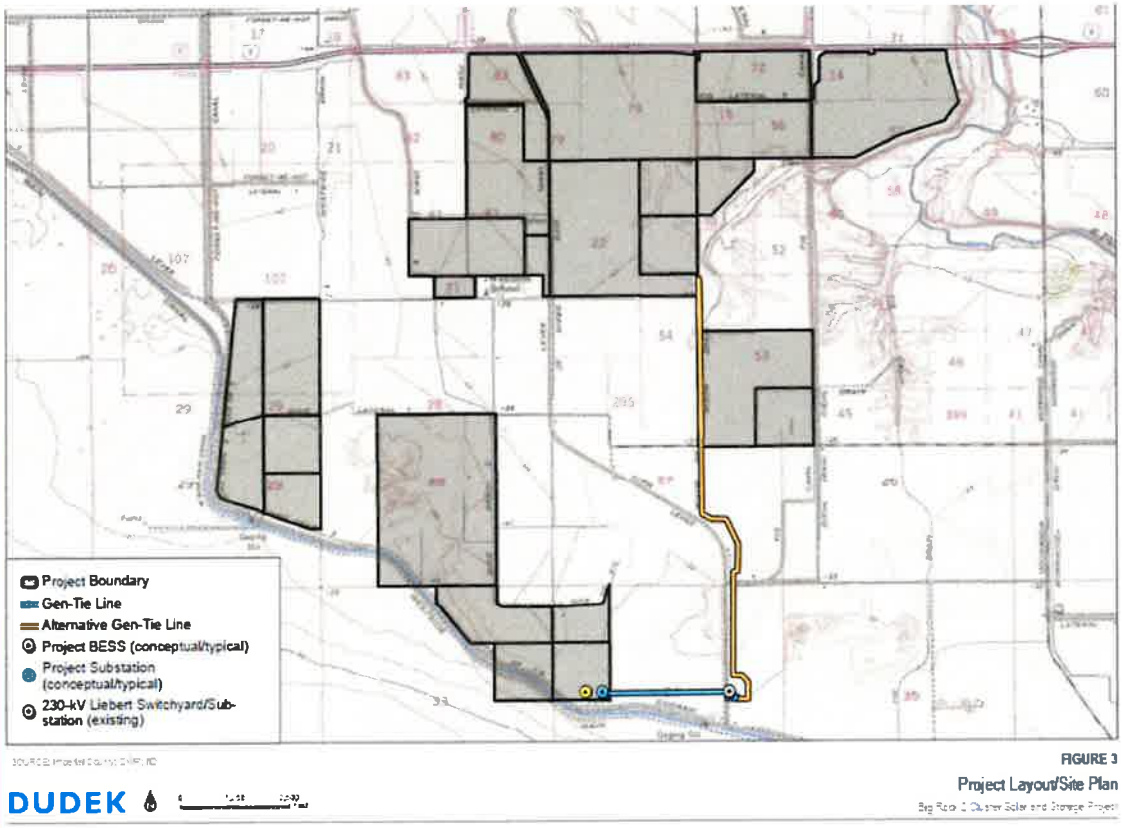


Figure 3. Project Layout/Site Plan

PC ORIGINAL PKG

Description of IID Service Area

The proposed Project site is located in Imperial County in the southeastern corner of California. The County is comprised of approximately 4,597 square miles or 2,942,080 acres.[5] Imperial County is bordered by San Diego County to the west, Riverside County to the north, the Colorado River/Arizona boundary to the east, and 84 miles of International Boundary with the Republic of Mexico to the south. Approximately fifty percent of Imperial County is undeveloped land under federal ownership and jurisdiction. The Salton Sea accounts for approximately 11 percent of Imperial County's surface area. In 2024, 16 percent of the area was in irrigated agriculture (468,530 acres), including 14,676 acres of the Yuma Project, some 35 sections or 5,5568 acres served by Palo Verde Irrigation District (PVID), and 448,286 net acres served by IID.[6, 7]

The area primarily served by IID is located in the Imperial Valley, which is generally contiguous with IID's Imperial Unit, lies south of the Salton Sea, north of the U.S./Mexico International Border, and generally in the 699,132 acre area between IID's Westside Main and East Highline Canals. In 2024, IID delivered untreated water to 497,241 acres, predominantly in the Imperial Valley, along with small areas of East and West Mesa land, including non-agricultural use, but excluding temporarily fallowed land.

The developed area consists of seven incorporated cities (Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland), three unincorporated communities (Heber, Niland and Seeley), and three institutions (Naval Air Facility [NAF] El Centro, Calipatria CDCR, and Centinela CDCR) and supporting facilities. **Figure 4** provides a map of the IID canal network, as well as cities, communities and main canals.

Climate Factors

Imperial Valley, located in the Northern Sonoran Desert, which has a subtropical desert climate is characterized by hot, dry summers and mild winters. Clear and sunny conditions typically prevail, and frost is rare. The region receives 85 to 90 percent of possible sunshine each year, the highest in the United States. Winter temperatures are mild rarely dropping below 32°F, but summer temperatures are very hot, with more than 100 days over 100°F each year. The remainder of the year has a relatively mild climate with temperatures averaging in the mid-70s.

The 100-year average climate characteristics are provided in Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024. Rainfall contributes around 50,000 AF of effective agricultural water per inch of rain. Most rainfall occurs from November through March; however, summer storms can be significant in some years. Annual areawide rainfall is shown in Table 2. IID Areawide Annual Precipitation (In). (1990-2024). The thirty-year, 1995-2024, average annual air temperature was 74.13°F, and average annual rainfall was 2.40 inches, see Tables 3 and 4. This record shows that while average annual rainfall has fluctuated, the 10-year average temperatures have slightly increased over the 30-year averages.

[5] *Imperial County General Plan*, Land Use Element 2008 Update
[6] *USBR website: Yuma Project. PVID contacted Chris Parrish for acreage April 2025.*
[7] IID Annual Inventory of Areas Receiving Water Years 2023, 2022, 2021.

PC ORIGINAL PKG

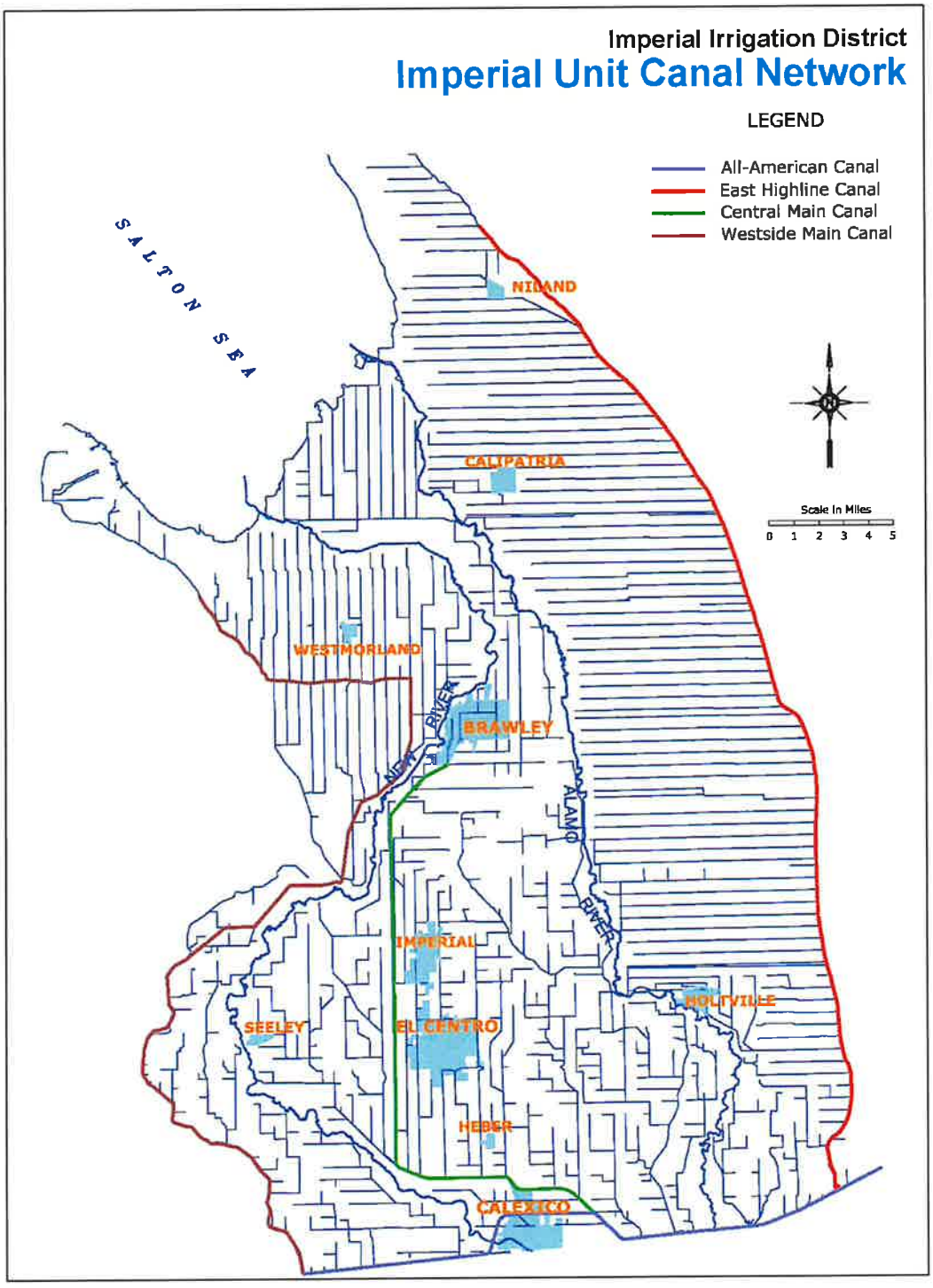


Figure 4. IID Imperial Unit Boundary and Canal Network

PC ORIGINAL PKG

Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024

Climate Characteristic	Annual Value
Average Precipitation (100-year record, 1925-2024)	2.75 inches (in)
Minimum Temperature, Jan 1937	16 °F
Maximum Temperature, July 1995	121 °F
Average Minimum Temperature, 1925-2024	48.5 °F
Average Maximum Temperature, 1925-2024	98.4 °F
Average Temperature, 1925-2024	73.2 °F

Source: IID Imperial Weather Station Record

Table 2. IID Areawide Annual Precipitation (In). (1990-2024)

1990	1991	1992	1993	1994	1995	1996
1.646	3.347	4.939	2.784	1.775	1.251	0.685
1997	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1.328	2.604	1.399	0.612	0.516	0.266	2.402
2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
4.116	4.140	0.410	1.331	1.301	0.619	3.907
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
2.261	2.752	2.772	1.103	2.000	1.867	2.183
2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
1.305	3.017	2.685	1.688	1.265	1.40	TBD

Source: Computation based on polygon average of CIMIS as station came online in the WISKI.[8]

Notable from Table 2 (above) and Table 3(below) is that while average annual rainfall measured at IID Headquarters in Imperial, California, has been decreasing, monthly average temperatures are remarkably consistent.

Table 3. Monthly Mean Temperature (°F)- Imperial, CA 10- Year, 30- Year & 100- Year (2015-2024,1995-2024,1925-2024)

	Jan			Feb			Mar			Apr		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	81	34	**58**	85	36	**51**	92	42	**67**	101	49	**74**
30-year	81	34	**57**	84	36	**60**	93	41	**66**	100	47	**72**
100-year	80	32	**56**	84	35	**59**	91	40	**65**	99	46	**71**
	May			**Jun**			**Jul**			**Aug**		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	104	54	**77**	115	62	**89**	116	72	**95**	115	73	**94**
30-year	106	54	**78**	113	60	**87**	115	69	**93**	114	70	**93**
100-year	105	53	**78**	113	59	**86**	114	68	**92**	113	68	**91**
	Sep			**Oct**			**Nov**			**Dec**		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	112	65	**88**	103	53	**78**	90	40	**65**	82	36	**58**
30-year	111	63	**88**	102	51	**76**	90	39	**64**	81	33	**56**
100-year	111	61	**86**	102	49	**75**	89	38	**63**	80	32	**56**

Source: IID Imperial Headquarters Station Record (Data provided by IID staff)

[8] From 1/1/1990-3/23/2004, 3 CIMIS stations: Seeley, Calipatria/Mulberry, Meloland; 3/24/2004-7/5/2009, 4 CIMIS stations (added Westmorland N.); 7/6/2009-12/1/2009, 3 CIMIS stations: Westmorland N. offline; 12/2/2009-2/31/2009, 4 CIMIS stations, Westmorland N. back online; 1/1/2010-9/20/2010.

PC ORIGINAL PKG

Table 4. Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
10-year	0.58	0.17	0.27	0.11	0.08	0.01	0.07	0.16	0.34	0.12	0.17	0.32	**2.38**
30-year	0.43	0.35	0.23	0.09	0.05	0.00	0.13	0.23	0.31	0.16	0.19	0.31	**2.40**
100-year	0.38	0.36	0.24	0.10	0.03	0.00	0.10	0.30	0.35	0.24	0.19	0.47	**2.75**

Source: IID WIS: CIMIS stations polygon calculation (Data provided by IID staff).

Imperial Valley depends on the Colorado River for its water, which IID transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Golden State Water (which includes all or portions Calipatria, Niland, and some land adjacent within Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. Industries outside the municipal areas treat the water to the required standards of their industry. To comply with U.S. Environmental Protection Agency (USEPA) requirements and avoid termination of canal water service, residents in the IID water service area who do not receive treated water service must obtain alternative water service for drinking and cooking from a state-approved provider. To avoid penalties that could exceed $25,000 a day, IID strictly enforces this rule. The IID Water Department tracks nearly 3,200 raw water service accounts required by the State Water Resources Control Board's Department of Drinking Water to have alternate state approved drinking water service. IID maintains a small-acreage pipe and drinking water database and provides an annual compliance update to the Department of Drinking Water.

Imperial Valley Historic and Future Land and Water Uses

Agricultural development in the Imperial Valley began at the turn of the twentieth century. In 2023, gross agricultural production for Imperial County was valued at $2,692,716,000, of which approximately $2.6 billion was produced in the IID water service area.[9] While the agriculture-based economy is expected to continue, land use is projected to change somewhat over the years as industrial and/or alternative energy development and urbanization occur in rural areas and in areas adjacent to existing urban centers, respectively.

Imperial Valley's economy is gradually diversifying. Agriculture will likely continue to be the primary industry within the valley; however, two principal factors anticipated to reduce crop acreage are renewable energy (geothermal and solar) and urban development. Over the next twenty years, urbanization is expected to slightly decrease agriculture land use to provide space for an increase in residential, commercial and industrial uses. The transition from agricultural land use typically results in a net decrease in water demand for municipal, commercial, and solar energy development; and a net increase in water demand for geothermal energy development. Local energy resources include geothermal, wind, biomass and solar. The County General Plan provides for development of energy production centers or energy parks within Imperial County. Alternative energy facilities will help California

[9] 2023 Imperial County Crop and Livestock Report

PC ORIGINAL PKG

meet its statutory and regulatory goals for increasing renewable power generation and use and decrease water demands in Imperial County. As a solar project, the Big Rock 2 project would provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.

The IID Board has adopted the following policies and programs to address how to accommodate water demands under the terms of the QSA/ Transfer Agreements and minimize potential negative impacts on agricultural water uses:

Imperial Integrated Regional Water Management Plan (IRWMP): adopted by the board on December 18, 2012, and by the County of Imperial, to meet the basic requirement of California Department of Water Resources (CDWR) for an IRWM plan. In all, 14 local agencies adopted the 2012 Imperial IRWMP.

Interim Water Supply Policy for Non-Agricultural Projects: adopted by the board on September 29, 2009, to ensure sufficient water will be available for new development, in particular, anticipated renewable energy projects until the board selects and implements capital development projects such as those considered in the Imperial IRWMP.

Temporary Land Conversion Fallowing Policy: adopted by the board on May 8, 2012, and revised on March 29, 2016, to provide a framework for a temporary, long-term fallowing program to work in concert with the IWSP and IID's coordinated land use/water supply strategy.

Equitable Distribution Plan: final adoption by the board on July 26, 2023, to provide a mechanism for IID to administer apportionment of the district's quantified annual supply of Colorado River water.

In addition, water users within the IID service area are subject to the statewide requirement of reasonable and beneficial use of water under the California Constitution, Article X, section 2.

Imperial Integrated Regional Water Management Plan (October 2012)

The Imperial IRWMP serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the IID Board of Directors approved it in December 2012. Approval by these three (3) stakeholders met the basic requirement of California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.[10] As discussed herein, long term water supply augmentation is not anticipated to be necessary to meet proposed Project demands.

[10] October 2012 Imperial Integrated Regional Water Management Plan, Chapter 12.

PC ORIGINAL PKG

Chapter 5 of the 2012 Imperial IRWMP addresses water supplies (Colorado River and groundwater), demand, baseline and forecasted through 2050; and IID water budget. Chapter 12 addresses projects, programs and policies, and funding alternatives. Chapter 12 of the IRMWP lists, and Appendix N details, a set of capital projects that IID might pursue, including the amount of water that might result (AFY) and cost ($/AF) if necessary. These also highlight potential capital improvement projects that could be implemented in the future.

Imperial Valley historic 2015 and 2020 and the forecasted future for 2025 to 2055 non-agricultural water demand, are provided in **Table 5** in five-year increments. Total water demand for non-agricultural uses is projected to be 201.4 KAF in the year 2055. This is a forecasted increase in the use of non-agricultural water of 94 KAF from 107.4 KAF for the period of 2015 to 2055. These values were modified from Chapter 5 of the Imperial IRWMP to reflect updated conditions from the IID Provisional Water Balance for calendar year 2015 and 2020. Due to the recession in 2009, state policies affecting municipal water use in relation to the drought and other factors, non-agricultural growth projections have lessened since the 2012 Imperial IRWMP. Projections in **Table 5** have been adjusted (reduced by 3 percent for Municipal and Industrial uses and applied a flat 0.5 AF increase for Recreation use) to reflect IID 2015 and 2020 delivery data adjustments. Even with these adjustments, the Table 5 projections for non-agricultural water demand within the IID water service area continue to reflect an unlikely aggressive growth.

Table 5. Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Municipal	30.0	30.9	36.8	39.8	41.5	46.3	51.7	57.8	61.9
Industrial	26.4	28.7	39.8	46.5	53.2	59.9	66.6	73.3	80.0
Other	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Feedlots/Dairies	17.8	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Envr Resources	8.3	9.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Recreation	7.4	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Service Pipes	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Non Ag	**107.4**	**115.1**	**136.1**	**145.8**	**154.2**	**165.7**	**177.8**	**190.6**	**201.4**

Notes: 2015 non-agricultural water demands are from IID 2015 Provisional Water Balance rerun 01/25/2021; 2020-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2015 Provisional Water Balance; 2020 non-agricultural water demands are from IID 2020 Provisional Water Balance rerun on 01/31/2022; 2025-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2020 Provisional Water Balance. Industrial Demand includes geothermal, but not solar, energy production.

Agricultural evapotranspiration (ET) demand of approximately 1,476.4 KAF in 2015, decreased in 2020 to approximately 1,442.2 KAF. The termination of fallowing programs provided 103.5 KAF of water for Salton Sea mitigation in 2017. Forecasted agricultural ET remains constant, as reductions in water use are to come from efficiency conservation not reduction in agricultural production. Market forces and other factors may impact forecasted future water demand.

Table 6 provides the 2015 and 2020 historic and 2025-2055 forecasted agricultural consumptive use and delivery demand within the IID water service area. When accounting for agriculture ET, tailwater and tilewater, total agricultural consumptive use (CU) demand ranges from 2,157.9 KAF in 2015 to 2,208.5

PC ORIGINAL PKG

KAF in 2055. Forecasted total agricultural delivery demand is around 1 KAFY higher than the CU demand, ranging from 2,158.9 KAF in 2015 to 2,209.5 KAF in 2055.

Table 6 Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Ag ET from Delivered & Stored Soil Water	1,476.4	1,442.2	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5
Ag Tailwater to Salton Sea	282.9	312.9	268.0	218.0	218.0	218.0	218.0	218.0	218.0
Ag Tilewater to Salton Sea	398.6	410.2	423.0	423.0	423.0	423.0	423.0	423.0	423.0
Total Ag CU Demand	**2,157.9**	**2,165.4**	**2,258.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**
Subsurface Flow to Salton Sea	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
Total Ag Delivery Demand	**2,158.9**	**2,166.4**	**2,259.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**

Notes: 2015 record from IID 2015 Provisional Water Balance rerun 06/28/2019; 2020 record from IID 2020 Provisional Water Balance rerun 01/25/2021; 2020-2055 forecasts from spreadsheet used to develop Figure 19, et seq. in Imperial IRWMP Chapter 5 (Data provided by IID staff).

In addition to agricultural and non-agricultural water demands, system operation demand must be included to account for operational discharge, main and lateral canal seepage, including seepage along the All-American Canal (AAC); and for AAC seepage, river evaporation and phreatophyte ET from Imperial Dam to IID's measurement site at AAC Mesa Lateral 5. These system operation demands are shown in **Table 7** for 2020. IID measures system operational uses at All-American Canal Station 2900 just upstream of Mesa Lateral 5 Heading. Total system operational use for 2020 was 167.8 KAF, including 10 KAF of LCWSP input, 39 KAF of seepage interception input, and 40 KAF of unaccounted canal water input.

PC ORIGINAL PKG

Table 7. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2020

Delivery System Evaporation	24.4
Canal Seepage	90.8
Main Canal Spill	10.1
Lateral Spill	121.5
QSA & IID Seepage Interception	-39.0
Unaccounted Canal Water	-40.0
Total System Operational Use, In valley	167.8
Imperial Dam to AAC @ Mesa Lat 5 *(Dam-Mesa Lat 5)(2,552,674-2,546,152)*	9.2
LCWSP	-10.0
Total System Operational Use in 2020	167.0
Source: 2020 IID Water Balance rerun 01/25/2021	

IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009)

The IID IWSP provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP designates up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects. The IWSP provides a mechanism and process to develop a water supply agreement for any appropriately permitted project, and establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed to offset the new demand. [11]

The environmental impacts of conserving up to the 25,000 acre-feet of IWSP water were analyzed in the *Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects* Negative Declaration, State Clearinghouse No. 2009061103 dated June 25, 2009. The IID Board adopted this Negative Declaration on September 29, 2009.

Depending on the nature, complexity and water demands of the proposed project, new projects may be charged a one-time Reservation Fee and annual Water Supply Development Fees for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project. The 2025 IWSP fee schedule is shown in **Table 8.**

Table 8. Interim Water Supply Policy 2025 Annual Non-Agricultural Water Supply Development Fee Schedule

Annual Demand (AF)	Reservation Fee ($/AF)*	Development Fee ($/AF)*
0-500	$91.39	$365.54
501-1000	$128.67	$514.68
1001-2500	$161.57	$646.28
2501-5000	$199.59	$798.34

Adjusted annually in accordance with the Consumer Price Index (CPI).

[11] *IID website: Municipal, Industrial and Commercial Customers.*

PC ORIGINAL PKG

IID customers with new projects receiving water under the IWSP will be charged the appropriate water delivery rate based on measured deliveries, see IID Water Rate Schedules. As of March 2025, IID has issued two water supply agreement and one "Will-Serve Letter" under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP.

IID Temporary Land Conversion Fallowing Policy (May 2012)

Imperial County planning officials determined that renewable energy facilities were consistent with the county's agricultural zoning designation and began issuing conditional use permits (CUPs) for these projects with 30-year terms with a 10-year extension (40 years in total). These longer-term, but temporary, land use designations were not conducive to a coordinated land use/water supply policy as envisioned in the Imperial IRWMP, because temporary water supply assignments during a CUP term were not sufficient to meet the water supply verification requirements for new project approvals. Agricultural landowners also sought long-term assurances from IID that, at project termination, irrigation services would be available for them to resume their farming operations.

Based on these conditions, IID determined it had to develop a water supply policy that conformed to the local land use decision-making in order to facilitate new development and economic diversity in Imperial County which resulted in the IID Temporary Land Conversion Fallowing Policy (TLCFP).[12] IID concluded that certain lower water use projects could still provide benefits to local water users. The resulting benefits; however, may not be to the same categories of use (e.g., municipal, commercial and industrial) but to the district as a whole.

Water demands for certain non-agricultural projects are typically less than that required for agricultural production; this reduced demand allows conserved water to be made available for other users under IID's annual consumptive use cap. This allows the district to avail itself of the ability during the term of the QSA/Transfer Agreements under CWC Section 1013 to create conserved water through projects such as temporary land fallowing conservation measures. This conserved water can then be used to satisfy the district's conserved water transfer obligation and for environmental mitigation purposes.

Under the terms of the legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the TLCFP was adopted by the IID board on May 8, 2012 and revised on March 29, 2016 to update the fee schedule for 2016. This policy provides a framework for a temporary, long-term fallowing program to work in concert with the IWSP. While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce efficiency conservation and water use reduction demands on IID water users, thus providing district wide benefits.

[12] *IID website: Temporary Land Conversion Fallowing Policy (TLCFP), and The TLCFP are the sources of the text for this section.*

PC ORIGINAL PKG

IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS

The laws and regulations that influence IID's water supply are noted in this section. The Law of the River (as described below), along with the 2003 Quantification Settlement Agreement and Related Agreements serve as the laws, regulations and agreements that primarily influence the findings of this WSA. These agreements grant California the most senior water rights along the Colorado River and specify that IID has access to 3.1 MAF per year. These two components will influence future decisions in terms of water supply availability during periods of shortages.

California Law

IID has a longstanding right to divert Colorado River water, and IID holds legal titles to all of its water and water rights in trust for landowners within the district (CWC Sections 20529 and 22437; *Bryant v. Yellen*, 447 U.S. 352, 371 (1980), fn.23.). Beginning in 1885, a number of individuals, as well as the California Development Company, made a series of appropriations of Colorado River water under California law for use in the Imperial Valley. The rights to these appropriations were among the properties acquired by IID from the California Development Company.

Law of the River

Colorado River water rights are governed by numerous compacts, state and federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the "Law of the River." Together, these documents form the basis for allocation of the water, regulation of land use, and management of the Colorado River water supply among the seven basin states and Mexico.

Of all regulatory literature that governs Colorado River water rights, the following are the specifics that impact IID:

- Colorado River Compact (1922)
- Boulder Canyon Project Act (1928)
- California Seven-Party Agreement (1931)
- Arizona v. California US Supreme Court Decision (1964, 1979)
- Colorado River Basin Project Act (1968)
- Quantification Settlement Agreement and Related Agreements (2003)
- 2003 Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA)
- 1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs
- Annual Operating Plan (AOP) for Colorado River Reservoirs
- 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead (2007 Interim Guidelines)

PC ORIGINAL PKG

Colorado River Compact (1922)

With authorization of their legislatures and urging of the federal government, representatives from the seven Colorado River basin states began negotiations regarding distribution of water from the Colorado River in 1921. In November 1922, an interstate agreement called the "Colorado River Compact" was signed by the representatives giving the Lower Basin perpetual rights to annual apportionments of 7.5 million acre-feet (MAF) of Colorado River water (75 MAF over ten years). The Upper Basin was to receive the remainder, which based on the available hydrological record was also expected to be 7.5 MAF annually, with enough left over to provide 1.5 MAF annually to Mexico.

Boulder Canyon Project Act (1928)

Provisions in the 1928 Boulder Canyon Project Act made the compact effective and authorized construction of Hoover Dam and the All-American Canal, and served as the United States' consent to accept the Compact. Through a Presidential Proclamation on June 25, 1929, this act resulted in ratification of the Compact by six of the basin states and required California to limit its annual consumptive use to 4.4 MAF of the lower basin's apportionment plus not less than half of any excess or surplus water unportioned by the Compact. A lawsuit was filed by the State of Arizona after its refusal to sign. Through the implementation of its 1929 Limitation Act, California abided by this federal mandate. The Boulder Canyon Act authorized the Secretary of the Interior (Secretary) to "contract for the storage of water... and for the delivery thereof... for irrigation and domestic uses," and additionally defined the lower basin's 7.5 MAF apportionment split, with an annual allocation 0.3 MAF to Nevada, 2.8 MAF to Arizona, and 4.4 MAF to California. Even though the three states never formally settled or agreed to these terms, a 1964 Supreme Court decision (*Arizona v. California*, 373 U.S. 546) declared the three states' consent to be insignificant since the Boulder Canyon Project Act was authorized by the Secretary.

California Seven-Party-Agreement (1931)

Following implementation of the Boulder Canyon Project Act, the Secretary requested that California make recommendations regarding distribution of its apportionment of Colorado River water. In August 1931, under chairmanship of the State Engineer, the California Seven-Party Agreement was developed and authorized by the affected parties to prioritize California water rights. The Secretary accepted this agreement and established these priorities through General Regulations issued in September of 1931. The first four (4) priority allocations account for California's annual apportionment of 4.4 MAF, with agricultural entities using 3.85 MAF of that total. Additional priorities are defined for years in which the Secretary declares that excess waters are available.

Arizona v. California U.S. Supreme Court Decision (1964, 1979)

The 1964 Supreme Court decision settled a 25-year disagreement between Arizona and California that stemmed from Arizona's desire to build the Central Arizona Project to enable use of its full apportionment. California's argument was that as Arizona used water from the Gila River, which is a Colorado River tributary, it was using a portion of its annual Colorado River apportionment. An additional argument from California was that it had developed a historical use of some of Arizona's apportionment, which, under the

PC ORIGINAL PKG

doctrine of prior appropriation, precluded Arizona from developing the project. California's arguments were rejected by the U.S. Supreme Court. Under direction of the Supreme Court, the Secretary was restricted from delivering water outside of the framework of apportionments defined by law. Preparation of annual reports documenting consumptive use of water in the three lower basin states was also mandated by the Supreme Court. In 1979, present perfected water rights (PPRs) referred to in the Colorado River Compact and in the Boulder Canyon Project Act were addressed by the Supreme Court in the form of a Supplemental Decree.

In March of 2006, a Consolidated Decree was issued by the Supreme Court to provide a single reference to the conditions of the original 1964 decrees and several additional decrees in 1966, 1979, 1984 and 2000 that stemmed from the original ruling. The Consolidated Decree also reflects the settlements of the federal reserved water rights claim for the Fort Yuma Indian Reservation.

Colorado River Basin Project Act (1968)

In 1968, various water development projects in both the upper and lower basins, including the Central Arizona Project (CAP) were authorized by Congress. Under the Colorado River Basin Project Act, priority was given to California's apportionment over (before) the CAP water supply in times of shortage. Also under the act, the Secretary was directed to prepare long-range criteria for the Colorado River reservoir system in consultation with the Colorado River Basin States.

Quantification Settlement Agreement and Related Agreements (2003)

With completion of a large portion of the CAP infrastructure in 1994, creation of the Arizona Water Banking Authority in 1995, and the growth of Las Vegas in the 1990s, California encountered increasing pressure to live within its rights under the Law of the River. After years of negotiating among Colorado River Compact States and affected California water delivery agencies, a Quantification Settlement Agreement and Related Agreements and documents were signed on October 10, 2003, by the Secretary of Interior, IID, Coachella Valley Water District (CVWD), Metropolitan Water District of Southern California (MWD), San Diego County Water Authority (SDCWA), and other affected parties.

The Quantification Settlement Agreement and Related Agreements (QSA/Transfer Agreements) are a set of interrelated contracts that resolve certain disputes among the United States, the State of California, IID, MWD, CVWD and SDCWA, for a period of 35 to 75 years, regarding the reasonable and beneficial use of Colorado River water; the ability to conserve, transfer and acquire conserved Colorado River water; the quantification and priority of Priorities 3(a) and 6(a)[13] within California for use of Colorado River water; and the obligation to implement and fund environmental impact mitigation.

[13] *Priorities 1, 2, 3(b), 6(b), and 7 of current Section 5 Contracts for the delivery of Colorado River water in the State of California and Indian and miscellaneous Present Perfected Rights within the State of California and other existing surplus water contracts are not affected by the QSA Agreement.*

PC ORIGINAL PKG

Conserved water transfer agreements between IID and SDCWA, IID and CVWD, and IID and MWD are all part of the QSA/Transfer Agreements. For IID, these contracts identify conserved water volumes and establish transfer schedules along with price and payment terms. As specified in the agreements, IID will transfer nearly 415,000 AF annually over a 35-year period (or longer), as follows:

- to MWD 110,000 AF [modified to 105,000 AF in 2007],
- to SDCWA 205,000 AF,
- to CVWD and MWD combined 103,000 AF, and
- to certain San Luis Rey Indian Tribes up to 11,500 AFY of water.

All of the conserved water will ultimately come from IID system and on-farm efficiency conservation improvements. In the interim, IID has implemented a Fallowing Program to generate water associated with Salton Sea mitigation related to the impacts of the IID/SDCWA water transfer, as required by the State Water Resources Control Board, which is to run from 2003 through 2017. In return for its QSA/Transfer Agreements programs and deliveries, IID will receive payments totaling billions of dollars to fund needed efficiency conservation measures and to pay growers for conserved on-farm water, so IID can transfer nearly 14.5 MAF of water without impacting local productivity. In addition, IID will transfer to SDCWA 67,700 AFY annually of water conserved from the lining of the AAC in exchange for payment of lining project costs and a grant to IID of certain rights to use the conserved water. In addition to the 105,000 acre-feet of water currently being conserved under the 1988 IID/MWD Conservation Program, these more recent agreements define an additional 303,000 AFY to be conserved by IID from on-farm and distribution system conservation projects for transferred to SDCWA, CVWD, and MWD.

Colorado River Water Delivery Agreement (2003)[14]

As part of QSA/Transfer Agreements among California and federal agencies, the Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA) was entered into by the Secretary of the Interior, IID, CVWD, MWD and SDCWA. This agreement involves the federal government because of the change in place of diversion from Imperial Dam into the All-American Canal to Parker Dam into MWD's Colorado River Aqueduct.

The CRWDA assists California to meet its "4.4 Plan" goals by quantifying deliveries for a specific number of years for certain Colorado River entitlements so transfers may occur. In particular, for the term of the CRWDA, quantification of Priority 3(a) was effected through caps on water deliveries to IID (consumptive use of 3.1 MAF per year) and CVWD (consumptive use of 330 KAF per year). In addition, California's Priority 3(a) apportionment between IID and CVWD, with provisions for transfer of supplies involving IID, CVWD, MWD and SDCWA are quantified in the CRWDA for a period of 35 years or 45 years (assumes SDCWA does not terminate in year 35) or 75 years (assumes SDCWA and IID mutually consent to renewal term of 30 years).

Allocations for consumptive use of Colorado River water by IID, CVWD and MWD that will enable California to stay within its basic annual apportionment (4.4 MAF plus not less than half of any declared surplus) are

[14] *CRWDA: Federal QSA accessed 7 June 2017.*

PC ORIGINAL PKG

defined by the terms of the QSA/Transfer Agreements (**Table 9**). As specified in the QSA/Transfer Agreements, by 2026, IID's annual use within (Imperial Valley) is to be reduced to just over 2.6 MAF of its 3.1 MAF quantified annual apportionment. The remaining nearly 500,000 AF (which includes the 67,000 AF from AAC lining) are to be transferred annually to urban water users outside of the Imperial Valley.

Table 9. CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY)

User	Apportionment (AFY)
Palo Verde Irrigation District and Yuma Project*	420,000
Imperial Irrigation District	3,100,000
Coachella Valley Water District	330,000
Metropolitan Water District of Southern California*	550,000
Total:	**4,400,000**

* PVID and Yuma Project did not agree to a cap; value represents a contractual obligation by MWD to assume responsibility for any overages or be credited with any volume below this value.
Notes: All values are consumptive use at point of Colorado River diversion: Palo Verde Diversion Dam (PVID), Imperial Dam (IID and CVWD), and Parker Dam (MWD). Source: IID Annual Water Report

Quantification of Priority 6(a) was effected through quantifying annual consumptive use amounts to be made available in order of priority to MWD (38 KAF), IID (63 KAF), and CVWD (119 KAF) with the provision that any additional water available to Priority 6(a) be delivered under IID's and CVWD's existing water delivery contract with the Secretary.[15] The CRWDA provides that the underlying water delivery contract with the Secretary remain in full force and effect. (*Colorado River Documents 2008*, Chapter 6, pages 6-12 and 6-13). The CRWDA also provides a source of water to effect a San Luis Rey Indian Water Rights settlement. Additionally, the CRWDA satisfies the requirement of the 2001 Interim Surplus Guidelines (ISG) that a QSA be adopted as a prerequisite to the interim surplus determination by the Secretary in the ISG.

Inadvertent Overrun Payback Policy (2003)

The CRWDA Inadvertent Overrun Payback Policy (IOPP), adopted by the Secretary contemporaneously with the execution of the CRWDA, provides additional flexibility to Colorado River management and applies to entitlement holders in the Lower Division States (Arizona, California and Nevada).[16] The IOPP defines inadvertent overruns as "Colorado River water diverted, pumped, or received by an entitlement holder of the Lower Division States that is in excess of the water users' entitlement for the year." An entitlement holder is allowed a maximum overrun of 10 percent of its Colorado River water entitlement when operating under normal conditions.

In the event of an overrun, the IOPP provides a mechanism to payback the overrun. When the Secretary has declared a normal year for Colorado River diversions, a contractor has from one to three years to pay back its obligation, with a minimum annual payback equal to 20 percent of the entitlement holder's maximum allowable cumulative overrun account or 33.3 percent of the total account balance, whichever is greater. However, when Lake Mead is below 1125 feet on January 1, the terms of the IOPP require that the payment of the inadvertent overrun obligation be made in the calendar year after the overrun is

[15] When water levels in the Colorado River reservoirs are low, Priority 5, 6 and 7 apportionments are not available for diversion.
[16] *USBR, 2003 CRWDA ROD Implementation Agreement, IOPP and Related Federal Actions Final EIS. Section IX. Implementing the Decision A. Inadvertent Overrun and Payback Policy. Pages 16-19 of 34.*

PC ORIGINAL PKG

reported in the USBR Lower Colorado Region Colorado River Accounting and Water Use Report [for] Arizona, California, and Nevada (Decree Accounting Report).[17]

1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs

The 1970 Operating Criteria control operation of the Colorado River reservoirs in compliance with requirements set forth in the Colorado River Compact of 1922, the United States-Mexico Water Treaty of 1944, the Colorado River Storage Project Act of 1956, the Boulder Canyon Projects Act (Lake Mead) and the Colorado River Basin Project Act (Upper Basin Reservoirs) of 1968, and other applicable federal laws. Under these Operating Criteria, the Secretary makes annual determinations published in the USBR Annual Operating Plan for Colorado River Reservoirs (discussed below) regarding the release of Colorado River water for deliveries to the lower basin states. A requirement to equalize active storage between Lake Powell and Lake Mead when there is sufficient storage in the Upper Basin is included in these operating criteria. **Figure 5** identifies the major storage facilities at the upper and lower basin boundaries.

[17] *2003 CRWDA ROD. Section IX. A.6.c,, page 18 of 34.*

PC ORIGINAL PKG

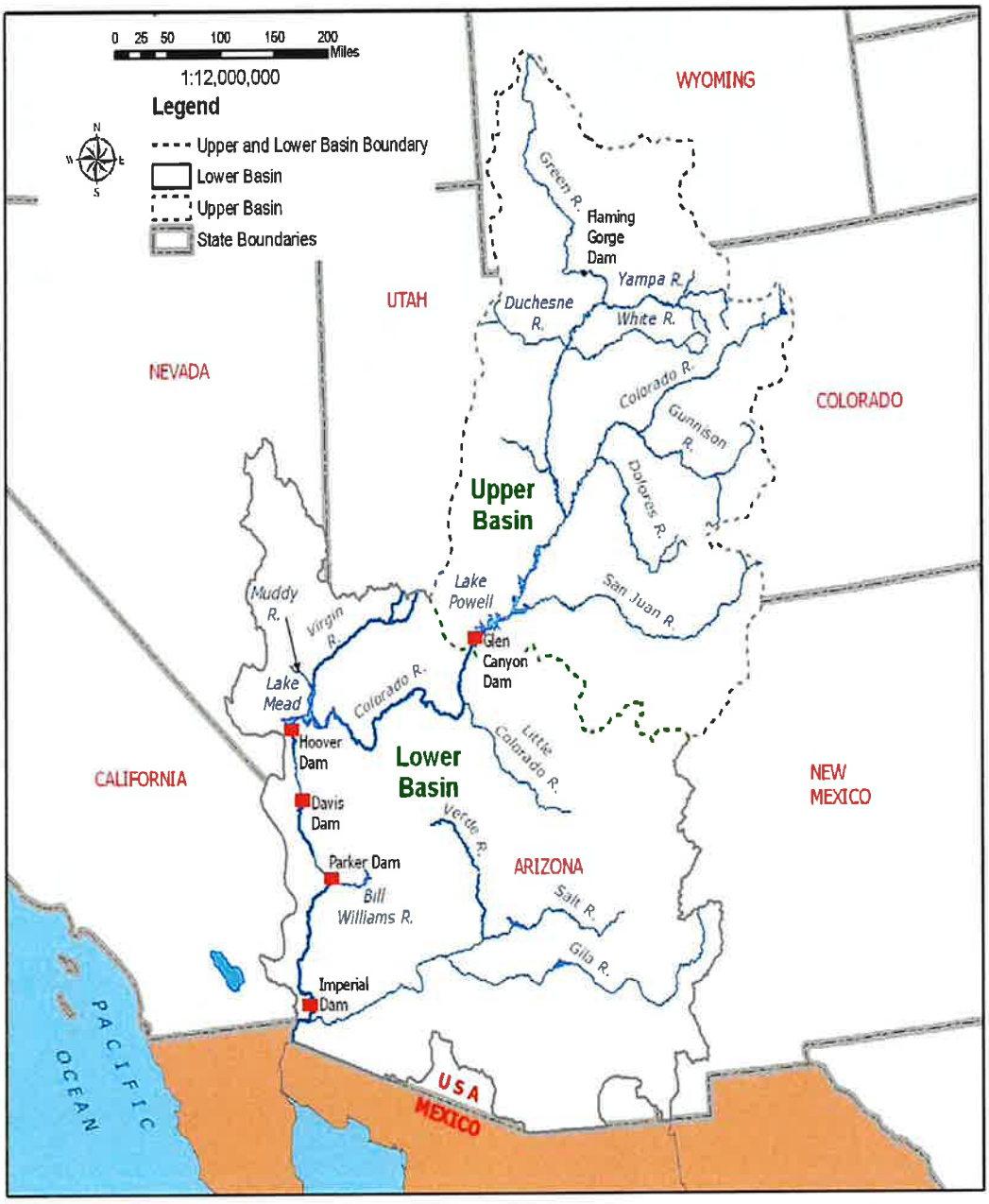


Figure 5. Major Colorado River Reservoir Storage Facilities and Basin Location Map

Source: **Final EIS – Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Volume 1 Chapter 1 Purpose and Need**, p I-10.

PC ORIGINAL PKG

Annual Operating Plan for Colorado River Reservoirs (*Applicable when Lake Mead Surplus/Shortage)*

The AOP is developed in accordance with Section 602 of the Colorado River Basin Project Act (Public Law 90-537); the Criteria for Coordinated Long-Range Operations of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of 1968, as amended, promulgated by the Secretary of the Interior; and Section 1804(c)(3) of the Grand Canyon Protection Act (Public Law 102-575). As part of the AOP process, the Secretary makes determinations regarding the availability of Colorado River water for deliveries to the lower basin states, including whether normal, surplus, and shortage conditions are in effect on the lower portion of the Colorado River.

2007 Colorado River Interim Guidelines for Lower Basin Shortages (2007 Interim Guidelines)

A multi-year drought in the Colorado River Upper Basin triggered the need for the 2007 Interim Shortage Guidelines. In the summer of 1999, Lake Powell was essentially full with reservoir storage at 97 percent of capacity. However, precipitation fell off starting in October 1999 and 2002 inflow was the lowest recorded since Lake Powell began filling in 1963.[18] By August 2011, inflow was 279 percent of average; however, drought resumed in 2012 and continued through calendar year 2022. Although 2023 experienced hydrological improvements, it was not sufficient to make a significant difference in lake elevation. Using the record in **Table 10,** average unregulated inflow to Lake Powell for water years 2000-2024 is 68 percent; or if 2011 is excluded, 64 percent of the historic average.

Table 10. Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2024

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
62%	59%	25%	51%	49%	105%	73%	68%	102%	88%	73%
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
136%	35%	49%	90%	83%	80%	101%	36%	111%	45%	33%
2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
52%	112%	66%	–	–	–	–	–	–	–	–

Source: UCR Water Operations: Historic Data (2000-2024)

In the midst of the drought period, USBR developed 2007 Interim Guidelines with consensus from the seven basin states, which selected the Draft EIS Preferred Alternative as the basis for USBR's final determination. The basin states found the Preferred Alternative best met all aspects of the purpose and need for the federal action. [19]

The 2007 Interim Guidelines Preferred Alternative highlights the following:

1. The need for the Interim Guidelines to remain in place for an extended period of time.
2. The desirability of the Preferred Alternative based on the facilitated consensus recommendation from the basin states.
3. The likely durability of the mechanisms adopted in the Preferred Alternative in light of the extraordinary efforts that the basin states and water users have undertaken to develop

[18] Water Year: October 1 through September 30 of following year, so water year ending September 30, 1999

[19] USBR *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* <http://www.usbr.gov/lc/region/programs/strategies.html>

PC ORIGINAL PKG

implementing agreements that will facilitate the water management tools (shortage sharing, forbearance, and conservation efforts) identified in the Preferred Alternative.

4. That the range of elements in the Preferred Alternative will enhance the Secretary's ability to manage the Colorado River reservoirs in a manner that recognizes the inherent tradeoffs between water delivery and water storage.

In June 2007, USBR announced that a preferred alternative for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead (Final Preferred Alternative) had been determined. The Final Preferred Alternative, based on the basin states' consensus alternative and an alternative submitted by the environmental interests called "Conservation Before Shortage," is comprised of four key operational elements which are to guide operations of Lake Powell and Lake Mead through 2026. These four operational elements are:

1. Shortage strategy for Lake Mead and Lower Division states: The Preferred Alternative proposed discrete levels of shortage volumes associated with Lake Mead elevations to conserve reservoir storage and provide water users and managers in the Lower Basin with greater certainty to know when, and by how much, water deliveries will be reduced during low reservoir conditions.
2. Coordinated operations of Lake Powell and Lake Mead: The Preferred Alternative proposed a fully coordinated operation of the reservoirs to minimize shortages in the Lower Basin and to avoid risk of curtailments of water use in the Upper Basin.
3. Mechanism for storage and delivery of conserved water in Lake Mead: The Preferred Alternative proposed the Intentionally Created Surplus (ICS) mechanism to provide for the creation, accounting, and delivery of conserved system and non-system water thereby promoting water conservation in the Lower Basin. Credits for Colorado River or non-Colorado River water that has been conserved by users in the Lower Basin creating an ICS would be made available for release from Lake Mead at a later time. The total amount of credits would be 2.1 MAF, but this amount could be increased up to 4.2 MAF in future years.
4. Modifying and extending elements of the Interim Surplus Guidelines (ISG). The ISG determines conditions under which surplus water is made available for use within the Lower Division states. These modifications eliminate the most liberal surplus conditions thereby leaving more water in storage to reduce the severity of future shortages.

With respect to the various interests, positions and views of the seven basin states, this provision adds an important element to the evolution of the legal framework for prudent management of the Colorado River. Furthermore, the coordinated operation element allows for adjustment of Lake Powell releases to respond to low reservoir storage conditions in either Lake Powell or Lake Mead. States found the Preferred Alternative best met all aspects of the purpose and need for the federal action.[20] The 2007

[20] *USBR Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead*.

PC ORIGINAL PKG

Interim Guidelines are in place from 2008 through December 31, 2025 (through preparation of the 2026 Annual Operating Plan).

Lower Colorado Region Water Shortage Operations

The Colorado River Basin is experiencing a prolonged period of drought and record-low runoff conditions that have resulted in historically low reservoir levels in both Lake Powell (upper Basin) and Lake Mead (lower Basin). The period from 2000 through 2024 was the lowest 25-year inflow into Lake Powell in the historical record and has strained the Colorado River system, despite an increase in observed runoff in August 2011 when unregulated inflow to Lake Powell was 279 percent of the average. Since 2000, Lake Mead has been below the "average" level of lake elevations (see **Figure 6**). Such conditions have caused the activation of shortage plans for waters users in Arizona and Nevada, and in Mexico. By May of 2022 Lake Meads elevation had declined to 1,048 feet. These conditions resulted in the U.S. Secretary of the Interior declaring the first-ever Tier 2a Shortage on the Colorado River. The drought in the Colorado River watershed had lessened by mid 2023 after a winter of record-breaking rain and snow but not enough to take the Lower Basin out of a Tier 1 Shortage for 2024 operations.

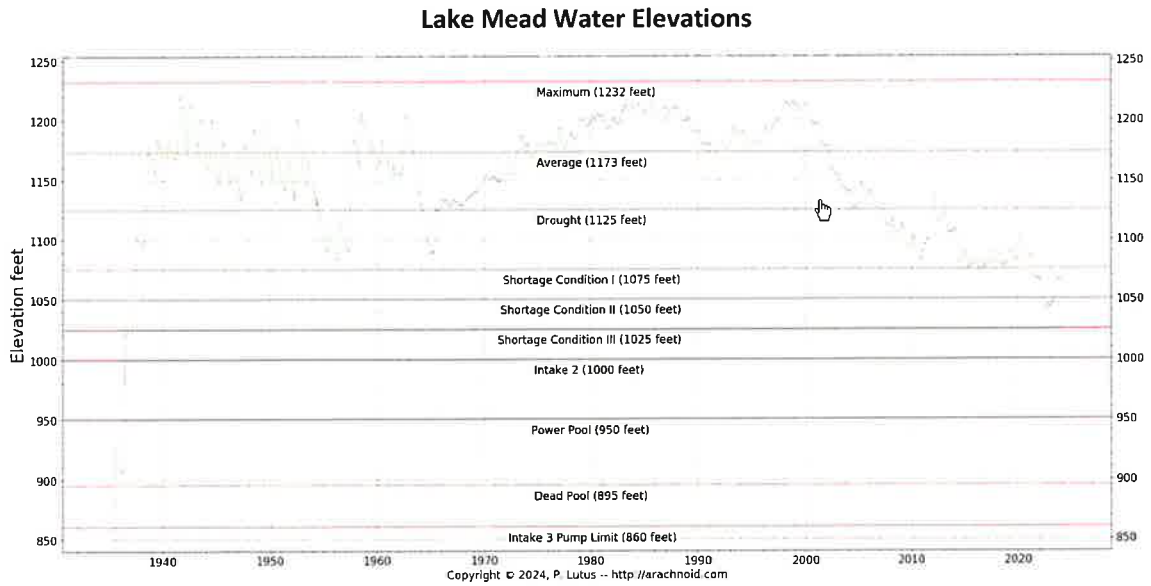


Figure 6. Lake Mead Water Elevation Levels 02.11.24.

According to guidelines put in place in 2007, Arizona and Nevada begin to take shortages when the water elevation in Lake Mead falls below 1,075 feet. The volumes of shortages increase as water levels fall to 1,050 feet and again at 1,025 feet. In 2012, Mexico agreed to participate in a 5-year pilot agreement to share specific volumes of shortages at the same elevations. The 2007 interim shortage guidelines contain no reductions for California, which has senior water rights to the Central Arizona Project water supply, through 2025 when the guidelines expire. If Lake Mead's elevation drops to 1,025 feet, a re-consultation process would be triggered among the basin states to address next steps. Consultation would start out within each state, then move to the three lower basin states, followed by all seven states and the USBR.

PC ORIGINAL PKG

Mexico will then be brought into the process unless they choose to participate earlier. In total, 721,000 acre-feet of reductions were implemented in the Lower Basin and Mexico in 2023 consistent with various agreements that dictate the operation of the Colorado River.

California has no stipulated reduction to its water supplies under a Tier 2a Shortage declaration. While not directly affected by the shortage reductions announced by Reclamation, the Shortage condition does prevent IID from overrunning its approved water order and, as stated earlier, contributions to address Lake Mead water elevation are anticipated by IID. IID has entered into a voluntary water conservation agreement for the benefit of Lake Mead, up to 250,000 AFY, through 2026.

IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND

SB 610 requires an analysis of a normal, single dry, and multiple dry water years to show that adequate water is available for the proposed Project in various climate scenarios. Water availability for this Project in a normal year is no different from water availability during a single-dry and multiple-dry year scenarios. This is due to the small effect rainfall has on water availability in IID's arid environment along with IID's strong entitlements to the Colorado River water supply. Local rainfall does have some impact on how much water is consumed (i.e. if rain falls on agricultural lands, those lands will not demand as much irrigation), but does not impact the definition of a normal year, a single-dry year or a multiple-dry year scenario.

WATER AVAILABILITY – NORMAL YEAR

IID is entitled to annual net consumptive use of 3.1 MAF of Colorado River, less its QSA/Transfer Agreement obligations. Imperial Dam, located north of Yuma, Arizona, serves as a diversion structure for water deliveries throughout southeastern California, Arizona and Mexico. Water is transported to the IID water service area through the AAC for use throughout the Imperial Valley. IID historic and forecast net consumptive use volumes at Imperial Dam from CRWDA Exhibit B are shown in **Table 11**. Volumes 2003-2024 are adjusted for USBR Decree Accounting historic records. Volumes for 2025-2077 are from CRWDA Exhibit B modified to reflect 2014 Letter Agreement changes to the 1988 IID/MWD Water Conservation Agreement.[21]

Due to limits on annual consumptive use of Colorado River water under the QSA/Transfer Agreements, IID's water supply during a normal year is best represented by the CRWDA Exhibit B Net Available for Consumptive Use **(Table 11**, Column 11). The annual volume is IID Priority 3(a) Quantified Amount of 3.1 million acre-feet (MAF) (**Table 11**, Column 2) less the IID transfer program reductions for each year (**Table**

[21] 2014 Imperial Irrigation District Letter Agreement for Substitution and Conservation Modifications to the IID/MWD Water Conservation Agreement - December 17, 2014.

PC ORIGINAL PKG

11, Columns 3-9). IID suggests **Table 11**, which assumes full use of IID's quantified water supply, be used in determining base normal year water availability.

Table 11. IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B)

IID Quantification and Transfers, Volumes in KAF at Imperial Dam [1]										
Col 1	2	3	4	5	6	7	8	9	10	11
	IID Priority 3(a)									
		IID Reductions								**IID Net [Available for] Consumptive Use (Col 2 - 10)**
Year	**IID 3(a) Quantified Amount**	**1988 MWD Transfer[2]**	**SDCWA Transfer**	**AAC Lining**	**Salton Sea Mitigation SDCWA Transfer[3]**	**Intra-Priority 3 CVWD Transfer**	**MWD Transfer w\ Salton Sea Restoration[4]**	**Misc. PPRs**	**IID Total Reduction (Σ Cols 3-9)[5]**	
2003	3,100	105.1	10.0	0.0	0.0	0.0	0.0	11.5	126.6	2978.2
2004	3,100	101.9	20.0	0.0	15.0	0.0	0.0	11.5	148.4	2743.9
2005	3,100	101.9	30.0	0.0	15.0	0.0	0.0	11.5	158.4	2756.8
2006	3,100	101.2	40.0	0.0	20.0	0.0	0.0	11.5	172.7	2909.7
2007	3,100	105.0	50.0	0.0	25.0	0.0	0.0	11.5	191.5	2872.8
2008	3,100	105.0	50.0	8.9	26.0	4.0	0.0	11.5	205.4	2825.1
2009	3,100	105.0	60.0	65.5	30.1	8.0	0.0	11.5	280.1	2566.7
2010	3,100	105.0	70.0	67.7	33.8	12.0	0.0	11.5	294.8	2540.5
2011	3,100	103.9	63.3	67.7	0.0	16.0	0.0	11.5	262.4	2915.8
2012	3,100	104.1	106.7	67.7	15.2	21.0	0.0	11.5	326.2	2,903.2
2013	3,100	105.0	100.0	67.7	71.4	26.0	0.0	11.5	381.6	2,554.9
2014	3,100	104.1	100.0	67.7	89.2	31.0	0.0	11.5	403.5	2,533.4
2015	3,100	107.82	100.0	67.7	153.3	36.0	0.0	11.5	476.3	2,480.9
2016	3,100	105.0	100.0	67.7	130.8	41.0	0.0	11.5	456.0	2,504.3
2017	3,100	105.0	100.0	67.7	105.3	45.0	0.0	9.9	432.9	2,667.1
2018	3,100	105	130.0	67.7	0.1	63	0.0	9.7	375.5	2,724.5
2019 [6]	3,100	105	160.0	67.7	46.55	68	0.0	6.9	454.2	2,645.8
2020	3,100	105	192.5	67.7	0.0	73	0.0	9.1	448.0	2,652.0
2021	3,100	105	205.0	67.7	0.0	78	0.0	9.3	465.0	2,635.0
2022	3,100	105	202.5	67.7	0	83	0.0	9.8	468.0	2,632.0
2023[7]	3,100	105	150.0	67.7	0	88	0.0	11.5	420.6	2,679.4
2024	3,100	105	150	67.7	0	93	0.0	11.5	427.2	2672.8
2025	3,100	105	200	67.7	0	98	0.0	11.5	482.2	2,617.8
2026	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2027	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2028	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2029-37	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2038-47[8]	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2048-77 [9]	3,100	105	200	67.7	0	50	0.0	11.5	434.2	2,665.8

1. 2003 through 2024, volumes are adjusted for actual USBR Decree Accounting values; IID Total Reduction and Net Available for Consumptive Use may not equal Col 2 minus Col 10, if IID conservation/use was not included in Exhibit B.
2. 2014 Letter of Agreement provides that, effective January 2016 total amount of conserved water available is 105 KAFY
3. Salton Sea Mitigation volumes may vary based on conservation volumes and method of conservation.
4. *This transfer is not likely given lack of progress on Salton Sea restoration as of 2018; shaded entries represents volumes that may vary..*
5. Reductions include conservation for 1988 IID/MWD Transfer, IID/SDCWA Transfer, AAC Lining; SDCWA Transfer Mitigation, MWD Transfer w/Salton Sea Restoration (if any); Misc. PPRs. Amounts are independent of increases and reductions as allowed by the IOPP. *Reductions do not reflect additional reduced volumes for temporary SCIA commitments to Lake Mead which initiated in 2023 with a sunset schedule of 2026.*
6. In order to resolve the outstanding 2010 Salton Sea mitigation water pre-delivery issue, IID left 46,546 AF of extraordinary conservation in Lake Mead. See IID's December 19, 2019 revised 2019 water order and Reclamation's March 10, 2020 approval letter.
7. In 2023 and 2024, 50 KAF of ICS was foregone by SDCWA for the benefit of Lake Mead under the Drought Response Plan by Reclamation.
8. Assumes SDCWA does not elect termination in year 35.
9. Assumes SDCWA and IID mutually consent to renewal term of 30 years.
10. Modified from 100 KAFY in CRWDA Exhibit B; stating in 2018 MWD will provide CVWD 50 KAFY of the 100 KAFY.

PC ORIGINAL PKG

Source: CRWDA: Federal QSA Exhibit B, p 13; updated values from 2023 Annual Water & QSA Implementation Report

PC ORIGINAL PKG

CRWDA Exhibit B Net Available for Consumptive Use volumes less system operation demand represents the amount of water available for delivery by IID Water Department to its customers each year. In a normal year, perhaps 50,000 to 100,000 AF of effective rainfall would fall in the IID water service area. However, rainfall is not evenly distributed throughout the IID water service area and is not taken into account by IID in the submittal of its Estimate of Diversion (annual water order) to the USBR.

EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS

Historically, when drought conditions exist within the IID water service area, as has been the case for the past two decades, the water supply available to meet agricultural and non-agricultural water demands remains the same as normal year water supply because IID historically relied solely on its entitlement for Colorado River water. Due to the priority of IID water rights and other agreements, drought conditions affecting Colorado River water supplies cause shortages for Arizona, Nevada and Mexico, before impacting California and IID. Accordingly, the Net Available for Consumptive Use volumes in **Table 11**, Column 11 represents the water supply at Imperial Dam available for diversion by IID in single-dry year and multiple-dry year scenarios, consistent with IID's senior water rights. The runoff declines in the upper basin and prolonged drought conditions throughout the west have resulted, for the first time, in the Colorado River operating under a Tier 2a Shortage Condition in 2023, creating long-term water supply uncertainties throughout the Basin states. The expiration of the 2007 Guidelines add to the uncertainty of operations post 2026.

Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP)

Under normal operating conditions, the CRWDA Inadvertent Overrun Payback Policy (IOPP), provided IID with some flexibility to manage its water use. When the water level in Lake Mead is above 1,125 feet, an overrun of its USBR approved annual water order was permissible, and IID had up to three years to pay water use above the annual water order. When Lake Mead's water level is at or below 1,125 feet on January 1 in the calendar year after the overrun is reported in the USBR Lower Colorado Region Decree Accounting Report, the IOPP prohibits additional overruns and requires that outstanding overruns be paid back in the subsequent calendar year rather than in three years as allowed under normal conditions; that is, the payback is to be made in the calendar year following publication of the overrun in the USBR Decree Accounting Report. The IOPP is suspended during shortage conditions. For historic IID annual rainfall, net consumptive use, transfers and IID underrun/overrun amounts, see **Table 12.**

PC ORIGINAL PKG

Table 12. IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024

Year	IID Total Annual Rainfall	IID Water Users	IID/MWD Transfer	IID/ SDCWA Transfer	SDCWA Transfer Salton Sea Mitigation	IID Underrun / Overrun	IID/CVWD Transfer	AAC Lining
1988		2,947,581						
1989		3,009,451						
1990	91,104	3,054,188	6,110					
1991	192,671	2,898,963	26,700					
1992	375,955	2,575,659	33,929					
1993	288,081	2,772,148	54,830					
1994	137,226	3,048,076	72,870					
1995	159,189	3,070,582	74,570					
1996	78,507	3,159,609	90,880					
1997	64,407	3,158,486	97,740					
1998	100,092	3,101,548	107,160					
1999	67,854	3,088,980	108,500					
2000	29,642	3,112,770	109,460					
2001	12,850	3,089,911	106,880					
2002	12,850	3,152,984	104,940					
2003	116,232	2,978,223	105,130	10,000	0	**6,555**		
2004	199,358	2,743,909	101,900	20,000	15,000	-166,408		
2005	202,983	2,756,846	101,940	30,000	15,000	-159,881		
2006	19,893	2,909,680	101,160	40,000	20,000	**12,414**		
2007	64,580	2,872,754	105,000	50,000	25,021	**6,358**		
2008	63,124	2,825,116	105,000	50,000	26,085	-47,999	4,000	8,898
2009	30,0354	2,566,713	105,000	60,000	30,158	-237,767	8,000	65,577
2010	189,566	2,545,593	105,000	70,000	33,736	-207,925	12,000	67,700
2011	109,703	2,915,784	103,940	63,278	0	**82,662**	16,000	67,700
2012	133,526	2,903,216	104,140	106,722	15,182	**134,076**	21,000	67,700
2013	134,497	2,554,845	105,000	100,000	71,398	-64,981	26,000	67,700
2014	53,517	2,533,414	104,100	100,000	89,168	-797	31,000	67,700
2015	97,039	2,480,933	107,820	100,000	153,327	-90,025	36,000	67,700
2016	90,586	2,504,258	105,000	100,000	130,796	-62,497	41,000	67,700
2017	105,919	2,548,171	105,000	100,000	105,311	-30,591	45,000	67,700
2018	63,318	2,625,422	105,000	130,000	0	0	63,000	67,700
2019	146,384	2,558,136	105,000	160,000	46,555	-34,215	68,000	67,700
2020	130,275	2,493,623	105,000	192,500	0	-98,073	73,000	67,700
2021	81,901	2,552,674	105,000	205,000	0	-37,737	78,000	67,700
2022	61,377	2,577,164	105,000	202,500	0	-6,470	83,000	67,700
2023	68,122	2,417,024	105,000	150,000	0	-146.8	88,000	67,700
2024	**88,063**	**2,311,905**	105,000	150,000[1]	0	**-93,255**	93,000	67,700

Notes: Volumes in acre-feet and except Total Annual Rainfall are USBR Decree Accounting Report record at Imperial Dam.
IID Total Annual Rainfall from IID Provisional Water Balance, first available calculations are for 1990
Not all IID QSA programs are shown on this table.
Source: USBR Decree Accounting reports, except IID Total Rainfall and IID Overrun/Underrun is a separate calculation
Source: 2023 IID Annual Water & QSA Implementation Report and 2024 IID SWRCB Report; IID Total Rainfall and IID Overrun/ Underrun is a separate calculation

PC ORIGINAL PKG

On August 16, 2021, the water level in Lake Mead was 1,060 feet and for the first time since the IOPP came into effect, the Secretary of the Interior declared the first-ever, Tier 1 shortage condition for Colorado River operations, with elevations reaching 1,045 as of mid 2022 (**Figure 7**). For IID, this meant that no overruns would be allowed to IID's approved water order which continues in effect through 2024.

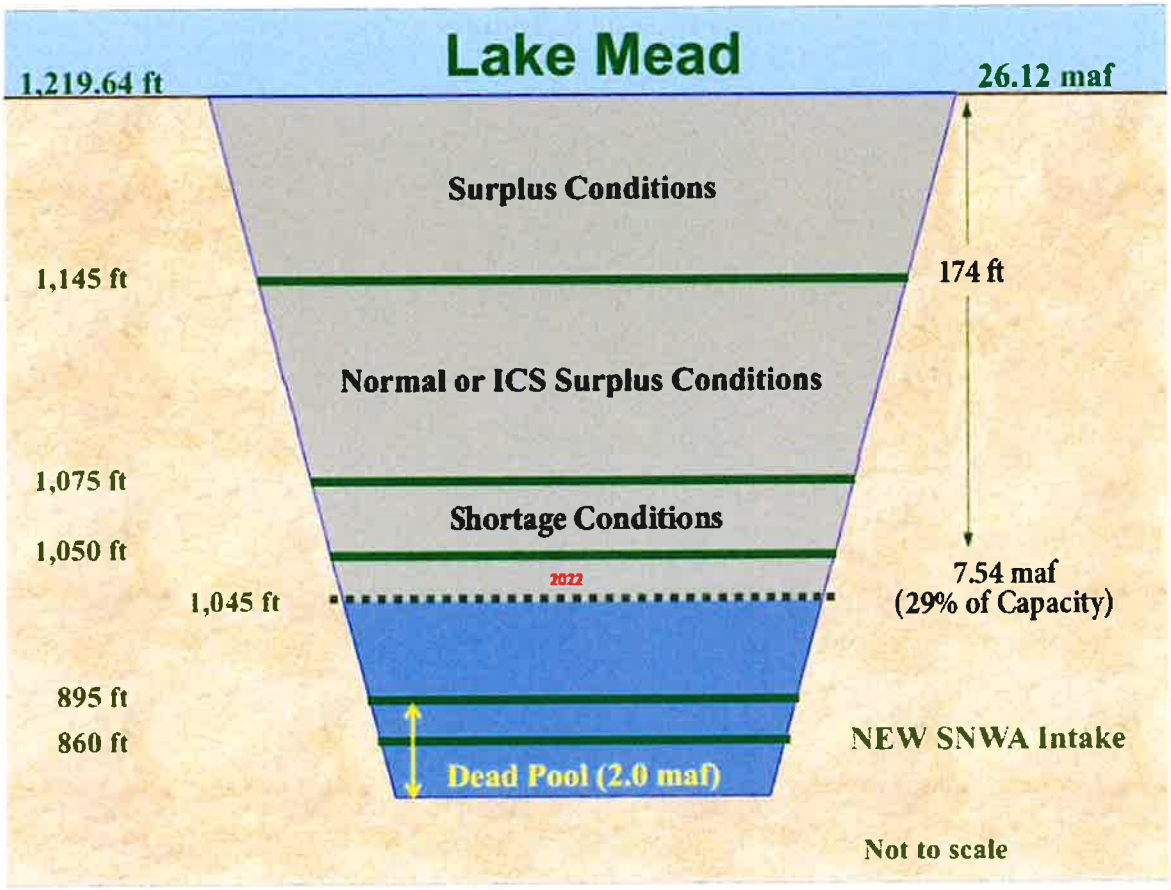


Figure 7. Lake Mead Schematic (June 15, 2022)

The flexibility that IID was allowed in 2013 and 2014 is no longer available to the district. Under the terms of the IOPP, no overruns are allowed in a year when payback is required. IID has not experienced any overrun pay back since 2014 as noted in **Table 13**. Under shortage conditions, IID would use any conserved water stored in a non-System reservoir, if available, to prevent any overrun.

Table 13. IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024

Calendar Year of Payback	2011 Overrun Payback (AF)	2012 Overrun Payback (AF)	Payback Total for Calendar Year (AF)
2013	55,710	-	55,710
2014	20,662	134,076	154,738
Total Payback	**76,372**	**134,076**	**210,448**

Notes: All values are consumptive use volumes at Imperial Dam (AF).
2013 Payback Total was 62 KAF, but in 2012 IID had 6,290 AF of early payback, reducing volume to 55,710 AF

PC ORIGINAL PKG

The 2013 IOPP payback obligation, prohibition on overruns in payback years, and suspension of this flexibility during shortage conditions led the IID Board to implement an apportionment program pursuant to the 2007 EDP, which has been subsequently revised and modified over the years. The 2023 EDP is a version approved and adopted by the IID Board on July 26, 2023 (see Attachment B). The Revised 2023 EDP also establishes a water exchange clearinghouse to facilitate the movement of water supply between all water users and within water user categories. The established water user categories are 1) agricultural water users, 2) industrial/commercial water users and 3) potable water users. As designed, the clearinghouse will allow IID and its water customers to balance water demands with the water supplies that are available to all users.

Generally, the EDP Apportionment, as discussed in the proceeding section, is not expected to impact potable water uses or industrial/commercial uses. However, given the certainty of continuing drought on the Colorado River through 2026 and other stressors, provisions such as the 2012 IWSP Water Agreement sections 3.7 and 3.8 as well for dry and multiple dry year water assessment may come into effect. IID has agreed to work with public and private treatment water purveyors and Project proponents to ensure to the extent possible that the IWSP Water Supply Agreement terms will not adversely impact Project operation. For purposes of this WSA, years with a shortage condition that impacts non-agricultural projects such as an IOPP payback obligation constitute "dry" years for IID. For single-dry year and multiple-dry water year assessments, IID's EDP shall govern.

Equitable Distribution Plan (EDP) History

A 2006 study by Hanemann and Brookes suggested that overrun conditions were likely to occur 40-50 percent of the years during the decade following the report. Under such conditions a supply/demand imbalance would occur resulting in a need to apportion water consistent with state law. Under California state law, water must be distributed equitably as determined by the IID Board of Directors.

On November 28, 2006, the IID Board of Directors adopted Resolution No 22-2006 approving development and implementation of an Equitable Distribution Plan to address times when customers' demand would exceed IID's Colorado River supply. The EDP, adopted in 2007 allowed the IID Board to institute an apportionment program. As part of this resolution, the IID Board directed the General Manager to prepare the rules and regulations necessary or appropriate to implement the plan within the district. The EDP Regulations were created to enable IID to implement a water management tool (apportionment) to address years in which water demand is expected to exceed supply.

It was expected that an annual EDP Apportionment would be established for each of the next several years, if not for the duration of the QSA. However, the implementation of the EDP apportionment was legally challenged in 2013 with litigation ensuing through 2017 when a statement of decision was issued by the trial court, followed by a writ of mandate and a declaratory judgment later that year. The writ of mandate directed IID to repeal the EDP. On February 6, 2018, the IID board approved a resolution repealing the EDP while the case was on appeal. On July 16, 2020, the appellate court reversed the writ of mandate and declaratory judgment on almost all grounds, including declaratory relief on the water rights issue and IID's

PC ORIGINAL PKG

discretion to determine the method of apportionment except for a provision as to how water was prioritized among water user categories. The court ruled that the district is required to distribute water equitably for all categories of users.

On June 21, 2022, IID adopted a revised EDP to address the single outstanding legal issue with respect to prioritization of apportionments among categories of water users. The revised EDP also updated certain operational provisions and most importantly, to the extent feasible, provides for a defined quantity of available, annual water supply apportioned to each water user to prevent cumulative demands from exceeding IID's available, authorized annual Colorado River supply (Appendix B-Equitable Distribution Plan). In July 2023 the EDP was revised again to allow for direct transfer of water through the IID Clearinghouse and among the respective water user categories. Implementation of the EDP resumed in January 1, 2023 and will continue annually thereafter consistent with the latest adopted EDP. For details regarding the EDP and its implementation, including related forms, please visit IID's website at Equitable Distribution | Imperial Irrigation District (iid.com).

Projected Water Supplies

The projected and continued decline in runoff and prolonged drought conditions in the West are expected to contribute to even lower water elevation levels at Lakes Powell and Mead. The Department of the Interior made the decision in early 2022 to protect critical Lake Powell elevations above Glen Canyon Dam by adding 500,000 AF of water from Flaming Gorge reservoir and temporarily reducing the 2022 annual operational release to Lake Mead by 480,000 AF. These conditions resulted in a reduced water apportionment to most of the Lower Division States and Mexico for 2022 through 2024, but did not affect IID's water supply available for consumptive use. However, IID's voluntary commitments for Lake Mead have been in effect since 2023 and will continue through 2026 at the maximum conservation volume of 300,000 AFY.

Despite the Department's extraordinary actions, the hydrological forecasts and reservoir elevations would have continued to decline if not for the Basin state contributions, particularly California's commitments. California reductions, or the potential for regulatory reductions by the Secretary of the Interior post 2026 remain undefined as of the date of this water supply assessment for the Big Rock 2 Solar project.

IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community. In this vein, IID recognizes the need for significant response actions to protect the long-term water supply certainty for the Imperial Valley as the Colorado River operates under these unprecedented conditions. On October 5, 2022 the Colorado River Board of California, in partnership with representatives of the four primary California Section 5 contractors (IID, Palo Verde Irrigation District, Coachella Valley Water District and Metropolitan Water District of Southern California) submitted a letter to the Department of Interior proposing for California to conserve up to an additional 400,000 AF of water in Lake Mead each year, beginning in 2023 and extending through 2026, to assist with stabilizing Colorado River reservoir elevations. IID has entered into an agreement with Reclamation for its share of the California proposal that would not exceed 300,000 AFY. IID proposes to conserve its contribution to Lake

PC ORIGINAL PKG

Mead via system and on-farm efficiency conservation and short-term, deficit irrigation (seasonal fallowing).

PC ORIGINAL PKG

PROJECT WATER AVAILABILITY FOR A 30-YEAR PERIOD TO MEET PROJECTED DEMANDS

The proposed Project will not require potable (drinking) water for operational purposes.

Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). The Project parcels consist of individual parcels zoned for general agriculture (A-2), general agriculture/rural (A-2-R), general agriculture/rural/renewable energy (A-2-R-RE), heavy agricultural (A-3), and heavy agriculture/renewable energy (A-3-RE). Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland. The Project would use approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development. 90FI 8me LLC (the Applicant) is seeking approval of four (4) CUPs associated with the construction and operation of the Big Rock 2 solar facility. Water would be supplied by IID via the Westside Main canal and delivery gates listed in Table 15 which are all assumed to be in adequate working condition

The proposed amortized 125 AFY water demand for the Project represents an estimated 98.3 percent reduction in historical water demand from the calculated historical 7,348 AFY water demand on the Project parcels.[22]

As noted previously, under the terms of California legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the IID board adopted the TLCFP to address how to deal with any temporary reduction of water use by projects such as solar projects that are developed under a CUP.

While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce the need for efficiency conservation and other water use reduction practices on the part of IID and its water users providing the district with wide benefits. One of the considerations in developing the TLCFP was to provide agricultural land owners with long-term assurances from IID that, at Project termination, irrigation service would be available for them to resume farming operations.

IWSP Water

The IWSP, provided herein as Attachment A, designates up to 25,000 AFY of water for potential conservation for Non-Agricultural Projects within IID's water service area. As of March 2025, IID has up to 18,620 AFY that it may make available for conservation under the IWSP for new projects such as the proposed Project. The IWSP establishes a schedule for Processing Fees, Reservation Fees, and Development Fees that change each year for all non-agricultural projects, and annual Water Supply

[22] The 20 year average demand includes a 2 year construction period and 18 years of operation.

PC ORIGINAL PKG

Development fees for some non-agricultural projects. The proposed Project's water use will be subject to the annual Water Supply Development fee if IID determines that water for the Project is to be supplied under the IWSP.

Given the Colorado River conditions, the likelihood that IID will not receive its annual 3.1 MAF apportionment less QSA/Transfer Agreement obligations of Colorado River water is no longer low despite the high priority of the IID entitlement relative to other Colorado River contractors, see IID's Water Rights section on page 26 and projected water supplies. Given the prolonged drought conditions and recent communication from the Department of the Interior, reductions to all basin contractors, including IID, are increasingly likely. If such obligatory reductions were to come into effect within the 30-year Project life, the Applicants are to work with IID to ensure any anticipated reduction can be managed.

The County of Imperial as the lead agency has a responsibility to determine if the current and projected demands and water supply conditions, including projected uncertainties of Colorado River hydrology are sufficient to enable the County to make the findings necessary to approve this WSA. IID, like any water provider, has jurisdiction to manage the water supply within its service area and impose conservation measures during a period of temporary water shortage, such as the one we are experiencing now.

Furthermore, with the proposed Project's replacement of agricultural land with the Big Rock 2 solar facility , IID's task of managing water supply under the QSA/Transfer Agreements and any other voluntary contributions to Lake Mead would be lighter, because agricultural water use on the proposed Project site would be significantly higher than the proposed water demand for the proposed Project as explained in the Expected Water Demands for the Proposed Project on the section that follows.

Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for MCI temporary water use.[23] Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the Project proponent will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which allows the Water Department to provide the district with information needed to manage the district apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts. If water is to be provided under IWSP in addition to the established delivery charges, the Applicant may also need to enter into a IWSP Water Supply Agreement.

[23] *Complete the Application for Temporary Water Use and submit to Division office. Complete encroachment permit through Real Estate – non-refundable application fee of $250, se. IID website: Real Estate / Encroachments, Permissions, and Other Permitting. Fee for temporary service water: Schedule No. 7 General Industrial Use / Temporary Service Minimum charge for up to 5 AF, pay full flat fee for 5 AF at General Industrial Use rate ($425); use more than 5 AF, pay fee for actual use at General Industrial Rate ($85/AF).*

PC ORIGINAL PKG

EXPECTED WATER DEMANDS FOR THE PROPOSED PROJECT

Water for the proposed Project will be needed on-site for operational demands including the O&M building, fire flow storage, and panel washing (no water for dust suppression during operation required). Untreated Colorado River water will be supplied to the project via the adjacent Westside Main canal from the gates listed in Table 15 which are assumed to be good condition. As noted above, the Project is estimated to require up to 10 AFY over a 30 year, which is a 99.9 percent decrease from the historical Project site demand of 7,348 AFY.

Projected water use by Big Rock 2 are summarized in **Table 14**.

Table 14. Project Operational Water Uses (AFY)

Use	Acre-Feet per Year	Total AF Over 30-Year Period
Water for Landscape Irrigation	0	0
Water for Dust Control	0	0
Water for Operation and Maintenance (30 years)	10	300
TOTAL RAW WATER USAGE	10	300

As of the date of this WSA, IID delivers untreated Colorado River water to the proposed Project site for agricultural uses through the following gates and laterals. The 10-year record for 2015-2024 of water delivery accounting is shown in **Table 15.** The data documents a 10-year 7,348 AFY average.

PC ORIGINAL PKG

Table 15. Ten-Year Historic Delivery (AFY), 2015-2024

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Westside Main 14A (Brundy)	319.7	219.7	81.7	372.2	431.2	345.8	280.3	429.1	398.1	546.9
Foxglove 3 (Brundy)	507.3	322.6	530.9	585.1	527.9	502.5	395.6	525.8	477.9	582
Foxglove 1 (Downs)	437	444.7	393.4	391.4	310.8	396.3	401.4	395.2	423.3	437.5
Foxglove 2 (Downs)	426.4	462.5	394.6	386.3	316.3	347.2	413.2	398.1	404.5	465.7
Fern 15 (Gabrych/Kuhn)	431.5	232.1	380.9	310.9	288.5	304.8	356.7	330.4	228.6	243.2
Fern 22 (Gabrych/Kuhn)	793.5	0	0	408.5	993.6	1,029.4	1182.7	838.5	949.5	902.6
Fig 6 (Gabrych/Kuhn)	249.8	221.3	261	287	311.2	177.5	108.6	0	0	255.5
Fig 7 (Gabrych/Kuhn)	430.9	393.4	491	411.3	457.1	450.4	436.4	502.8	365.3	347.4
Fig 12A (Gabrych/Kuhn)	1,133.8	855.4	264	219.1	450.6	760.9	308.6	989.6	264	141.5
Fig 13 (Gabrych/Kuhn)	395.1	268.2	299.4	142.1	142.1	98.8	203.6	487	518.6	587
Fig 18 (Gabrych/Kuhn)	0	0	0	0	0	0	0	0	0	0
Westside Main 13 (LaValle Sabbia)	1,325.8	1,314.1	1,155.7	1,302.3	1,206.9	903.1	1,310.7	1,620.2	1,258.2	936.6
Westside Main 13A (LaValle Sabbia)	0	544.7	914.1	887.5	719.2	771.6	953.7	931.7	888.8	648.7
Fern 17 (Tomlinson)	243.1	290.8	373.5	386.4	165.2	253.2	333	329	230.5	48.1
Fern 18 (Tomlinson)	27.9	69.6	113	52.8	37.9	43	46.8	47.4	131	8
Fern 20 (Tomlinson)	148.6	149.7	248.2	192.2	150.1	126.1	203.5	204.8	132.8	29.9
Fern 23 (Tomlinson)	638.4	603.1	827.6	811	817.6	603.1	680.4	778.8	209.4	0

PC ORIGINAL PKG

Fern 29 (Tomlinson)	155	178.6	251.1	203.6	220.2	173.6	234.8	250.9	134.4	34.9
Fern FSM 12A (Whitmer)	0	0	0	0	0	0	0	0	0	0
TOTAL	7,663.8	6,570.5	6,980.1	7,349.7	7,546.4	7,287.3	7,778	9,059.3	7,014.9	6,215.5

Source: *IID Staff, 2025, Marian Gabrych, Randal Whitmer, Tom Brundy, Susan Downs, Will Tomlinson, and La Valle Sabia, received in February 2025.*

PC ORIGINAL PKG

The proposed Project has an estimated total water demand of up to 300 AF or 10 AFY for the 30-year operational period. Thus, the proposed Project demand is a decrease of 7,338 AFY from the historical 10-year average (7,348 AFY) or 99.9 percent less than the historic 10-year average annual delivery for agricultural uses at the proposed Project site. The proposed Project's estimated operational water demand of up to10 AFY represents only 0.054 percent of the 18,620 AFY balance of water supply that may be available for contracting under the IWSP.

PC ORIGINAL PKG

IID's Ability to Meet Demands With Water Supply

Under normal operating conditions, non-agricultural water demands for the IID water service area are projected for 2025-2055 in **Table 5**, and IID agricultural demands including system operation are projected for 2025-2055 in **Table 6**, all volumes within the IID water service area. IID water supplies available for consumptive use after accounting for mandatory transfers are projected to 2077 in **Table 11** Column 11), volumes at Imperial Dam.

To assess IID's ability to meet future water demands, IID historic and forecasted demands are compared with CRWDA Exhibit B net availability under its water supply entitlement, volumes at Imperial Dam **Table 11** (Column 11). The analysis requires accounting for system operation consumptive use within the IID water service area, from AAC at Mesa Lateral 5 to Imperial Dam, and for water pumped for use by the USBR Lower Colorado Water Supply Project (LCRWSP), an IID consumptive use component in the USBR Decree Accounting Report. IID system operation consumptive use for 2020 is provided in **Table 16** to show the components to be included in the calculation of 2024 volumes in comparison to 2020.

Table 16. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024

	2020 Operational Consumptive Use (KAF)	2024 Operational Consumptive Use (KAF)
IID Delivery System Evaporation	24.4	24.9
IID Canal Seepage	90.8	94.9
IID Main Canal Spill	10.1	8.4
IID Lateral Canal Spill	121.5	112.9
IID Seepage Interception	-39.0	-8.9
IID Unaccounted Canal Water	-40.0	TBD
Total IID System Operational Use, within water service area	167.8	**TBD**
"Losses" from AAC @ Mesa Lat 5 to Imperial Dam (Station 1117-2900)	9.2	TBD
LCWSP pumpage	-10	-10.0
Total System Operational Use in 2020 and 2024	167.0	**TBD**

Sources: 2024 IID Water Balance Ran 03/27/2024

Notwithstanding any regulatory water supply cuts from the Secretary of Interior, IID's ability to meet customer water demands through 2055 as shown in **Table 17** is based on the following:

- Non-agricultural use from **Table 5.**
- Agricultural and Salton Sea mitigation uses from **Table 6.**
- CRWDA Exhibit B net available for IID consumptive use from **Table 11.**
- System operation consumptive use from **Table 16** for 2020.

PC ORIGINAL PKG

Table 17. IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2025

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Non-Ag Delivery	107.4	113.2	133.1	142.9	151.4	163.2	175.4	188.4	199.3
Ag Delivery	2,158.9	2,165.4	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5
QSA SS Mitigation Delivery	153.3	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
System Op CU in IID & to Imperial Dam	61.3	167.0	230.5	225.4	225.4	225.4	225.4	225.4	225.4
IID CU at Imperial Dam	**2,488.2**	**2,503.6**	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Conservation in Excess of Exhibit B	**45.5**	**51.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total IID CU	**2,533.6**	**2,554.6**	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Exhibit B IID Net Available for CU at Imperial Dam (adjusted PPR's 2015/2020)	**2,623.7**	**2,652.7**	**2,617.8**	**2,612.8**	**2,612.8**	**2,612.8**	**2,612.8**	**2,665.8**	**2,665.8**
2015 & 2020 Actual and 2025-2055 Projected IID Underrun (-)/Overrun at Imperial Dam	**-90.02**	**-98.07**	5.30	-35.00	-26.50	-14.70	-2.50	-42.50	-31.60

Notes: 2015 and 2020 have been updated to reflect actual consumptive use with respective USBR decree accounting adjustments
Non-Ag Delivery CI 15.0%, Ag Delivery CI 3.0%, QSA SS mitigation CI 15%
QSA Salton Sea Mitigation Delivery terminated on 12/31/2017
Underrun /Overrun = IID CU at Imperial Dam minus CRWDA Exhibit B Net Available
Notes: Ag Delivery for 2025-2055 does not take into account land conversion for solar use nor reduction in agricultural land area due to urban expansion.

As shown above, IID forecasted demand has the potential to exceed CRWDA Exhibit B Net Consumptive Use volumes during several time intervals through the lifespan projection for the Project. However, due to temporary land conversion for solar use and urban land expansion that will reduce agricultural acres in the future, a water savings of approximately 217,000 AFY will likely be generated into the future and for the lifetime of the proposed Project, assuming no regulatory cutbacks are enforced upon IID.

In addition, USBR 2020 Decree Accounting Report states that IID Consumptive Use was 2,493.7 KAF (excludes 1,579 AF of ICS for storage in Lake Mead and an additional 49,444 AF of conserved water left on the Colorado River system) with an underrun of -98.1 KAF, as reported by IID in 2020 Annual SWRCB Report per WRO 2002-2013; that is, IID uses less than the amount in its approved Water Order (2,615,300 AF).

Table 18. 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam

IID Approved Water Order	2,625.3 less 10 supplied by LCWSP and less 26 of additional conserved water
IID Consumptive Use	2,493.7
IID **Underrun** /Overrun	**-98.1**
Sources: *2020 IID Revised Water Order, approved on March 10, 2020, 2020 Decree Accounting Report, and* *2020 Annual Report of IID Pursuant to SWRCB Revised Order WRO 2002-2013*	

PC ORIGINAL PKG

As reported in the 2023 Annual Water & QSA Implementation Report and 2024 SWRCB Report and presented in **Table 12**, from 2013 to 2024 IID consumptive use (CU) resulted in underruns; i.e., annual CU was less than the district's QSA Entitlement of 3.1 MAFY minus QSA/Transfer Agreements obligations. This would indicate that even though **Table 17** shows IID Overrun/Underrun at Imperial Dam not exceeding CRWDA Exhibit B Net Available for CU, for the 30-year life of the proposed Project, IID consumptive use may be less than forecasted.

Meanwhile, forecasted Ag Delivery reductions presented in **Table 6** are premised on implementation of on-farm practices that will result in efficiency conservation. These reductions do not take into account land conversion for solar projects nor reduction in agricultural land area due to urban expansion; that is to say, the forecasted Ag Delivery is for acreage in 2003 with reduction for projected on-farm conservation efficiency. Thus, Ag Delivery demand may well be less than forecasted in **Table 6**. In any case, the proposed Project will use less water than the historical agricultural demand of proposed Project site, so the proposed Project will ease rather than exacerbate overall IID water demands.

In the event that IID has issued water supply agreements that exhaust the 25 KAFY IWSP set aside for conservation, and it becomes apparent that IID delivery demands due to non-agriculture use are going to cause the district to exceed its quantified 3.1 MAFY entitlement less QSA/Transfer Agreements obligations, IID has identified options to meet these new non-agricultural demands. These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing conservation strategies and projects to expand the size of the district's water supply portfolio.

These factors will be discussed in the next two sections, Tracking Water Savings from Growth of Non-Agricultural Land Uses and Expanding Water Supply Portfolio.

Tracking Water savings from Growth of Non-Agricultural Land Uses

The Imperial County Board of Supervisors has targeted up to 25,000 acres of agricultural lands, about 5 percent of the farmable acreage served by IID, for temporary conversion to solar farms; because the board found that this level of reduction would not adversely affect agricultural production. As reported for IID's Temporary Land Conversion Fallowing Program, existing solar developments at the end of 2024 have converted 13,307 acres of farmland. Solar projects had a total yield at-river of 72,320 AF of water in 2024. The balance of the 25,000-acre agriculture-to-solar policy is 11,693 acres. On average, each agricultural acre converted reduces agricultural demand by 5.1 AFY, which results in a total at-river yield (reduction in consumptive use) of 127,500 AFY.

However, due to the nature of the conditional use permits under which solar farms are developed, IID cannot rely on this supply being permanently available. In fact, should a solar project decommission early, that land may go immediately back to agricultural use (it remains zoned an agricultural land). Nevertheless, during their operation, the solar farms do ameliorate pressure on IID to implement projects to meet demand from new non-agricultural projects.

PC ORIGINAL PKG

Unlike the impact of solar projects, other non-agricultural uses are projected to grow, as reflected in the nearly 85.6 percent increase in non-agricultural water demand from 107.4 KAF in 2015 to 199.3 KAF in 2055 reflected herein in **Table 17**. Although state mandated water conservation goals to municipalities has curtailed the upward trend, Table 17 continues to depict a conservative scenario. This increase in demand of 92 KAFY is likely to be offset by reductions in agricultural lands; however, as the land remains zoned as agricultural land, that source is not reliable to be permanently available to IID.

The amount of land developed for residential, commercial, and industrial purposes is projected to grow by 55,733 acres from 2015 to 2050[24] within the sphere of influence of the incorporated cities and specific plan areas in Imperial County. A conservative estimate is that such development will displace at least another 24,500 acres of farmland based on the Imperial Local Agency Formation Commission (LAFCO) sphere of influence maps and existing zoning and land use in Imperial County. At 5.13 AFY yield at-river, there would be a 125,000 AFY reduction IID net consumptive use. However, the total acreage from actual annexations that have resulted in reductions to agricultural acreage between 2015 and 2024 has been 2,224 acres, according to IID's annual inventory of total farmable land which is consistent with the acreage gain to non-agricultural land uses (2,224 acres) and based off of annexation records obtained through the Imperial County Local Agency Formation Commission. This shift in acreage documents a growth rate of approximately 50 percent of the originally projected rate.

The total foreseeable solar project temporary yield at-river (91,800 AFY) and municipal development permanent yield at-river, conservatively adjusted (65,000 AFY) is to reduce forecasted IID net consumptive use at-river 156,800 AFY, which is more than enough to meet the forecast demand minus Exhibit B Net Available volumes shown in **Table 17.** This yield at-river is sufficient to meet the forecasted excess of non-agricultural use over Net Available supply within the IID service area for the next 20 years, as is required for SB 610 analysis (assuming there are no regulatory cuts to IID's full entitlement).

Farmland retirement associated with municipal development would reduce IID agricultural delivery requirements beyond the efficiency conservation projections shown **Table 6.** Therefore, in the event that Schedule 7 General Industrial Use water has exhausted its apportioned amount, the Applicants will rely on IID IWSP water to supply the Project, as discussed above in the Projected Water Availability section.

Expanding Water Supply Portfolio

The proposed Project, as a new non-agricultural development, may need to enter into a water supply agreement with IID. Upon agreement, the District will procure or develop a water supply for the Project at its sole discretion, which may include policy changes, construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the

[24] IRWMP, Chapter 5, Table 5-14.

PC ORIGINAL PKG

corresponding water supply agreement, along with other terms and conditions including the requisite environmental permitting.

While forecasted long-term annual yield-at-river from the reduction in agricultural acreage due to municipal development in the IID service area may be sufficient to meet the forecasted excess of non-agricultural use over CRWDA Net Available supply (**Table 17**) without regulatory cuts and without expanding IID's Water Supply Portfolio, IID has also evaluated the feasibility of a number of capital projects to increase its water supply portfolio.

As reported in 2012 Imperial IRWMP Chapter 12, IID contracted with GEI Consultants, Inc. to identify a range of capital project alternatives that the district could implement. Qualitative and quantitative screening criteria and assumptions were developed in consultation with IID staff. Locations within the IID water service area with physical, geographical, and environmental characteristics most suited to implementing short- and long-term alternatives were identified. Technical project evaluation criteria included volumes of water that could be delivered and/or stored by each project, regulatory and permitting complexity, preliminary engineering components, land use requirements, and costs.

After preliminary evaluation, a total of 27 projects were configured:

- 17 groundwater or drain water desalination
- 2 groundwater blending
- 6 recycled water
- 1 groundwater banking
- 1 IID system conservation (concrete lining)

Projects were assessed at a reconnaissance level to allow for comparison of project costs. IID staff and the board identified key factors to categorize project alternatives and establish priorities. Lower priority projects were less feasible due to technical, political, or financial constraints. Preferential criteria were features that increased the relative benefits of a project and grant it a higher priority. Four criteria were used to prioritize the IID capital projects:

1. **Financial Feasibility.** Projects whose unit cost was more than $600/AF were eliminated from further consideration.
2. **Annual Yield.** Project alternatives generating 5,000 AF or less of total annual yield were determined not to be cost-effective and lacking necessary economies of scale.
3. **Groundwater Banking.** Groundwater banking to capture and store underruns is recognized as a beneficial use of Colorado River water. Project alternatives without groundwater banking were given a lower priority.
4. **Partnering.** Project alternatives in which IID was dependent on others (private and/or public agencies) for implementation were considered to have a lower priority in the IID review; this criterion was reserved for the IRWMP process, where partnering is a desirable attribute.

PC ORIGINAL PKG

Based on these criteria, the top ten included six desalination, two groundwater blending, one system conservation, and one groundwater storage capital projects. These capital projects are listed in **Table 19** which follows. Some of these project alternatives have proven to longer be feasible due to technical and/or environmental constraints and have been stricken, as noted.

PC ORIGINAL PKG

Table 19. IID Capital Project Alternatives and Cost (May 2009 price levels $)

Name	Description	Capital Cost	O&M Cost	Equivalent Annual Cost	Unit Cost ($/AF)	In-Valley Yield (AF)
~~GW 18~~	~~Groundwater Blending E. Mesa Well Field Pumping to AAC~~	~~$39,501,517~~	~~$198,000~~	~~$2,482,000~~	~~$99~~	~~25,000~~
~~GW 19~~	~~Groundwater Blending: E. Mesa Well Field Pumping to AAC w/Percolation Ponds~~	~~$48,605,551~~	~~$243,000~~	~~$3,054,000~~	~~$122~~	~~25,000~~
WB 1	Coachella Valley Groundwater Storage	$92,200,000	$7,544,000	$5,736,746	$266	50,000
DES 8	E. Brawley Desalination with Well Field and Groundwater Recharge	$100,991,177	$6,166,000	$12,006,000	$480	25,000
AWC 1	IID System Conservation Projects	$56,225,000	N/A	$4,068,000	$504	8,000
DES 12	East Mesa Desalination with Well Field and Groundwater Recharge	$112,318,224	$6,336,000	$12,831,000	$513	25,000
DES 4	Keystone Desalination with IID Drainwater/ Alamo River	$147,437,743	$15,323,901	$23,849,901	$477	50,000
~~DES 14~~	~~So. Salton Sea Desalination with Alamo River Water and Industrial Distribution~~	~~$158,619,378~~	~~$15,491,901~~	~~$24,664,901~~	~~$493~~	~~50,000~~
~~DES 15~~	~~So. Salton Sea Desalination with Alamo River Water and MCI Distribution~~	~~$182,975,327~~	~~$15,857,901~~	~~$26,438,901~~	~~$529~~	~~50,000~~
DES 2	Keystone Desalination with Well Field and Groundwater Recharge	$282,399,468	$13,158,000	$29,489,000	$590	50,000

Source: Imperial IRWMP, Chapter 12; see also Imperial IRWMP Appendix N, IID Capital Projects

[1] Pumping on the East Mesa via Well Fields was assessed by IID and it was determined that the area is not condusive of groundwater recovery due to the geological conditions in the area and/or environmental challenges.

[2] It has been demonstrated over time that any reduction in Salton Sea water could result in environmental impacts related to existing biological resources, air quality and other potential adverse community impacts. Salton Sea water desalination for redistribution to industrial and/or municipal use is not being persued at any level.

IID Near Term Water Supply Projections

As mentioned above, IID's quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID's use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including seepage recovery from IID canals and the All-American Canal (ACC) and measures to reduce operational discharge. As the IID website Water Department states:

> Through the implementation of extraordinary conservation projects, the development of innovative efficiency measures and the utilization of progressive management tools, the IID Water Department is working to ensure both the long-term viability of agriculture and the continued protection of water resources within its service area.

PC ORIGINAL PKG

Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including this Project for the next 20 years and for the life of the proposed Project under a water supply consistent with the district's full entitlement.

PC ORIGINAL PKG

COUNTY OF IMPERIAL FINDINGS

IID serves as the regional wholesale water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, industrial, environmental and recreational water users within its water service area. Imperial County serves as the responsible agency with land use authority over the proposed project. Imperial County Water Assessment findings are summarized as follows, based on the information contained herein and as supported by IID water supply data:

1. IID's annual entitlement to consumptive use of Colorado River water is capped at 3.1 MAF less water transfer obligations, pursuant to the QSA and Related Agreements. Under the terms of the CRWDA, IID is implementing efficiency conservation measures to reduce net consumptive use of Colorado River water needed to meet its QSA/Transfer Agreements obligations while retaining historical levels of agricultural productivity.
2. In 2024 IID consumptively used 2311905 AF of Colorado River water (volume at Imperial Dam); 2,103,768 AF were delivered to customers (including recreational and environmental water deliveries) of which 1,991,796 AF, or 95 percent, went to agricultural users as per IID's Provisional Water Balance of Selective Flow Paths run on March 2025.
3. Reduction of IID's net consumptive use of Colorado River water under the terms of the Colorado River Water Delivery Agreement is to be the result of efficiency conservation measures. Crop water use in the Imperial Valley will not decline under these conditions, however IID operational spill and tailwater from field runoff will decline as efficiency conservation measures are implemented, impacting the Salton Sea.
4. The dependability of IID's water rights, Colorado River flows, and Colorado River storage facilities for Colorado River water alone are not sufficient to assure water availability for the Project. The prolonged drought conditions on the Colorado River Basin have made it increasingly likely that the water supply of IID may be disrupted, in dry years or/and under shortage conditions. Mexico, Arizona and Nevada, which have lower priority than IID, have already experienced Tier 1 and/or Tier 2a reductions in 2022, 2023, and 2024 as a result of the declared Colorado River water shortage.
5. Due to ongoing Colorado River drought conditions, Lake Mead's declining elevation, reduced inflows from Lake Powell, and the suspension of the federal Inadvertent Overrun and Payback Policy, which eliminates IID's ability to overrun its 3.1 MAF annual entitlement during water shortage conditions, the IID Board has implemented an annual apportionment program (otherwise known as the Equitable Distribution Plan or EDP).
6. IID's EDP apportions the available water supply among all its water users equitably and among three water user categories based on historical use: 1) agricultural water users, 2) commercial/industrial water users, and 3) potable water users. Apportionment into these categories as a whole is initiated after deducting from the available water supply water for operational system needs, system conservation yields, environmental mitigation requirements,

PC ORIGINAL PKG

recreational uses, and similar unmeasured small pipe account water uses. See Attachment B - Equitable Distribution Plan.

7. Historically, IID has never been denied the right to use the annual volume of water it has available for its consumptive uses under its entitlement. Nevertheless, IID is participating in discussions for possible actions in response to continued extreme drought on the Colorado River.
8. The proposed Project has an estimated operational water demand of 300 AF or 10 AFY over a 30-year period. Thus, the proposed Project demand is a decrease of 7,338 AFY from the historical 10-year average or 99.9 percent decrease from the historical 10-year average annual delivery for agricultural uses at the proposed Project site.
9. The Project's water delivery will be covered under the Schedule 7 General Industrial Use. In the event that IID determines that the proposed Project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. In which case, the proposed Project would use 0.054 percent of the 18,620 AFY of IWSP water.
10. The Project is required to enter into a Water Supply Agreement with IID for the 10 AFY of projected water demand. Under any fully executed water supply agreement, IID has the capacity to procure or develop water supplies for the Project through the implementation of policies, the construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions, including the requisite environmental permitting.
11. Based on the Environmental Impact Report (EIR) prepared for this proposed Project pursuant to the CEQA, California Public Resources Code sections 21000, *et seq*. (SCH No. 2024090063), the County of Imperial hereby finds that the IID projected water supply, together with water conservation measures required, is sufficient to satisfy the demands of this proposed Project in addition to existing and planned future uses, including agricultural and non-agricultural uses for a 30-year Water Supply Assessment period.

PC ORIGINAL PKG

ASSESSMENT CONCLUSION

This Water Supply Assessment has determined that IID water supply is adequate for the Big Rock 2 solar facility (proposed Project). The Imperial Irrigation District's IWSP for Non-Agricultural Projects may dedicate up to 25,000 AF of IID's annual conserved water supply to serve new projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID. Imperial County estimates a cumulative, non-agricultural project water supply demand increase of up to 63,243 AFY within the foreseeable 30-year planning period, within its jurisdiction. However, all new non-agricultural projects, including Big Rock 2 solar, are required to mitigate their respective water supply demand via conservation programs or conservation projects in order to receive future water apportionments.

New, non-agricultural projects may be susceptible to delivery cutbacks when an EDP Apportionment is exhausted, thus all approved projects require best management practices and water use efficiency at all times. Given the prolonged drought conditions and recent communication to IID from the Department of the Interior, reductions to all basin contractors, including IID and its water customers, are increasingly likely. If such reductions were to come into effect within an approved project's operation, the County of Imperial is to work with IID to ensure any anticipated reduction can be managed via the means identified herein or other equivalent measures.

Under an authorized water supply agreement, Big Rock 2 solar will be required to acknowledge and accept as a condition of water service that to the extent that IID receives an order or directive from a governmental authority, having appropriate jurisdiction, that reduces the total volume of water available to IID from the Colorado River during all or any part of their water service agreement, IID may reduce the water service agreement amount, as directed by the IID Board, as a proportionate reduction of the total volume of water available to IID. This reduction is separate from and in addition to any allocation authorized pursuant to the EDP.

The Project's operational water demand of approximately 10 AFY represents 0.054 percent of the unallocated supply that may be set aside for additional conservation and contracting under the IWSP for non-agricultural projects, and approximately 0.016 percent of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed Project represents a 99.9 percent decrease from the 10-year historical average agricultural water use for 2015-2024 at the proposed Project site.

For all the reasons described herein, the historical stability of the IID water supply, the amount of foreseeable water available, along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers suggest that Big Rock 2 solar 's water needs will be reasonably met for the next 20 years as assessed for compliance under SB-610.

PC ORIGINAL PKG

RESOURCES AND REFERENCES

1. California Department of Water Resources. (2003). Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001 to assist water suppliers, cities, and counties in integrating water and land use planning.

2. Imperial County Planning and Development Services. (2008). Imperial County General Plan 2008 Update. El Centro, CA. General Plan | Imperial County Planning & Development Services (icpds.com), retrieved, 2021

3. Imperial Irrigation District. Website: Equitable Distribution Plan.

4. Imperial Irrigation District Website: 2021 Water Conservation Plan. (2025). Imperial Irrigation District 2021 Water Conservation Plan. Imperial, CA.

5. Imperial Irrigation District. (2024). IID Interactive GIS Water Service Area Map. Imperial, CA.

6. Imperial Irrigation District. (2009). Interim Water Supply Policy for Non-Agricultural Projects. Imperial, CA

7. Imperial Irrigation District. (2012). Temporary Land Conversion Fallowing Policy (TLFCP) for Water Conservation Yield Water conservation yield attributable to land removed from agricultural production and temporarily fallowed. Updated March 27, 2018.

8. Imperial Irrigation District Water Department. (2013). Colorado River Water Accounting and. Conservation Commitments Update. Tina Anderholt Shields, PE. Colorado River Resources Manager Imperial, CA.

9. Imperial Irrigation District. (2023). 2023 Water & QSA Implementation Report, Imperial, CA

10. Imperial Irrigation District. (2021). Consultation with Justina Gamboa-Arce., Water Conservation Planner. Imperial, CA.

11. Imperial Irrigation District. (2021). Temporary Land Fallowing Conversion Policy. (TLFCP).

12. Imperial Irrigation District. (2024). 2023 IID SWRCB Report.

13. Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., and Macknick, J. 2013. Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States. July 2013. http://large.stanford.edu//courses/2020/ph240/multani2/docs/sand-2013-5238.pdf

PC ORIGINAL PKG

14. Macknick, J., Newmark, R., Heath, G., and Hallet, KC. 2011. A Review of Operational Water Consumption and Withdrawal Factors for Electricity Generating Technologies. March 2011. https://www.nrel.gov/docs/fy11osti/50900.pdf

15. United States Bureau of Reclamation Lower Colorado Region Website: Boulder Canyon Operations Office – Programs and Activities, Lower Colorado River Water Accounting, Water Accounting Reports (1964 - 2015). Compilation of Records in Accordance with Article V of the Decree of the Supreme Court of the United States in Arizona v. California Dated March 9, 1964: Calendar Years 1964 - 2015 Boulder City, NV.

PC ORIGINAL PKG

ATTACHMENTS

PC ORIGINAL PKG

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects

Attachment B: IID 2023 Equitable Distribution Plan, revised July 26, 2023

PC ORIGINAL PKG

(This page intentionally left blank)

PC ORIGINAL PKG

ATTACHMENT A: IID INTERIM WATER SUPPLY POLICY FOR NON-AGRICULTURAL PROJECTS[25]

1.0 Purpose.

Imperial Irrigation District (the District) is developing an Integrated Water Resources Management Plan (IWRMP) [26] that will identify and recommend potential programs and projects to develop new water supplies and new storage, enhance the reliability of existing supplies, and provide more flexibility for District water department operations, all in order to maintain service levels within the District's existing water service area. The first phase of the IWRMP is scheduled to be completed by the end of 2009 and will identify potential projects, implementation strategies and funding sources. Pending development of the IWRMP, the District is adopting this Interim Water Supply Policy (IWSP) for Non-Agricultural Projects, as defined below, in order to address proposed projects that will rely upon a water supply from the District during the time that the IWRMP is still under development. It is anticipated that this IWSP will be modified and/or superseded to take into consideration policies and data developed by the IWRMP.

2.0 Background.

The IWRMP will enable the District to more effectively manage existing water supplies and to maximize the District's ability to store or create water when the available water supplies exceed the demand for such water. The stored water can be made available for later use when there is a higher water demand. Based upon known pending requests to the District for water supply assessments/verifications and pending applications to the County of Imperial for various Non-Agricultural Projects, the District currently estimates that up to 50,000 acre feet per year (AFY) of water could potentially be requested for Non-Agricultural Projects over the next ten to twenty years. Under the IWRMP the District shall evaluate the projected water demand of such projects and the potential means of supplying that amount of water. This IWSP currently designates up to 25,000 AFY of water for potential Non-Agricultural Projects within IID's water service area. Proposed Non-Agricultural projects may be required to pay a Reservation Fee, further described below. The reserved water shall be available for other users until such Non-Agricultural projects are implemented and require the reserved water supply. This IWSP shall remain in effect pending the approval of further policies that will be adopted in association with the IWRMP.

3.0 Terms and Definitions.

3.1 Agricultural Use. Uses of water for irrigation, crop production and leaching.

[25] IID Board Resolution 31-2009. Interim Water Supply Policy for New Non-Agricultural Projects. September 29, 2009. < IID Interim Water Supply Policy for Non-Agricultural Projects>

[26] The 2009 Draft IID IWRMP has been superseded by the October 2012 Imperial IRWMP, which incorporates the conditions of the IWSP by reference.

PC ORIGINAL PKG

3.2 Connection Fee. A fee established by the District to physically connect a new Water User to the District water system.

3.3 Industrial Use. Uses of water that are not Agricultural or Municipal, as defined herein, such as manufacturing, mining, cooling water supply, energy generation, hydraulic conveyance, gravel washing, fire protection, oil well re-pressurization and industrial process water.

3.4 Municipal Use. Uses of water for commercial, institutional, community, military, or public water systems, whether in municipalities or in unincorporated areas of Imperial County.

3.5 Mixed Use. Uses of water that involve a combination of Municipal Use and Industrial Use.

3.6 Non-Agricultural Project. Any project which has a water use other than Agricultural Use, as defined herein.

3.7 Processing Fee. A fee charged by the District Water Department to reimburse the District for staff time required to process a request for water supply for a Non-Agricultural Project.

3.8 Reservation Fee. A non-refundable fee charged by the District when an application for water supply for a Non-Agricultural Project is deemed complete and approved. This fee is intended to offset the cost of setting aside the projected water supply for the project during the period commencing from the completion of the application to start-up of construction of the proposed project and/or execution of a water supply agreement. The initial payment of the Reservation Fee will reserve the projected water supply for up to two years. The Reservation Fee is renewable for up to two additional two-year periods upon payment of an additional fee for each renewal.

3.9 Water Supply Development Fee. An annual fee charged to some Non-Agricultural Projects by the District, as further described in Section 5.2 herein. Such fees shall assist in funding IWRMP or related water supply projects,

3.10 Water User. A person or entity that orders or receives water service from the District.

4.0. CEQA Compliance.

4.1 The responsibility for CEQA compliance for new development projects within the unincorporated area of the County of Imperial attaches to the County of Imperial or, if the project is within the boundaries of a municipality, the particular municipality, or if the project is subject to the jurisdiction of another agency, such as the California Energy Commission, the particular agency. The District will coordinate with the County of Imperial, relevant municipality, or other agency to help ensure that the water supply component of their respective general plans is comprehensive and based upon current information. Among other things, the general plans should assess the direct, indirect and cumulative potential impacts on the environment of using currently available water supplies for new industrial, municipal, commercial and/or institutional uses instead of the historical use of that water for agriculture. Such a change in land

PC ORIGINAL PKG

use, and the associated water use, could potentially impact land uses, various aquatic and terrestrial species, water quality, air quality and the conditions of drains, rivers and the Salton Sea.

4.2 When determining whether to approve a water supply agreement for any Non-Agricultural Project pursuant to this IWSP, the District will consider whether potential environmental and water supply impacts of such proposed projects have been adequately assessed, appropriate mitigation has been developed and appropriate conditions have been adopted by the relevant land use permitting/approving agencies, before the District approves any water supply agreement for such project.

5.0. Applicability of Fees for Non-Agricultural Projects.[27]

5.1 Pursuant to this Interim Water Supply Policy, applicants for water supply for a Non-Agricultural Project shall be required to pay a Processing Fee and may be required to pay a Reservation Fee as shown in Table A. All Water Users shall also pay the applicable Connection Fee, if necessary, and regular water service fees according to the District water rate schedules, as modified from time to time.

5.2 A Non-Agricultural Project may also be subject to an annual Water Supply Development Fee, depending upon the nature, complexity, and water demands of the proposed project. The District will determine whether a proposed Non-Agricultural Project is subject to the Water Supply Development Fee for water supplied pursuant to this IWSP as follows:

5.2.1. A proposed project that will require water for a Municipal Use shall be subject to an annual Water Supply Development Fee as set forth in Table B if the projected water demand for the project is in excess of the project's estimated population multiplied by the District-wide per capita usage. Municipal Use projects without an appreciable residential component will be analyzed under sub-section 5.2.3.

5.2.2. A proposed project that will require water for an Industrial Use located in an unincorporated area of the County of Imperial shall be subject to an annual Water Supply Development Fee as set forth in Table B.

5.2.3. The applicability of the Water Supply Development Fee set forth in Table B to Mixed Use projects, Industrial Use projects located within a municipality, or Municipal Use projects without an appreciable residential component, will be determined by the District on a case-by-case basis, depending upon the proportion of types of land uses and the water demand proposed for the project.

5.3. A proposed Water User for Non-Agricultural Projects may elect to provide some or all of the required water supply by paying for and implementing some other means of providing water in a manner approved by the District, such as conservation projects, water storage projects and/or use of an alternative source of supply, such as recycled water or some source of water other than from the District water supply. Such election shall require consultation with the District regarding the details of such alternatives and a determination by the District, in its reasonable discretion, concerning how much credit,

[27] The most recent fee schedules can be found in a link at IID/Water/ Municipal, Industrial and Commercial Customers; or visit by URL at Imperial Irrigation District : Water Rate Schedules

PC ORIGINAL PKG

if any, should be given for such alternative water supply as against the project's water demand for purposes of determining the annual Water Supply Development Fee for such project.

5.4 The District Board shall have the right to modify the fees shown on Tables A and B from time to time.

6. Water Supply Development Fees collected by the District under this IWSP shall be accounted for independently, including reasonable accrued interest, and such fees shall only be used to help fund IWRMP or related District water supply projects.

7. Any request for water service for a proposed Non-Agricultural Project that meets the criteria for a water supply assessment pursuant to Water Code Sections 10910-10915 or a water supply verification pursuant to Government Code Section 66473.7 shall include all information required by Water Code Sections 10910 –10915 or Government Code Section 66473.7 to enable the District to prepare the water supply assessment or verification. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

8. Any request for water service for a proposed Non-Agricultural Project that does not meet the criteria for a water supply assessment pursuant to Water Code Section 10910-10915 or water supply verification pursuant to Government Code Section 66473.7 shall include a complete project description with a detailed map or diagram depicting the footprint of the proposed project, the size of the footprint, projected water demand at full implementation of the project and a schedule for implementing water service. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

9. All other District rules and policies regarding a project applicant or Water User's responsibility for paying connection fees, costs of capital improvements and reimbursing the District for costs of staff and consultant's time, engineering studies and administrative overhead required to process and implement projects remain in effect.

10. Municipal Use customers shall be required to follow appropriate water use efficiency best management practices (BMPs), including, but not limited to those established by the California Urban Water Conservation Council BMP's (see http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx) [https://calwep.org/our-work/conservation/bmp-guidebooks/], or other water use efficiency standards, adopted by the District or local government agencies.

11. Industrial Use customers shall be required to follow appropriate water use efficiency BMP's, including but not limited to those established by the California Urban Water Conservation Council and California Energy Commission, as well as other water use efficiency standards, adopted by the District or local government agencies.

PC ORIGINAL PKG

12. The District may prescribe additional or different BMPs for certain categories of Municipal and Industrial Water Users.

PC ORIGINAL PKG

(This page intentionally left blank)

PC ORIGINAL PKG

ATTACHMENT B: IID EQUITABLE DISTRIBUTION PLAN[28]

Adopted December 11, 2007
Revised November 18, 2008
Revised April 07, 2009
Revised April 23, 2013
Revised May 14, 2013
Revised October 28, 2013
Revised June 21, 2022
Revised July 26, 2023

[28] Equitable Distribution Plan documents. July 26, 2023 https://www.iid.com/water/rules-and-regulations/equitable-distribution

PC ORIGINAL PKG

ATTACHMENT "D"

FEIR RESOLUTION AND FINDINGS

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING THE IMPERIAL COUNTY BOARD OF SUPERVISORS CERTIFY THE FINAL ENVIRONMENTAL IMPACT REPORT (FEIR) FOR THE BIG ROCK 2 CLUSTER ENERGY SOLAR PROJECT.

WHEREAS, a Final Project EIR SCH #2024090063 and Candidate CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended for the Big Rock 2 Cluster Solar Project which consists of an Environmental Impact Report (EIR), a Mitigation Monitoring & Reporting Program (MM&RP), General Plan Amendment (GPA), Zone Change (ZC), four (4) Conditional Use Permits and four (4) Variances; and

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of making recommendations to the Imperial County Board of Supervisors regarding the Projects for approval and certification; and,

WHEREAS, the Final Project EIR has been provided in a timely manner to public agencies; and

WHEREAS, timely public notice of the Planning Commission's hearing on the Project application has been given, and the Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at that public hearing held with respect to this item on September 24, 2025; and,

WHEREAS, the Final Project EIR includes analysis of various alternatives as required by CEQA including Conditional Use Permit, and Mitigation Monitoring & Reporting Program; and,

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission independently has reviewed and considered the proposed Final Environmental Impact Report (FEIR), Mitigation Monitoring and Reporting Program (MM&RP), and Candidate CEQA Findings prior to making a decision to recommend that the Board of Supervisors approve the proposed Final EIR and Findings of Fact. The Planning Commission finds and determines that the FEIR is adequate and prepared in accordance with the requirements of CEQA, which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with, CEQA, State Planning and Zoning law and the County of Imperial Land Use Ordinance, the following findings for the recommendation for approval and certification of the Final EIR, MM&RP and Findings of Fact have been made as follows:

PC ORIGINAL PKG

1.That the Final Project EIR SCH #2024090063, MM&RP and Candidate CEQA Findings for the Big Rock 2 Cluster Solar Project have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended, and such findings are incorporated by reference herein.

2. That the County independently has reviewed, analyzed, and considered the Final Project EIR, the environmental impacts therein identified for this Project, the Mitigation Monitoring and Reporting Program, and the entire Record of Proceedings prior to recommending approval of this project.

3. The Final Project EIR and the Candidate CEQA Findings reflect the independent judgment of the County.

4. That the Candidate CEQA Findings are supported by substantial evidence and backed by information provided to the County by experts, including but not limited to the County staff and the EIR preparer, on whom the County relies.

5. That the County accept as its own, incorporate as if set forth in full herein, and make each and every one of the findings contained in the CEQA Findings, including feasibility of mitigation measures pursuant to Public Resources Code 21081 (a)/CEQA Guidelines 15091, and the infeasibility of project alternatives.

6. That the Project will not individually or cumulative have an unmitigated adverse effect on fish and wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

7. That the Mitigation Monitoring and Reporting Program is designed to ensure that during project implementation, the Developer and any other responsible parties implement the Project components and comply with feasible mitigation measures identified in the CEQA Findings, the Project entitlements, and the Mitigation Monitoring and Reporting Program and that these measures are fully enforceable through permit conditions, agreements, and/or other measures, such as their inclusion in the Mitigation Monitoring and Reporting Program.

8. Finally, all documents submitted by members of the public and public agencies in connection with the Final Project EIR; minutes and transcripts of all public meetings and public hearings; all written and verbal public testimony presented during a noticed public hearing for the proposed project which such testimony was taken and any and all other materials which constitute the record of proceeding pursuant to Public Resources Code section 21167.6(e); and matters of common knowledge to the County staff, Planning Commission, and Board of Supervisors, including, but not limited to the County General Plan, the County Land Use Ordinance, and County policies, which may be found at the Clerk's Office located at 940 Main Street, Suite 209, El Centro, CA, 92243 during regular business hours, and the Imperial County Planning & Development Services Department at 801 Main Street, El Centro, CA 92243.

PC ORIGINAL PKG

9. That the County Planning Commission does hereby recommend for the Board of Supervisors of the County of Imperial to approve of the resolution to certify the Final Project EIR (FEIR) and the Finding of Fact.

NOW, THEREFORE, based on the above findings, the Planning Commission of the County of Imperial **DOES HEREBY RECOMMEND** the Board of Supervisors approve the proposed Final EIR **SCH #2024090063** & Candidate CEQA Findings for the Big Rock 2 Cluster Solar Project

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote took the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\D. FEIR RESOLUTION\BIG ROCK 2 FEIR Resolution.docx

PC ORIGINAL PKG

CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS
(Public Resource Code §21081, CEQA Guidelines §15091)
Final Environmental Impact Report for the
Big Rock 2 Cluster Solar and Storage Project
(SCH No. 2024090063)

1 Introduction

The following Findings are made for the Environmental Impact Report SCH #2024090063 (the "EIR") for the proposed Big Rock 2 Cluster Solar and Storage Project. The project applicant, 90FI 8me LLC, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and four variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility"); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

1.1 Purpose of CEQA Findings; Terminology

CEQA Findings play an important role in the consideration of projects for which an EIR is prepared. Under Public Resources Code §21081 and CEQA Guidelines §15091 above, where a final EIR identifies one or more significant environmental effects, a project may not be approved until the public agency makes written findings supported by substantial evidence in the administrative record regarding each of the significant effects. In turn, the three possible findings specified in CEQA Guidelines §15091(a) are:

1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

PC ORIGINAL PKG

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

CEQA Guidelines §15092(b) provides that no agency shall approve a project for which an EIR was prepared unless either:

1. The project approved will not have a significant effect on the environment, or
2. The agency has:
   a. Eliminated or substantially lessened all significant effects where feasible as shown in the findings under Section 15091, and
   b. Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

1.2 EIR Process

After the County reviewed the applications for the proposed project, it concluded that the project could have a significant impact on the environment and that preparation of an environmental impact report was determined to be the appropriate CEQA environmental document. The County issued a Notice of Preparation (NOP) on September 3, 2024. The NOP was distributed to city, county, and state and federal agencies, other public agencies, and various interested private organizations and individuals. The NOP was also published in the Imperial Valley Press on September 3, 2024. A public scoping meeting was held on September 26, 2024. No comment letters were received during the scoping meeting. A copy of the NOP is included in Appendix A of the Final EIR.

Based on the analysis presented in the NOP, it was determined that the Draft EIR should analyze project related environmental impacts relative to the following 15 substantive potential impact areas in the Environmental Analysis section:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas (GHG) Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)

PC ORIGINAL PKG

- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

Additionally, the Draft EIR was required to include other CEQA substantive sections including an Executive Summary, Introduction, Environmental Setting, Project Description, Analysis of Long-Term Effects, Cumulative Impacts, Effects Not Significant, and Alternatives.

The Draft EIR was distributed to various federal, state, regional, local agencies and interested parties for a 50-day public review period (May 1, 2025 through June 20, 2025) in accordance with Section 15087 of the CEQA Guidelines. Four letters were received during the comment period, and are responded to in the responses to comments section of the Final EIR.

2 Project Location

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately-owned land, comprising 24 assessor parcels.

As previously mentioned above, the project applicant is seeking approval of four separate CUPs associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility, which together define the project site. The four CUP applications or individual site locations consist of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

2.1 Big Rock 2 Cluster North: CUP #24-0006

The Big Rock 2 Cluster North site is located on 13 parcels comprising approximately 1,030 acres. The Big Rock 2 Cluster North site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

2.2 Big Rock 2 Cluster South: CUP #24-0007

The Big Rock 2 Cluster South site is located on five parcels comprising approximately 410 acres. The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

PC ORIGINAL PKG

2.3 Big Rock 2 Cluster East/Laurel Cluster South: CUP #24-0008

The Big Rock 2 Cluster East/Laurel Cluster South site is located on two parcels comprising approximately 160 acres. The Big Rock 2 Cluster East site/Laurel Cluster South site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

2.4 Big Rock 2 Cluster West: CUP #24-0009

The Big Rock 2 Cluster West site is located on five parcels comprising approximately 249 acres. The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

3 Project Description

The proposed project involves the construction of a utility-scale PV solar and BESS facility on approximately 1,849 acres of privately-owned land. The project would generate up to a combined 500 MW of AC on a daily basis and up to 500 MW of battery storage. Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines which could run overhead and/or underground to a dedicated project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the project substation to the existing Liebert Switchyard, which will then be connected via an overhead 230-kV gen-tie line to the existing Mandrapa Switchyard and the San Diego Gas and Electric (SDG&E) Imperial Valley Substation.

Each individual CUP site may include a ground mounted photovoltaic solar power generating system, supporting structures, inverter modules, pad mounted transformers, BESS, access roads and fencing, an operations and maintenance (O&M) building, and an on-site substation

It is anticipated that all BESS facilities associated with the project will be developed concurrently with PV componentry and situated in proximity to project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and project needs, by allowing one CUP area to utilize BESS credits of another CUP area. Likewise, the project may share facilities such as O&M facilities, transmission-related facilities, project sub-station(s), and/or other appurtenances.

3.1 Project Objectives

The primary project objective is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.

PC ORIGINAL PKG

- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Renewable Energy and Transmission Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce GHG emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of GHGs to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.

3.2 Discretionary Actions/Approvals by the County of Imperial

The County is the "lead agency" for the proposed project. Lead agency is defined as, "the public agency, which has the principal responsibility for carrying out or approving a project." The County must undertake the following discretionary actions and approvals for the project:

1. **General Plan Amendment (#24-0002).** An amendment to the County's General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.
2. **Zone Change (#24-0003).**
    - **Big Rock 2 Cluster North**. The Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy

PC ORIGINAL PKG

Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the RE Overlay Zone. The applicant is requesting a Zone Change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

- **Big Rock 2 Cluster South**. The Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). The applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-3-RE).
- **Big Rock 2 Cluster East.** The Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.
- **Big Rock 2 Cluster West.** The Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). The applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

3. **Approval of the following CUPs:**
    - Big Rock 2 Cluster North: #24-0006
    - Big Rock 2 Cluster South: #24-0007
    - Big Rock 2 Cluster East: #24-0008
    - Big Rock 2 Cluster West: #24-0009

Implementation of the project would require the approval of the four CUPs listed above by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. With approval of the zone change, the project site would be zoned General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone (A-2-RE, A-2-R-RE and A-3-RE).

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*

PC ORIGINAL PKG

- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

4. **Variance (#24-0002 through 24-0005).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project.

The project may involve additional ministerial and discretionary approvals as listed below. Ministerial and discretionary approvals may include, but are not limited to the following:

- Grading Permit(s) - Imperial County Planning & Development Services (ICPDS)
- Building Permit(s) - ICPDS
- Dust Control Plan – Imperial County Air Pollution Control District (ICAPCD)
- Rule 310 Exemption (as applicable) - ICAPCD
- Construction Traffic Control Plan – Imperial County Department of Public Works (ICDPW)
- County Road Encroachment Permits, Transportation Permits - ICDPW
- Vacation of Public Easements (as applicable) - ICDPW
- Site Plan and Architectural Review – ICPDS
- Occupancy Permits - ICPDS

PC ORIGINAL PKG

- Fire Safety Plan – Imperial County Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements – Imperial County Fire Department and Office of Emergency Management
- On-site Water Treatment Permit – Imperial County Division of Environmental Health, ICDPW
- Private Sewage Disposal Permit - Imperial County Division of Environmental Health
- Project Decommissioning Plan - ICPDS, ICDPW
- Pest Management Plan - Agricultural Commissioner's Office

3.3 Discretionary Actions/Approvals by Other Agencies

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of the project. Trustee Agencies are state agencies that have discretionary approval or jurisdiction by law over natural resources affected by a project. These agencies may include, but are not limited to the following:

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- California Endangered Species Act (CESA), Incidental Take Permit (ITP) for Western Burrowing Owl (recently listed by California Department of Fish and Wildlife as a "Candidate" species).
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

4 Issues Addressed In the EIR

Based on the analysis presented in the NOP, the following environmental topics were analyzed in the EIR.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils

PC ORIGINAL PKG

- GHG Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

5 Mitigation Monitoring Program

Pursuant to PRC §21081.6, the County has adopted a detailed mitigation and monitoring program prepared under the County's direction. The program is designed to ensure that all mitigation measures as hereafter required are in fact implemented on a timely basis as the project is implemented.

6 Record of Proceedings

For all purposes of CEQA compliance, including these Findings of Fact, the administrative record of all County proceedings and decisions regarding the environmental analysis of the project include but are not limited to:

- The Draft and Final EIR for the project, together with all appendices and technical reports referred to therein, whether separately bound or not, or on a CD;
- All reports, letters, applications, memoranda, maps or other planning and engineering documents prepared by the County, its planning consultant and environmental consultant, the applicant or others and presented to or before the decision-makers or staff;
- All minutes of any public workshops, meetings or hearings, and any recorded or verbatim transcripts or videotapes thereof;
- Any letters, reports or other documents or evidence submitted into the record at any public workshops, meetings or hearings; and
- Matters of common general knowledge to the County which it may consider, including applicable state or local laws, ordinances and policies, the General Plan and all applicable planning programs and policies of the County.

Documents or other materials that constitute the record of proceedings upon which these Findings are made are located at the Department of Planning and Development Services of the County of Imperial, 801 Main Street, El Centro, CA 92243.

PC ORIGINAL PKG

7 Findings of Significant Impacts, Required Mitigation Measures and Supporting Facts

The County, having reviewed and considered the information contained in the EIR and the entire administrative record, including but not limited to the expert opinions of the County's professional planning staff and independent consultants familiar with the environmental conditions of the County and the facts and circumstances of the project who prepared the EIR, finds pursuant to Public Resources Code §21081(a)(1) and Guidelines §15091(a)(1) that changes or alterations have been required in, or incorporated into, the project which would mitigate, avoid, or substantially lessen to below a level of significance the following potential significant environmental effects identified in the EIR.

7.1 Agricultural Resources

7.1.1 Conversion of Important Farmlands to Non-Agricultural Use

A. Potential Impact. Implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland
- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

The loss of agricultural land designed Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is typically considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.3, Agricultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with the implementation of Mitigation Measures AG-1a and AG-1b of the Final EIR as identified below. With the implementation of Mitigation Measure AG-1a, the project applicant would be required to minimize the impact associated with the permanent loss of valuable farmlands through either provision of an agricultural conservation easement (Option 1) , payment into the County agricultural fee program (Option 2), entering into a public benefit agreement (Option 3), or avoiding Prime Farmlands (Option 4). Option 1 would require the Permittee to procure agricultural conservation easements on a "1 on 1" (for Non-Prime Farmland) or "2 on 1" (for Prime Farmland) basis of land of equal size, equal quality farmland, outside the path of development. Option 2 would require the Permittee to pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent (for Non-Prime Farmland) or 30 percent (for Prime Farmland) of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program

PC ORIGINAL PKG

costs on a cost recovery/time and material basis. This fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. Option 3 would require the Permittee and County to voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment. The Agricultural Benefit Fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. Option 4 would require the Permittee to revise their CUP Application/Site Plan to avoid Prime Farmland. Mitigation Measure AG-1b will ensure that the project applicant adheres to the terms of the agricultural reclamation plan prepared for the project site, which would address the temporary conversion impact. The Reclamation Plan will include the procedures by which the project site will be returned to its pre-project agricultural condition during decommissioning.

Mitigation Measure(s)

Mitigation Measure AG-1a: Payment of Agricultural and Other Benefit Fees. Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented:

A. Mitigation for Non-Prime Farmland:

Option 1: *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or,

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that: 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development

PC ORIGINAL PKG

Agreement, including addressing the mitigation of agricultural job loss on the local economy.

B. Mitigation for Prime Farmland:

Option 1: *Provide Agricultural Conservation Easements.* Provide Agricultural Conservation Easement(s). The permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project; or

Option 4: *Avoid Prime Farmland.* The Permittee must revise their Conditional Use Permit Application/Site Plan to avoid Prime Farmland.

Mitigation Measure AG-1b: Site Reclamation Plan. In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.

PC ORIGINAL PKG

Additional facts in support are found in EIR Section 3.3, Chapter 5, and the Final EIR responses to comments relating to agricultural resources.

7.1.2 Involve Other Changes that Coult Result in Conversion of Farmland to Non-Agricultural Use

A. Potential Impact. With the implementation of the solar facilities, it is possible that the physical and chemical makeup of the soil materials within the upper soil horizon may change. For example, improper soil stockpiling and management of the stockpiles could result in increased decomposition of soil organic materials, increased leaching of plant available nitrogen, and depletion of soil biota communities (e.g., Rhizobium or Frankia). Any reductions in agricultural productivity could significantly limit the types of crops (e.g., deeper rooting crops, orchards, etc.) that may be grown within the project site in the future. Additionally, there is the potential that weeds or other pests may occur within the solar field if the area is not properly maintained and managed to control weeds and pests.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.3, Agricultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with the implementation of Mitigation Measures AG-1b and AG-2 of the Final EIR as identified below. With implementation of Mitigation Measure AG-1b, the project applicant would be required to adhere to the terms of the comprehensive reclamation plan that would restore the project site to preexisting (pre-project) conditions following decommissioning of the project (after their use for solar generation activities). Implementation of Mitigation Measure AG-2 would require the project applicant to prepare and submit a Pest Management Plan to the County of Imperial Agricultural Commissioner for approval. The project applicant will be required to implement the strategies contained in the Pest Management Plan until reclamation is complete on the project site.

Mitigation Measure(s)

Mitigation Measure AG-1b: Site Reclamation Plan (as described above).

Mitigation Measure AG-2: Pest Management Plan. Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following:

1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line);
2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows:

PC ORIGINAL PKG

- Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business;
- All treatments must be performed by a qualified applicator or a licensed pest control operator;
- "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments;
- Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation;
- Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture;
- Obey all pesticide use laws, regulations, and permit conditions;
- Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties;
- Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current;
- Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, EPA Registration numbers, and application rates. A pesticide use report may be used for this;
- Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request.

PC ORIGINAL PKG

3. A long-term strategy for weed and pest control and management during the operation of the proposed project. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis.
4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands.
5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.

Additional facts in support are found in EIR Section 3.3, Chapter 5, and the Final EIR responses to comments relating to agricultural resources.

7.2 Air Quality

7.2.1 Cumulatively Considerable Net Increase of Criteria Pollutant - Construction

A. Potential Impact. As shown in Table 3.4-8 of the Final EIR, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. The proposed project must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Regulation VIII requires all unpaved roadways, on- and off-site, to be conditioned and maintained with soil stabilizers to reduce dust opacity to no more than 20 percent; all unpaved disturbed surfaces, on- and off-site, to be stabilized with a dust suppressant, watering, or soil stabilizers to reduce opacity to no greater than 20 percent; and to reduce vehicle speed to no greater than 15 mph on all unpaved surfaces.

Mitigation Measure AQ-2 would require a list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted annually to ICAPCD to perform a NO_X analysis. ICAPCD will utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5.

Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development

PC ORIGINAL PKG

and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9 of the Final EIR, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure AQ-1: Fugitive Dust Control. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process.

ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control

- All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover.
- All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.
- The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and

PC ORIGINAL PKG

visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering.

ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control

- Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust.
- Replace ground cover in disturbed areas as quickly as possible.
- Automatic sprinkler system installed on all soil piles.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.
- Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.
- Implement a shuttle service to and from retail services and food establishments during lunch hours.

Standard Mitigation Measures for Construction Combustion Equipment

- Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Enhanced Mitigation Measures for Construction Equipment

To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures:

- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

AQ-2 Construction Equipment. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted annually to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and

PC ORIGINAL PKG

Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of construction. During the operational life of the project, the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-4 Dust Suppression Management Plan. Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.

AQ-5 Speed Limit. During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.

Additional facts in support are found in EIR Section 3.4, Chapter 5, and the Final EIR responses to comments relating to air quality.

7.2.2 Cumulatively Considerable Net Increase of Criteria Pollutant - Operations

A. **Potential Impact.** During long-term operations of the project, minimal amounts of criteria air pollutants would be generated from periodic vehicle trips for maintenance, inspections, and routine cleaning. However, these events are expected to be occasional and result in minimal emissions. Operational emissions are not anticipated to exceed ICAPCD's significance thresholds. Although no significant air quality impact would occur during operation, the project applicant is required to submit a Dust Suppression Management Plan for both construction and operation in order to reduce fugitive dust emissions.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Implementation of Mitigation Measures AQ-3 and AQ-4 would ensure that a Dust Suppression Management Plan is implemented, thereby ensuring that this potential impact would remain less than significant. In addition, implementation of Mitigation Measure AQ-5 would limit the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less and Mitigation Measure AQ-6 would ensure an Operational Dust Control Plan is implemented.

PC ORIGINAL PKG

Mitigation Measure(s)

Mitigation Measure AQ-3: Dust Suppression (as described above).

Mitigation Measure AQ-4: Dust Suppression Management Plan (as described above).

Mitigation Measure AQ-5: Speed Limit (as described above).

Mitigation Measure AQ-6: Operational Dust Control Plan. Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Additional facts in support are found in EIR Section 3.4, Chapter 5, and the Final EIR responses to comments relating to air quality.

7.3 Biological Resources

7.3.1 Burrowing Owls

A. Potential Impact. Burrowing owls and active burrow sites were recorded on the project site during the 2023 and 2024 burrowing owl surveys. Potential direct impacts to burrowing owls, including unintentional clearing or trampling of occupied habitat and/or destruction of burrowing owl dens, eggs, young, or adults, would be significant. Potential short-term, indirect impacts to burrowing owls include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on burrowing owls would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-1 through BIO-4 of the Final EIR. Mitigation Measure BIO-1 requires pre-construction clearance surveys to be conducted within 14 days prior to the start of ground disturbance by qualified and agency-approved biologists to determine the presence or absence of this species within the project footprint. These surveys are necessary because burrowing owls may not use the same burrow every year. The identification of any active burrows would result in the establishment of appropriate buffers and avoidance/minimization of impacts to burrowing owls.

PC ORIGINAL PKG

Mitigation Measure BIO-2 establishes compensation for unavoidable direct impacts to burrowing owls. Mitigation Measure BIO-3 establishes an education program to provide information on burrowing owl biology, regulations, protection measures, and reporting procedures. Mitigation Measure BIO-4 requires evaluation and implementation of best measures to reduce burrowing owl mortality along access roads and establishment of a speed limit and perimeter fencing.

Mitigation Measure(s)

Mitigation Measure BIO-1: Burrowing Owl Mitigation. Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities.

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the

PC ORIGINAL PKG

burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation.

Burrowing Owl Protection and Mitigation Plan

If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.

As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall

PC ORIGINAL PKG

include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant.

Incidental Take Authorization

The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

Mitigation Measure BIO-2: Burrowing Owl Habitat Compensation. The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site.

Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-2 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

Mitigation Measure BIO-3: Worker Awareness Program and Ongoing Training. Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:

- Biology and status of burrowing owl.
- California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations.
- Protection measures designed to reduce potential impacts on the species.
- The function of flagging designated authorized work areas.
- Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field.

All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The

PC ORIGINAL PKG

construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

Mitigation Measure BIO-4: Speed Limit. During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.

Perimeter Fencing. Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.2 California Black Rail and Yuma Ridgeway's Rail

A. Potential Impact. California black rail and Yuma Ridgeway's rail were not recorded during the 2023 reconnaissance survey; however, marginally suitable habitat occurs in small quantities within the irrigation canals on the project site. Potential direct impacts to California black rail or Yuma Ridgeway's rail, including destruction of nests, eggs, and/or young if one or both species nest on site, would be considered significant. Potential short-term, indirect impacts to California black rails and Yuma Ridgeway's rails include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on California black rail and Yuma Ridgeway's rail would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-3 and BIO-5 of the Final EIR. Mitigation Measure BIO-3 establishes an education program to provide information on regulations, protection measures, and reporting procedures. Implementation of Mitigation Measure BIO-5 would require nesting bird pre-construction surveys to be completed if construction occurs during the nesting bird season (February 1 through September 15). These surveys would identify any California black rails and Yuma Ridgeway's rails within the project site, establish appropriate buffers, and avoid impacts to California black rails and Yuma Ridgeway's rails. Construction-related direct impacts to California black rails and Yuma Ridgeway's rails would be reduced to a level less than significant with implementation of Mitigation Measure BIO-5.

PC ORIGINAL PKG

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-5: Migratory Birds and Other Sensitive Non-Migratory Bird Species. To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial.

Construction conservation measures to be incorporated into the ABPP shall include the following:

- Minimizing disturbance to vegetation to the maximum extent practicable.
- Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest.
- Minimizing wildfire potential.
- Minimizing activities that attract prey and predators.
- Controlling non-native plants.

Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following:

- Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities.
- Minimizing noise.
- Minimizing use of outdoor lighting.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.3 Northern Harrier

A. Potential Impact. One northern harrier was recorded foraging during the June 2023 burrowing owl survey. Potential direct impacts to northern harriers, including destruction of nests, eggs, and/or young if they nest on site, would be significant. The proposed project also has the potential to impact the species' migratory movement. The agriculture fields on the project site provide foraging habitat for northern harrier,

PC ORIGINAL PKG

and the migratory movements of the species may be adversely affected by construction and presence of construction on the project site. Potential short-term, indirect impacts to northern harriers include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on northern harrier would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-3 and BIO-6. Mitigation Measure BIO-3 establishes an education program to provide information on regulations, protection measures, and reporting procedures. Mitigation Measure BIO-6 would require a qualified biologist to conduct a pre-construction bird survey within and adjacent to the project area. The survey will account for breeding and nesting birds, as wells other bird activity, such as foraging, and for behavior possibly caused by project activities, such as agitation, stress, and/or nest abandonment. The survey would identify any northern harriers within the project site, establish appropriate buffers, and avoid impacts to northern harriers.

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-6: Pre-Construction Bird Surveys and Nest Avoidance. Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species).

If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures.

PC ORIGINAL PKG

If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.4 Nesting Birds

A. Potential Impact. The project site has the potential to support avian nests, which are protected under the Migratory Bird Treaty Act and the California Fish and Game Code (Section 3503), under which it is unlawful to "take, possess, or needlessly destroy" avian nests or eggs. Thus, potentially significant impacts could occur if vegetation clearing is undertaken during the breeding season (February 1 through September 15). Potential short-term, indirect impacts to nesting birds include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on nesting birds would be mitigated to below a level of significance with implementation of Mitigation Measures BIO-3 and BIO-5. Mitigation Measure BIO-3 establishes an education program to provide information on regulations, protection measures, and reporting procedures. If vegetation removal cannot occur outside of the breeding season, Mitigation Measure BIO-5 would be implemented to require a pre-construction nesting bird survey, thus addressing direct and indirect impacts to nesting birds.

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-5: **Migratory Birds and Other Sensitive Non-Migratory Bird Species** (as described above)

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

PC ORIGINAL PKG

7.3.5 Bats

A. Potential Impact. The following non-listed special-status bat species were determined to have a low potential to forage on the project site: western yellow bat, western mastiff bat, and pocketed free-tailed bat. In addition, pallid bat and Townsend's big-eared bat have yearlong ranges that encompass the project site. The project site provides foraging habitat for these bat species, and the movements of these species may be adversely affected by construction and presence of construction on the project site.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on bats would be mitigated to below a level of significance with implementation of Mitigation Measure BIO-7. Mitigation Measure BIO-7 requires a focused bat survey to be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable. A Bat Management Plan will be prepared by the qualified bat biologist to identify situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats. The Bat Management Plan will be prepared for CDFW's review and approval. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist.

Mitigation Measure(s)

Mitigation Measure BIO-7: Focused Bat Surveys and Bat Management Plan. A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings.

If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing

PC ORIGINAL PKG

project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.3.6 Increased Human Activity

A. Potential Impact. Increased human activity can deter wildlife from using habitat areas near the project site and increase the potential for vehicle collisions.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Mitigation Measure BIO-3 requires worker training for operational staff to minimize impacts associated with increased human activity. Mitigation Measure BIO-4 imposes speed limits on site and limits allowed activities to reduce effects from increased human activity. Therefore, with implementation of Mitigation Measures BIO-3 and BIO-4, impacts would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure BIO-3: **Worker Awareness Program and Ongoing Training** (as described above)

Mitigation Measure BIO-4: **Speed Limit** (as described above)

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

PC ORIGINAL PKG

7.3.7 Jurisdictional Waters

A. Potential Impact. According to the project's Aquatic Resources Delineation Report (Appendix E of the Final EIR), the project site contains approximately 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW. While it is assumed that the project would avoid all direct impacts to IID irrigation canals, the smaller canals along the boundaries of agricultural fields on the project site may be impacted.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.5, Biological Resources, of the Final EIR, the project's potential impacts on jurisdictional waters would be mitigated to below a level of significance with implementation of Mitigation Measure BIO-8. Mitigation Measure BIO-8 requires the project applicant or its designee to obtain the following permits if required: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. Avoidance and minimization measures would be included in the conditions of the permits and shall be adhered to.

Mitigation Measure(s)

Mitigation MeasureBIO-8: Federal and State Agency Permits. Prior to impacts occurring to USACE, RWQCB, and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.

Additional facts in support are found in EIR Section 3.5, Chapter 5, and the Final EIR responses to comments relating to biological resources.

7.4 Cultural Resources

7.4.1 Archaeological Resources

A. Potential Impact. Based on available archival information, the presence of archaeological resources adjacent to the project site, and in consideration of the topography, and the project's vicinity to the New River; there is a moderate potential for the inadvertent discovery of archaeological resources on the project site. The project includes ground-disturbing activities that will extend to depths of 20 feet below the ground surface. As such, the project has the potential to disturb previously

PC ORIGINAL PKG

undocumented cultural resources that could qualify as unique archaeological resources pursuant to CEQA.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.6, Cultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measures CUL-1 and CUL-2 of the Final EIR. Mitigation Measure CUL-1 requires a Cultural Resources Worker Environmental Awareness Program Training to be developed and implemented to train equipment operators about cultural resources prior to construction. The program will inform construction personnel about regulations pertaining to cultural resources, the subsurface indicators of resources that will require a work stoppage, procedures for notifying the lead agency of any occurrences, project-specific requirements and mitigation measures, and enforcement of penalties and repercussions for non-compliance with the program. Mitigation Measure CUL-2 requires the project applicant to retain a qualified professional archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist will evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA.

Mitigation Measure(s)

Mitigation Measure CUL-1: Cultural Resources Worker Environmental Awareness Program Training. Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program.

PC ORIGINAL PKG

The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist.

The training shall be provided to all personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

Mitigation Measure CUL-2: Archaeological Monitoring. Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.

In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.

Additional facts in support are found in EIR Section 3.6, Chapter 5, and the Final EIR responses to comments relating to cultural resources.

7.4.2 Human Remains

A. Potential Impact. Although the potential for encountering subsurface human remains within the project site is low, there remains a possibility that human remains are present beneath the ground surface, and that such remains could be exposed during project

PC ORIGINAL PKG

construction. The potential to encounter human remains is considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.6, Cultural Resources, of the Final EIR, the project's potential impact to human remains would be mitigated to below a level of significance with implementation of Mitigation Measure CUL-3. This measure requires that construction be halted in the area where the remains are found and the procedures set forth in California Health and Safety Code 7050.5, AB 2641, and California Public Resources Code Section 5097.98 (NPS 1983), as applicable.

Mitigation Measure(s)

Mitigation Measure CUL-3: Discovery of Human Remains. In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983). If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Additional facts in support are found in EIR Section 3.6, Chapter 5, and the Final EIR responses to comments relating to cultural resources.

7.5 Geology and Soils

7.5.1 Seismic Ground Shaking

A. Potential Impact. Even with the integration of building standards, ground shaking within the project site could cause some structural damage to the facility structures or, at least, cause unsecured objects to fall. During a stronger seismic event, ground shaking could result in structural damage or collapse of electrical distribution facilities. Given the potentially hazardous nature of the project facilities, the potential impact of ground motion during an earthquake is considered a significant impact, as proposed structures, such as the substation and transmission lines could be damaged.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

PC ORIGINAL PKG

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1 of the Final EIR. The proposed project would be constructed in accordance with the applicable geotechnical and seismic design standards as well as the site-specific design recommendations in the final geotechnical report per Mitigation Measure GEO-1; and upon operation, the proposed project would not result in any significant changes related to the risk of seismic hazards on the project site when compared to existing conditions, nor would project operation increase or exacerbate the potential for strong seismic ground shaking to occur.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures. Facility design for all project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following:

- Site preparation
- Soil bearing capacity
- Appropriate sources and types of fill
- Potential need for soil amendments
- Structural foundations
- Grading practices
- Soil corrosion of concrete and steel
- Erosion/winterization
- Seismic ground shaking
- Liquefaction
- Expansive/unstable soils

In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

PC ORIGINAL PKG

7.5.2 Liquefaction

A. Potential Impact. Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet below ground surface) in zones of loose sands with variable fines content on the project site. Therefore, the potential for liquefaction exists at the project site. Additional geotechnical investigation would be required during the design phase of the project in order to assess the risk of liquefaction on the project site. The potential impact on liquefaction is considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1 of the Final EIR. The proposed project would be constructed in accordance with the site-specific design recommendations in the final geotechnical report per Mitigation Measure GEO-1.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.3 Construction Related Erosion

A. Potential Impact. Construction activities will involve demolition and grubbing, grading of the project site to establish access roads and pads for electrical equipment, trenching for underground electrical collection lines, and the installation of solar equipment and security fencing which could result in increased erosion and sedimentation to surface waters. Construction could produce sediment-laden stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality. If precautions are not taken to contain contaminants, construction-related erosion impacts are considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 of the Final EIR. As provided in Mitigation Measure GEO-1, during final engineering for the project, a design-level geotechnical study would identify appropriate measures for the project related to soil erosion. Mitigation Measure HYD-

PC ORIGINAL PKG

1 would require the preparation of a Stormwater Pollution Prevention Plan(SWPPP) for sediment and erosion control and implementation of Best Management Practices to reduce erosion from the construction site. The project applicant would be required to implement on-site erosion control measures in accordance with County standards, which require the preparation, review, and approval of a grading plan by the County Engineer.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration. The project applicant or its contractor shall prepare a SWPPP specific to the project and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories:

- Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching)
- Sediment control practices (e.g., temporary sediment basins, fiber rolls)
- Temporary and post-construction on- and off-site runoff controls
- Special considerations and BMPs for water crossings and drainages
- Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity
- Waste management, handling, and disposal control practices
- Corrective action and spill contingency measures
- Agency and responsible party contact information
- Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP

The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control

PC ORIGINAL PKG

practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.4 Unstable Geologic Unit or Soil

A. Potential Impact. In areas where project components are planned adjacent to existing channels, there could be potential lateral spreading issues that may require further evaluation in future design phases. Additional geotechnical investigation would be required in order to assess the risk of lateral spreading to occur on the project site. The potential impact associated with lateral spreading is considered a significant impact.

According to the City of Calipatria's 2035 General Plan, natural subsidence occurs in the Salton Trough. Therefore, the potential for subsidence exists at the project site. Additional geotechnical investigation would be required in order to assess the risk of subsidence to occur on the project site. The potential impact associated with subsidence is considered a significant impact.

Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the project site (Appendix G of this EIR). Additional geotechnical investigation would be required in order to assess the risk of liquefaction on the project site. Therefore, the potential impact on liquefaction is considered a significant impact.

It is unknown whether collapsible soils are present on the project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the project site is possible. As such, the potential for collapsible soils exists at the project site. Additional geotechnical investigation would be required in order to assess the risk of collapsible soils to occur on the project site. The potential impact associated with collapsible soils is considered a significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impacts associated with lateral spreading, subsidence, liquefaction, and collapsible soils would be reduced to a level less than significant with implementation of Mitigation Measure GEO-1. The proposed project would be constructed in accordance with the site-specific design recommendations in the final geotechnical report per Mitigation Measure GEO-1.

PC ORIGINAL PKG

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.5 Expansive and Corrosive Soils

A. Potential Impact. Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils. Clays are expected to be found at the project site. Therefore, the potential for expansive soils exists at the project site. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures and electrical connections producing shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material. These conditions could be worsened if structural facilities are constructed directly on expansive soil materials. This potential impact would be significant as structures could be damaged by these types of soils.

In addition, fine grained and potentially corrosive soils are expected to be encountered at the project site. Corrosive soils can damage underground utilities, including pipelines and cables, or weaken roadway structures. Generally, fine grained soils like clays are more likely to be corrosive. A site-specific geotechnical investigation would be required at the project site to determine the extent and effect of problematic soils.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-1. The proposed project would adhere to County building standards and CBC requirements for building on expansive soils. Moreover, Mitigation Measure GEO-1 would identify any potential hazards for building at the project site with recommended engineering practices that would reduce potential project impacts to a level less than significant.

Mitigation Measure(s)

Mitigation Measure GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures (as described above)

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

PC ORIGINAL PKG

7.5.6 Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems

A. Potential Impact. The project applicant is proposing the use of a standard on-site septic tank and leach field for the treatment and disposal of on-site generated sanitary wastewater. This would occur only at the O&M building. Site specific studies will be required to determine that County Environmental Health standards are met in regard to soil percolation rates and separation of leach fields from groundwater. Notwithstanding these design requirements, potential equipment failures or wastewater loading rates in excess of the design capacity of the treatment and disposal system could lead to water quality degradation.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact would be mitigated to below a level of significance with implementation of Mitigation Measure GEO-2. The proposed project would adhere to County building standards and CBC requirements for building on expansive soils. Moreover, Mitigation Measure GEO-1 would identify any potential hazards for building at the project site with recommended engineering practices that would reduce potential project impacts to a level less than significant. With implementation of Mitigation Measure GEO-2, potential impacts related to infiltration of wastewater into the soil column and water quality degradation would be reduced to a less than significant level through compliance with County performance standards.

Mitigation Measure(s)

Mitigation Measure GEO-2: Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.5.7 Paleontological Resources

A. Potential Impact. The project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla. Sediments from this formation have yielded

PC ORIGINAL PKG

fossilized remains of continental vertebrates, invertebrates, and plants at numerous previously recorded fossil sites in the Imperial Valley. Therefore, the project site is considered paleontologically sensitive. Although unlikely, project construction has the potential to unearth and/or potentially destroy previously undiscovered paleontological resources. Surficial sediments that have been disturbed by agricultural activities or other human-made disturbances have low paleontological resource sensitivity and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments would be considered a potentially significant impact.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Finding. Based on the analysis provided in Section 3.7, Geology and Soils, of the Final EIR, the project's potential impact on paleontological resources would be mitigated to below a level of significance with implementation of Mitigation Measures GEO-3 and GEO-4. Mitigation Measure GEO-3 requires a qualified paleontological monitor to be present during excavation activities associated with project construction. The paleontological monitor will be equipped to salvage fossils as they are unearthed and are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Mitigation Measure GEO-4 requires all construction personnel to attend and complete a WEAP training, which will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance.

Mitigation Measure(s)

Mitigation Measure GEO-3: Paleontological Resources Monitoring. Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

PC ORIGINAL PKG

Mitigation Measure GEO-4: Paleontological Resources Worker Awareness Program. Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.

Additional facts in support are found in EIR Section 3.7, Chapter 5, and the Final EIR responses to comments relating to geology and soils.

7.6 Hydrology and Water Quality

7.6.1 Violation of Water Quality Standards during Construction

A. **Potential Impact.** During the construction phase, sedimentation and erosion could occur because of tracking from earthmoving equipment, erosion and subsequent runoff of soil, or improperly designed stockpiles. The utilization of proper erosion and sediment control Best Management Practices (BMPs) is critical in preventing discharge to surface waters/drains.

The proposed project has the potential to affect surface water quality. Many different types of hazardous compounds will be used during the construction phase, with proper application, management, and containment being of high importance. Poorly managed construction materials can lead to the possibility for exposure of potential contaminants to precipitation. When this occurs, these visible and/or non-visible constituents become entrained in storm water runoff. If they are not intercepted or are left uncontrolled, the polluted runoff would otherwise freely sheet flow from the project to the IID Imperial Valley Drains and could result in the accumulation of these pollutants in the receiving waters. This is considered a potentially significant impact.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.10, Hydrology/Water Quality, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measure HYD-1 of the Final EIR. Prior to construction and grading activities, the project applicant is required to file a Notice of Intent with the SWRCB to comply with the General National Pollutant Discharge Elimination System (NPDES) Construction Permit and prepare a SWPPP, which addresses the measures that would be included

PC ORIGINAL PKG

during construction of the project to minimize and control construction and post-construction runoff to the maximum extent practicable. In addition, NPDES permits require the implementation of BMPs that achieve a level of pollution control to the maximum extent practical. With implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a level less than significant through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction and decommissioning.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Additional facts in support are found in EIR Section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.2 Violation of Water Quality Standards during Operation

A. Potential Impact. Long-term operation of the solar facility poses a limited threat to surface water quality after the completion of construction. The project would be subject to the County's Grading Regulations as specified in Section 91010.02 of the Ordinance Code. However, since the project site is located in unincorporated Imperial County and not subject to a Municipal Separate Storm Sewer System or NPDES General Industrial Permit, there is no regulatory mechanism in place to address post-construction water quality concerns. Based on this consideration, the project has the potential to result in both direct and indirect water quality impacts that could be significant.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. Based on the analysis provided in Section 3.10, Hydrology/Water Quality, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measure HYD-2 of the Final EIR. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The proposed project will be designed to include site design, source control, and treatment control BMPs. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. As such, upon implementation of Mitigation Measure HYD-2, impacts would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be

PC ORIGINAL PKG

integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.

Additional facts in support are found in EIR Section 3.11, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.3 Substantial Erosion or Siltation On- or Off-Site

A. Potential Impact. Project construction activities, specifically grading and excavation, have the potential to temporarily alter the existing drainage pattern of the project site such that soil erosion occurs.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. During construction, erosion would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1. Therefore, upon implementation of Mitigation Measure HYD-1, impacts related to erosion would be reduced to a level less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.4 Substantial Flooding On- or Off-Site

A. Potential Impact. Project implementation would not substantially alter the existing drainage pattern of the site or area. The majority of the project site would continue to sheet flow through the pervious native soils. However, the project will need to be designed to meet County of Imperial storage requirements (100 percent of the 100-year storm (3 inches of rain)) (refer to the County's *Engineering Guidelines Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County* (2008) for storm water runoff.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

PC ORIGINAL PKG

C. **Facts in Support of Findings.** Implementation of Mitigation Measure HYD-2 requires that the project Drainage Plan adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. As such, infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. Upon implementation of Mitigation Measure HYD-2, impacts would be less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.6.5 Creation of Runoff Water Exceeding the Capacity of Stormwater Drainage Systems

A. **Potential Impact.** Project implementation would not substantially alter the existing drainage pattern of the site or area. During construction, erosion and associated pollutants would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1.

B. **Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. **Facts in Support of Findings.** During construction, erosion and associated pollutants would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

PC ORIGINAL PKG

7.6.6 Conflict with Water Quality Control Plan

A. Potential Impact. As described above in Sections 7.6.1 and 7.6.2, the proposed project has the potential to affect surface water quality during construction and operation.

B. Finding. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. With the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a less than significant level through the inclusion of focused BMPs for the protection of surface water resources. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. Implementation of Mitigation Measures HYD-1 and HYD-2 would reduce impacts to a level less than significant.

Mitigation Measure(s)

Mitigation Measure HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration (as described above).

Mitigation Measure HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan (as described above).

Additional facts in support are found in EIR section 3.10, Chapter 5, and the Final EIR responses to comments relating to hydrology and water quality.

7.7 Tribal Cultural Resources

7.7.1 Substantial Adverse Change in the Significance of a Tribal Cultural Resource

A. Potential Impact. As discussed in Section 3.15.1, Tribal Cultural Resources, of the Final EIR, in accordance with AB 52, the County provided notification of the proposed project to Native American tribes that the County understands to be traditionally and culturally affiliated with the geographic area of the proposed project. Ray Teran of the Viejas Band of Kumeyaay Indians ("Viejas") responded via email on September 3, 2024, stating he had reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas.

B. Findings. Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

C. Facts in Support of Findings. Based on the analysis provided in Section 3.15, Tribal Cultural Resources, of the Final EIR, the project's potentially significant impact would be mitigated to below a level of significance with implementation of Mitigation Measures TCR-1 and CUL-2 of the Final EIR. In the event previously unidentified

PC ORIGINAL PKG

tribal cultural resources are identified during construction activities, Mitigation Measure TCR-1 would require construction work within 100 feet of the find be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074. Mitigation Measure CUL-2 requires the project applicant to retain a qualified professional archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction.

Mitigation Measure(s)

Mitigation Measure TCR-1: Discovery of Unidentified Tribal Cultural Resources. If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.

Mitigation Measure CUL-2: Archaeological Monitoring (as described above)

Additional facts in support are found in EIR Section 3.15, Chapter 5, and the Final EIR responses to comments relating to tribal cultural resources.

8 Cumulative Impacts

As analyzed in Chapter 5 of the Final EIR, cumulative impacts to agricultural resources, air quality, biological resources, cultural resources, geology and soils, hydrology/water quality, and tribal cultural resources would be significant prior to implementation of project specific mitigation measures, and mitigation that would be required of other cumulative projects.

Agricultural Resources

Cumulative impacts on agricultural resources take into account the proposed project's temporary impacts as well as those likely to occur as a result of other existing, proposed and reasonably foreseeable projects. To determine cumulative impacts on agricultural resources, an assessment is made of the temporal nature of the impacts on individual resources (e.g., temporary such as in solar projects versus permanent as in industrial or residential developments) as well as the inventory of agricultural resources within the cumulative setting.

As discussed in Section 3.3, Agricultural Resources of the Final EIR, implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland

PC ORIGINAL PKG

- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

Thus, the proposed project would incrementally add to the temporary conversion of agricultural land in Imperial County. According to the California Department of Conservation, in 2020, approximately 519,891 acres out of a total of 1,028,522 acres in Imperial County is classified as Important Farmland (California DOC n.d.). Table 5-2 of the Final EIR summarizes the percentage of each type of farmland in the County that would be converted by the proposed project.

As shown in Table 5-2 of the Final EIR, the Prime Farmland and Farmland of Statewide Importance within the project site comprises approximately 0.78 percent (0.52 + 0.26) of the total Important Farmland in the County. Thus, the proposed project would temporarily convert a very small fraction of the total Important Farmlands in the County and have a minimal effect on agricultural land on a cumulative scale. Furthermore, the conversion would be temporary and last for the duration of the project's useful life which is expected to be up to 30 years.

Development of the solar energy facility, BESS, and supporting infrastructure is subject to the County's zoning ordinance. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be*

PC ORIGINAL PKG

approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.

- *Solar energy plants meeting the requirements in Division 17*

Upon approval of a CUPs, the project's uses would be consistent with the Imperial County Land Use Ordinance and thus, is also consistent with the General Plan land use designations of the site. Additionally, as a condition of project approval, the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan.

As discussed in Section 3.3, Agricultural Resources of the Final EIR, Mitigation Measure AG-1a (Payment of Agricultural and Other Benefit Fees), AG-1b (Site Reclamation Plan), and AG-2 (Pest Management Plan) would be implemented to reduce potential impacts on agricultural resources to a level less than significant. Each individual cumulative project would be or would have been required to provide mitigation for any impacts on agricultural resources in accordance with the County's policies directed at mitigating the impact associated with the conversion of important farmlands. Therefore, the project's contribution to this impact would be less than cumulatively considerable.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to agricultural resources.

Air Quality

Construction. The proposed project would generate air emissions due to vehicle and dust emissions associated with construction activities. Similar effects would also be realized upon site decommissioning, which would be carried out in conjunction with the project's restoration plan, and subject to applicable ICAPCD standards. Likewise, the other cumulative projects that are pending construction (Laurel I, Laurel II, and Laurel III), or pending entitlement (Saavi BESS) identified in Table 5-1 of the Final EIR would result in the generation of air emissions during construction activities.

With respect to the proposed project, during the construction and decommissioning phases, the project would generate PM_{10}, $PM_{2.5}$, ROG, CO, and NO_x emissions during each active day of construction. As discussed in Section 3.4, Air Quality of the Final EIR, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissions. With implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

The proposed project, in conjunction with the construction of other cumulative projects as identified in Table 5-1 of the Final EIR, could result in a cumulatively considerable increase in the generation of PM_{10}, $PM_{2.5}$, and NO_x; however, like the proposed project, cumulative projects would be subject to mitigation pursuant to County ICAPCD's Regulations and Rules, and the cumulative impact would be reduced to a level less than significant through compliance with these measures. Because the project will be required to implement measures consistent with ICAPCD regulations designed to alleviate the cumulative impact associated with PM_{10}, the proposed project's contribution is rendered less than cumulatively considerable and is therefore, less than significant.

PC ORIGINAL PKG

Operation

Operation. As the proposed project would have no major stationary emission sources and would require minimal vehicular trips, operation of the proposed solar facility would result in substantially lower emissions than project construction. The project's operational emissions would not exceed the Tier I thresholds; therefore, the impact would be less than significant. Operational impacts of other renewable energy facilities identified in Table 5-1 of the Final EIR would also be similar. Although these cumulative projects generally involve large areas, their operational requirements are very minimal, requiring minimal staff or use of machinery or equipment that generate emissions. Further, alternative energy projects, such as the project, would assist attainment of regional air quality standards and improvement of regional air quality by providing clean, renewable energy sources. Consequently, the projects would provide a positive contribution to the implementation of applicable air quality plan policies and compliance with EO S-3-05.

However, from a cumulative air quality standpoint, the potential cumulative impact associated with the generation of O_3, $PM_{2.5}$ and PM_{10} emissions during operation of the cumulative projects is a consideration because existing O_3 and PM_{10} levels in the SSAB are at unhealthy levels during certain periods. Imperial County is classified as non-attainment for $PM_{2.5}$ for the urban areas of Imperial County. However, the project's operational contribution to O_3, $PM_{2.5}$ and PM_{10} would be below a level of significance. As with the construction phases, the cumulative projects would be required to comply with ICAPCD's Regulation VIII for dust control (Regulation VIII applies to both the construction and operational phases of projects). As a result, the ICAPCD would be required to comply with the various dust control measures and to prepare and implement operational dust control plans as approved by the ICAPCD, which is a component of ICAPCD's overall framework of the AQAP that sets forth a comprehensive program for SSAB's compliance with all federal and state air quality standards. Therefore, the project would not contribute to long-term cumulatively considerable air quality impacts and the project would not result in cumulatively significant air quality impacts, and cumulative impacts would be less than significant.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to air quality.

Biological Resources

The geographic scope for considering cumulative impacts on biological resources includes the Imperial Valley and related biological habitats. Table 5-1 of the Final EIR lists the projects considered for the biological resources cumulative impact analysis.

In general terms, in instances where a potential impact could occur, CDFW and USFWS have promulgated a regulatory scheme that limits impacts on these species. The effects of the project would be rendered less than significant through mitigation requiring compliance with all applicable regulations that protect plant, fish, and animal species, as well as waters of the U.S. and state. Other cumulative projects would also be required to avoid impacts on special-status species and/or mitigate to the satisfaction of the CDFW and USFWS for the potential loss of habitat.

As described in Section 3.5, Biological Resources of the Final EIR, the project would have the potential to result in impacts on biological resources. These impacts are generally focused on potential construction-related effects to burrowing owls, raptor species (California Black Rail, Yuma Ridgeway's Rail, and northern harrier), migratory birds, and bats. Additionally, project construction has the potential to result in direct and indirect impacts on nesting birds.

PC ORIGINAL PKG

Burrowing Owls are protected by the CDFW mitigation guidelines for burrowing owl (CDFW 2012) and Consortium guidance (1993), which require a suite of mitigation measures to ensure direct effects to burrowing owls during construction activities are avoided and indirect effects through burrow destruction and loss of foraging habitat are mitigated at prescribed ratios. Mitigation measures identified in Section 3.5, Biological Resources of the Final EIR, would ensure that all regulations required to protect burrowing owls, raptor species, and migratory birds, are implemented, thereby minimizing potential impacts on these species to a less than significant level. Similarly, the cumulative projects within the geographic scope of the project would be required to comply with the legal framework as described above. Based on these considerations, impacts on biological resources would not be cumulatively considerable.

As with the proposed project, each of the cumulative projects would be required to provide mitigation for impacts on biological resources. The analysis below is conducted qualitatively and in the context that the cumulative projects would be subject to a variety of statutes and administrative frameworks that require mitigation for impacts on biological resources.

Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The MBTA is enforced by USFWS. This act prohibits the killing of any migratory birds without a valid permit. Any activity which contributes to unnatural migratory bird mortality could be prosecuted under this act. With few exceptions, most birds are considered migratory under this act. Raptors and active raptor nests are protected under California FGCs 3503.5, 3503, and 3513.

The CWA and California's Porter-Cologne Water Quality Control Act provide protection for water-related biological resources by controlling pollution, setting water quality standards, and preventing jurisdictional streams, lakes, and rivers from being filled without a federal permit. No jurisdictional wetlands are located with the project site that could otherwise be directly impacted by construction of the proposed project. Likewise, Mitigation Measures HYD-1 and HYD-2 would be required to avoid or minimize potential water quality impacts that could otherwise indirectly impact biological resources. Further, the proposed project would result in a net decrease in water demand, which would provide a benefit to IID's water budget and available supply for the Salton Sea. Implementation of the project would result in fallowing of currently irrigated agricultural fields. The IID's "Imperial Valley Natural Community Conservation Plan and Habitat Conservation Plan Planning Agreement No. 2810-2004-001-06 (February 2006) covers water conservation and irrigation and drainage of land to which IID delivers water to which the environmental impacts and various approaches to mitigate potential impacts to the Salton Sea include fallowing agricultural lands as identified in the HCP Final EIR/EIR. Final EIR Section 3.16 discusses the IID's Interim Water Supply Policy (IWSP) for Non-Agricultural Projects and Temporary Land Conversion Fallowing Policy (TLCFP) adopted by the IID and according to the TLCFP "This fallowing program satisfies multiple district objectives and service to reduce the conservation and water use demands on other IID water uses and thus provide district-wide benefits."

Given the above, the project would not contribute substantially to a cumulative biological resources impact. Similarly, the cumulative projects within the geographic scope of the proposed project will be required to comply with the legal frameworks set forth above, as well as others, and will be required to mitigate their impacts to a less than significant level. Therefore, the project would not contribute to a cumulatively considerable impact to biological resources, and cumulative impacts would be less than significant.

PC ORIGINAL PKG

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to biological resources.

Cultural Resources

As discussed in Section 3.6, Cultural Resources of the Final EIR, 7 previously recorded cultural resources were identified within the project site during field surveys. Under Impact 3.6-1, the eligibility of the identified resources were discussed. None of the 7 previously recorded cultural resources were determined eligible for listing in the CRHR or NRHP.

The potential of finding a buried archaeological site during construction is considered low. However, like all construction projects in the state, the possibility exists. This potential impact is considered significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce potential impacts associated with the unanticipated discovery of unknown buried archaeological resources. Implementation of Mitigation Measure CUL-3 would reduce potential impacts on human remains to a level less than significant.

Future projects with potentially significant impacts on cultural resources would be required to comply with federal, state, and local regulations and ordinances protecting cultural resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures CUL-1 through CUL-3, the proposed project would have a less than cumulatively considerable contribution to impacts on cultural resources.

During operations and decommissioning of the project, no additional impacts on archaeological resources would be anticipated because the soil disturbance would have already occurred and been mitigated during construction.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to cultural resources.

Geology and Soils

The Imperial Valley portion of the Salton Trough physiographic province of Southern California is used as the geographic scope for the analysis of cumulative impacts on geology/soils and mineral resources. Cumulative development would result in an increase in population and development that could be exposed to hazardous geological conditions, depending on the location of proposed developments. Geologic and soil conditions are typically site specific and can be addressed through appropriate engineering practices. Cumulative impacts on geologic resources would be considered significant if the project would be impacted by geologic hazard(s) and if the impact could combine with off-site geologic hazards to be cumulatively considerable. None of the projects identified within the geographic scope of potential cumulative impacts would intersect or be additive to the project's site-specific geology and soils impacts; therefore, no cumulatively considerable effects are identified for geology/soils, and cumulative impacts would be less than significant.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant paleontological resources impact due to the potential loss of paleontological resources unique to the region. However, mitigation is included in the Final EIR to reduce potentially significant project impacts to paleontological resources during construction of the proposed project. Implementation of Mitigation Measures GEO-3 and GEO-4 would ensure that the potential impacts on paleontological resources do not rise to the level of significance. Future projects

PC ORIGINAL PKG

with potentially significant impacts on paleontological resources would be required to comply with federal, state, and local regulations and ordinances protecting paleontological resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures GEO-3 and GEO-4, the proposed project would have a less than cumulatively considerable contribution to impacts on paleontological resources.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to geology and soils.

Hydrology/Water Quality

Table 5-1 of the Final EIR lists the projects considered for the hydrology and water quality cumulative impact analysis. The geographic scope for considering cumulative hydrology and water quality impacts is the Imperial Valley Hydrologic Unit as defined by the Colorado Basin RWQCB Basin Plan.

The construction of the project is expected to result in short-term water quality impacts. Compliance with the SWRCB's NPDES general permit for activities associated with construction (2009-0009-DWQ) would reduce water quality impacts. As with the proposed project, each of the cumulative projects would be required to comply with the Construction General Permit. The SWRCB has determined that the Construction General Permit protects water quality, is consistent with the CWA, and addresses the cumulative impacts of numerous construction activities throughout the state. This determination in conjunction with the implementation of mitigation would ensure short-term water quality impacts are not cumulatively considerable.

The project is not expected to result in long-term operations-related impacts related to water quality. The project would mitigate potential water quality impacts by implementing site design, source control, and treatment control BMPs, as outlined in Mitigation Measures HYD-1 and HYD-2. Some cumulative projects would require compliance with the SWRCB's NPDES general permit for industrial activities, as well as rules found in the CWA, Section 402(p)(1) and 40 CFR 122.26, and implemented Order No. 90-42 of the RWQCB. With implementation of SWRCB, Colorado River RWQCB, and County policies, plans, and ordinances governing land use activities that may degrade or contribute to the violation of water quality standards, cumulatively considerable impacts on water quality would be minimized to a less than significant level.

Based on a review of the FEMA Flood Insurance Rate Map FIRM, the proposed project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. As such, the project would not result in a significant cumulatively considerable impact on floodplains by constructing new facilities within an identified flood hazard zone.

Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact to hydrology or water quality, and cumulative impacts would be less than significant.

Additional facts in support are found in EIR Chapter 5 and the Final EIR responses to comments relating to hydrology/water quality.

PC ORIGINAL PKG

Tribal Cultural Resources

As discussed in Section 3.15, Tribal Cultural Resources of the Final EIR, the County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians ("Viejas") have requested to be involved with monitoring efforts. The proposed project was determined to have cultural significance or ties to Viejas. As a result, implementation of Mitigation Measures CUL-3 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance. Other projects listed in Table 5-1 of the Final EIR would potentially be located in sensitive areas where unidentified tribal cultural resources may exist. Therefore, future cumulative projects would also be required to comply with the requirements of AB 52 to determine the presence/absence of tribal cultural resources and engage in consultation to determine appropriate mitigation measures to minimize or avoid impacts on tribal cultural resources. Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact tribal cultural resources.

9 Effects Found Not to Be Significant

CEQA Guidelines §15128 require that an EIR contain a brief statement disclosing the reasons why various possible significant effects of the project were found not to be significant, and therefore would not be discussed in detail in the EIR. Final EIR Chapter 6 identifies the following issues areas that will not be impacted by the project: Forestry Resources, Energy, Mineral Resources, Population/Housing, Public Services (Schools and Parks/Other Public Facilities), Recreation, Utilities (Wastewater, Stormwater, Power, and Solid Waste), and Wildfire.

10 Findings Regarding Feasible Alternatives

Pursuant to CEQA Guidelines §15126.6(a), EIRs must "describe a range of reasonable alternatives to the project, or to the location of this project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. To be legally sufficient, the consideration of project alternatives in an EIR must permit informed agency decision-making and informed public participation. The analysis of alternatives is evaluated against a rule of reason. Alternatives are suitable for study in an EIR if they meet all of the following thresholds: (1) substantially reduce or avoid the project's significant environmental impacts; (2) attain most of the basic project objectives; (3) are potentially feasible; and (4) are reasonable and realistic. (Guidelines §15126.6, Subds. (a), (c).) Candidate alternatives that do not satisfy these requirements may be excluded from further analysis. An EIR need not consider alternatives that would change the fundamental nature of the project or that cannot achieve the fundamental goals and purposes of the proposed project.

The alternatives to the project are evaluated in Chapter 7 of the EIR in terms of their ability to meet the basic objectives of the project, and eliminate or further reduce its significant environmental effects. Based on these parameters, the following alternatives were considered and analyzed in the EIR:

1) Alternative 1–No Project/No Development Alternative

PC ORIGINAL PKG

2) Alternative 2–Reduced Project Site

10.1 Alternative 1 – No Project/No Development

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e)(1), "the specific alternative of 'no project' shall also be evaluated along with its impact." Also, pursuant to Section 15126.6(e)(2); "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, … at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be developed. The No Project/No Development Alternative would not meet the project objectives.

A. Finding. Alternative 1 is infeasible. It is found pursuant to Public Resources Code Section 21081(a)(3), that specific economic, legal, social, technological, or other considerations, make Alternative 1 infeasible.

B. Facts in Support of Findings. Alternative 1-No Project/No Development Alternative is rejected as infeasible because it will not meet the primary objectives of the proposed project which include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Renewable Energy and Transmission Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce GHG emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of GHGs to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California

PC ORIGINAL PKG

Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.

For the reasons stated above, the County finds that this alternative is infeasible and less desirable than the proposed project and rejects this alternative.

10.2 Alternative 2 – Reduced Project Site

The purpose of this alternative is to reduce impacts on Prime Farmland within the project site. Implementation of the project would result in the temporary conversion of 973.24 acres of Prime Farmland to non-agricultural uses. A majority of the Prime Farmland occurs within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would reduce the overall size of the solar facility by avoiding the Prime Farmland occurring within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would avoid developing parcels that contain large areas of Prime Farmland. (NOTE: this alternative would not avoid several pockets of Prime Farmland, as these represent small, isolated pockets of land, which would likely not remain economically viable or practically feasible to farm as they would be surrounded by solar uses). Therefore, the project site would be reduced by approximately 788 acres from a total of 1,849 acres to 1,061 acres.

A. Finding. It is found pursuant to Public Resources Code Section 21081(a)(3), that specific economic, legal, social, technological, or other considerations, make Alternative 2 infeasible.

B. Facts in Support of Findings. The purpose of studying alternatives to the proposed project is to identify alternatives that would substantially reduce or avoid the significant environmental impacts of the proposed project. Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced.

For the reasons stated above, the County finds that this alternative is infeasible and less desirable than the proposed project and rejects this alternative.

10.3 Findings Regarding Range of Alternatives

A. Finding. The EIR considers a reasonable range of alternatives. Substantial evidence supports the conclusion of the EIR regarding alternatives considered and rejected.

B. Facts in Support of Findings. The purpose of studying alternatives to the proposed project is to identify alternatives that would substantially reduce or avoid the significant environmental impacts of the proposed project. Substantial evidence shows that all potentially significant environmental impacts of the proposed project are mitigated below significant levels and that no significant unavoidable significant environmental impacts remain. Consequently, the range of alternatives studied in the EIR is reasonable because it included four alternatives to the proposed project despite there being no significant unavoidable environmental impacts necessitating consideration of alternatives to substantially reduce or avoid such impacts. Although some alternatives would reduce the less-than-significant impacts of the proposed project, CEQA does not require that such alternatives be adopted.

PC ORIGINAL PKG

11 Findings Regarding Growth Inducing Impacts

The proposed project is located within the unincorporated area of Imperial County and it does not involve the development of permanent residences that would directly result in population growth in the area. The unemployment rate in Imperial County, as of January 2025 was 17.9 percent (State of California Employment Development Department 2025). The applicant expects to utilize construction workers from the local and regional area, a workforce similar to that involved in the development of other utility-scale solar facilities. Based on the unemployment rate, and the availability of the local workforce, construction of the proposed project would not have a growth-inducing effect related to workers moving into the area and increasing the demand for housing and services. Once construction is completed, no permanent construction workers would be hired. The proposed project would employ 4 to 10 full-time personnel to maintain the project facility 7 days a week during normal daylight hours. As such, the proposed project would not induce substantial population growth in the area.

While the proposed project would contribute to energy supply, which indirectly supports population growth, the proposed project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, it would also replace existing sources of non-renewable energy. Unlike a gas-fired power plant, the proposed project is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts, consistent with the findings and declarations in SB 100 that a benefit of the Renewable Portfolio Standard is displacing fossil fuel consumption within the state. The project is being proposed in response to state policy and legislation promoting development of renewable energy.

The proposed project would supply energy to accommodate and support existing demand and projected growth, but the energy provided by the project would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project site; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project (CEQA Guidelines Appendix F(II); PRC Section 21100(b)(3)). However, the relationship between the proposed project's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 CCR Section 15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in Napa Citizens for Honest Gov't v. Napa County Board of Supervisors, 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth" *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the proposed project's growth-inducing effects cannot be resolved by collection of further data because of the diversity of factors affecting growth.

While this document has considered that the proposed project, as an energy project, might foster regional growth, the particular growth that could be attributed to the proposed project is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of

PC ORIGINAL PKG

growth and the effect of other contributors to growth besides the proposed project. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the proposed project's contribution of additional electrical capacity. The County of Imperial has not adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA.

Additionally, the project would not involve the development of any new local or regional roadways, new water systems, or sewer; and thus, the project would not further facilitate additional development into outlying areas. For these reasons, the proposed project would not be growth-inducing.

12 Findings Regarding Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines Section 15126.2(d), an EIR must identify any significant irreversible environmental changes that would be caused by implementation of the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses.

Energy resources needed for the construction of the proposed project would contribute to the incremental depletion of renewable and non-renewable resources. Resources, such as timber, used in building construction are generally considered renewable and would ultimately be replenished. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the project. Thus, the project would irretrievably commit resources over the anticipated 30-year life of the project.

At the end of the project's operation term, the applicant may determine that the project should be decommissioned and deconstructed. Should the project be decommissioned, the project applicant is required to restore land to its pre-project state. Consequently, some of the resources on the site could potentially be retrieved after the site has been decommissioned. Concrete footings, foundations, and pads would be removed and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. The applicant anticipates using the best available recycling measures at the time of decommissioning.

Implementation and operation of the proposed project would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources. Additionally, the project is consistent with the state's definition of an "eligible renewable energy resource" in Section 399.12 of the California Public Utilities Code and the definition of "in-state renewable electricity generation facility" in Section 25741 of the California PRC.

13 Conclusion

1. The County of Imperial (the County), acting through the Board of Supervisors, is the Lead Agency for the project evaluated in the EIR. The County finds that the EIR was prepared in

PC ORIGINAL PKG

compliance with CEQA and the CEQA Guidelines. The County finds that it has independently reviewed and analyzed the EIR for the project, that the Draft EIR which was circulated for public review reflected its independent judgment and that the Final EIR reflects the independent judgment of the County.

2. The County finds that the EIR provides objective information to assist the decision-makers and the public at large in their consideration of the environmental consequences of the project. The public review period provided all interested jurisdictions, agencies, private organizations, and individuals the opportunity to submit comments regarding the Draft EIR. The Final EIR was prepared after the review period and responds to comments made during the public review period.
3. The Planning and Development Services Department evaluated comments on environmental issues received from persons who reviewed the Draft EIR. In accordance with CEQA, the Planning and Development Services Department prepared written responses describing the disposition of significant environmental issues raised. The Final EIR provides adequate, good faith and reasoned responses to the comments. The Planning Department reviewed the comments received and responses thereto and has determined that neither the comments received nor the responses to such comments add significant new information regarding environmental impacts to the Draft EIR. The Lead Agency has based its actions on full appraisal of all viewpoints, including all comments received up to the date of adoption of these findings, concerning the environmental impacts identified and analyzed in the EIR.
4. The EIR evaluated the following potential project and cumulative environmental impacts:
    - Aesthetics
    - Agricultural Resources
    - Air Quality
    - Biological Resources
    - Cultural Resources
    - Geology and Soils
    - GHG Emissions
    - Hazards and Hazardous Materials
    - Hydrology/Water Quality
    - Land Use and Planning
    - Noise and Vibration
    - Public Services (Fire Protection and Police Protection)
    - Transportation
    - Tribal Cultural Resources
    - Utilities/Service Systems (Water Supply)

    Additionally, the EIR considered, in separate sections, Significant Irreversible Environmental Changes, Growth Inducing Impacts and potential secondary effects of the project. The significant environmental impacts of the project were identified in the Final EIR. The significant

PC ORIGINAL PKG

environmental impacts of the project and the alternatives were also identified in the Draft and Final EIR.

5. The mitigation measures which have been identified for the project were identified in the Draft and Final EIR. The final mitigation measures are described in the MMRP. Each of the mitigation measures identified in the MMRP, and contained in the Final EIR, is incorporated into the project. The County finds that the impacts of the project have been mitigated to the extent feasible by the mitigation measures identified in the MMRP, and contained in the Final EIR.

6. Textual refinements and errata were compiled and presented to the decision-makers for review and consideration. The Planning and Development Services Department staff has made every effort to notify the decision-makers and the interested public/agencies of each textual change in the various documents associated with the project review. These textual refinements arose for a variety of reasons. First, it is inevitable that draft documents would contain errors and would require clarifications and corrections. Second, textual clarifications were necessitated in order to describe refinements suggested as part of the public participation process.

7. The responses to the comments on the Draft EIR, which are contained in the Final EIR, clarify and amplify the analysis in the Draft EIR.

8. Having reviewed the information contained in the EIR and in the administrative record as well as the requirements of CEQA and the CEQA Guidelines regarding recirculation of Draft EIRs, the County finds that there is no new significant information in the Final EIR, finds that the additional information provided therein merely clarifies, amplifies and/or makes insignificant modifications to the adequate Draft EIR, and finds that recirculation of the Draft EIR is not required.

9. CEQA requires the Lead Agency approving a project to adopt an MMRP for the changes to the project which it has adopted or made a condition of project approval in order to ensure compliance with the mitigation measures during project implementation. The mitigation measures included in the EIR as certified by the County and included in the MMRP as adopted by the County serves that function. The MMRP includes all of the mitigation measures identified in the EIR and adopted by the County in connection with the approval of the project and has been designed to ensure compliance with such measures during implementation of the project. In accordance with CEQA, the MMRP provides the means to ensure that the mitigation measures are fully enforceable. In accordance with the requirements of Public Resources Code §21081.6, the County hereby adopts the MMRP.

10. In accordance with the requirements of Public Resources Code §21081.6, the County hereby adopts each of the mitigation measures expressly set forth herein as conditions of approval for the project.

11. The custodian of the documents or other material which constitute the record of proceedings upon which the County's decision is based is the Imperial County Planning and Development Services Department, 801 Main Street, El Centro, California, 92243.

PC ORIGINAL PKG

12. The County finds and declares that substantial evidence for each and every finding made herein is contained in the EIR, which is incorporated herein by this reference, or is in the record of proceedings in the matter.
13. The County is certifying an EIR for, and is approving and adopting findings for, the entirety of the actions described in these Findings and in the EIR as comprising the project. It is contemplated that there may be a variety of actions undertaken by other State and local agencies (who might be referred to as "responsible agencies" under CEQA). Because the County is the Lead Agency for the project, the EIR is intended to be the basis for compliance with CEQA for each of the possible discretionary actions by other State and local agencies to carry out the project.
14. The EIR is a Project EIR for purposes of environmental analysis of the project. A Project EIR examines the environmental effects of a specific project. The EIR serves as the primary environmental compliance document for entitlement decisions regarding the project by the County of Imperial and the other regulatory jurisdictions.

PC ORIGINAL PKG

ATTACHMENT "E"
MM&RP RESOLUTION

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL OF THE MITIGATION MONTORING AND REPORTING PROGRAM FOR THE BIG ROCK 2 CLUSTER SOLAR PROJECT TO THE BOARD OF SUPERVISORS.

WHEREAS, a Mitigation Monitoring and Reporting Program has been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended; and

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of the consideration for recommending to the Board of Supervisors the approval of the Mitigation Monitoring and Reporting Program; and

WHEREAS, public notice of said application has been given, and Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department, and other interested parties at a public hearing held with respect to this item on September 24, 2025; and,

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Mitigation Monitoring and Reporting Program (MM&RP) prior to making a decision to recommend the adoption of the proposed MM&RP. The Planning Commission finds and determines that the Environmental Impact Report is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with CEQA, State Planning and Zoning law, Imperial County Land Use Ordinance and the County of Imperial General Plan, the following findings for recommending the approval of the MM&RP as follows:

1. That the Final Project EIR **SCH #2024090063**, Candidate CEQA Findings for the Big Rock 2 Cluster Solar Energy Project ("Project") have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA as amended".

2. That the County has reviewed, analyzed, and considered Final Project EIR, the environmental impacts therein identified for this Project, the Candidate CEQA Findings, and the Mitigation Monitoring and Reporting Program, and the entire Record of Proceedings prior to approving this project.

3. That the Mitigation Monitoring and Reporting Program is designed to ensure that during project implementation, the Developer and any other responsible parties

PC ORIGINAL PKG

implement the Project components and comply with feasible mitigation measures identified in the CEQA Findings, the Project entitlements, and the Mitigation Monitoring and Reporting Program and that these measures are fully enforceable through permit conditions, agreements, and/or other measures, such as their inclusion in the Mitigation Monitoring and Reporting Program.

4. That the Project will not individually or cumulative have an unmitigated adverse effect on fish and wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

5. That the Record of Proceedings consists of the Final Project EIR (and all its technical reports and addendums thereto); the County staff reports; the CEQA Findings; the Mitigation Monitoring and Reporting Program; the various Project entitlements and documents referenced therein; all final reports, applications, memoranda, maps, letters, and other planning documents prepared by the EIR planning/environmental consultant; all final reports, memoranda, maps, letters, and other planning documents prepared by the County staff; all documents submitted by members of the public and public agencies in connection with the Final Project EIR; minutes and transcripts of all public meetings and public hearings; all written and verbal public testimony presented during a noticed public hearing for the proposed project which such testimony was taken and any and all other materials which constitute the record of proceeding pursuant to Public Resources Code section 21167.6(e); and matters of common knowledge to the County staff, Planning Commission, including, but not limited to the County General Plan, the County Zoning Ordinance, County policies, which may be found at the Clerk's Office located at 940 Main Street, Suite 209, El Centro, CA, 92243 during regular business hours, and the Imperial County Planning & Development Services Department at 801 Main Street, El Centro, CA 92243.

6. That the County Planning Commission does hereby recommend to the Board of Supervisors to approve of the Mitigation Monitoring and Reporting Program.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the **IMPERIAL COUNTY PLANNING COMMISSION DOES HEREBY RECOMMEND TO THE BOARD OF SUPERVISORS TO APPROVE OF** the Mitigation Monitoring Reporting Program (MM&RP), for the Big Rock 2 Cluster Solar and Battery Storage Project.

_____

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote took the preceding resolution:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/XX/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\6. MMRP RESOLUTION & MMRP\BIG ROCK 2 CLUSTER MMRP RESOLUTION.docx

PC ORIGINAL PKG

0.4 Mitigation Monitoring and Reporting Program

The County of Imperial will adopt this Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. The purpose of the MMRP is to ensure that the Big Rock 2 Cluster Solar and Storage Project, which is the subject of the Environmental Impact Report (EIR), complies with all applicable environmental mitigation requirements. The mitigation measures for the project will be adopted by the County of Imperial, in conjunction with the certification of the Final EIR. The mitigation measures have been integrated into this MMRP.

The mitigation measures are provided in Table 0.4-1. The MMRP includes a checklist to be used during the mitigation monitoring period. The MMRP includes the following information for each mitigation measure:

- Description of Recommended Mitigation Measures from the CEQA EIR
- Time Frame for Implementation
- Steps to Compliance and Verification
- Responsible Monitoring Agency

The mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or reducing or eliminating impacts over time by maintenance operations during the life of the action.

Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The County of Imperial is the designated CEQA lead agency for the Mitigation Monitoring and Reporting Program. The County of Imperial is responsible for review of all monitoring reports, enforcement actions, and document disposition as it relates to impacts within the County's jurisdiction. The County of Imperial will rely on information provided by the monitor as accurate and up to date and will field check mitigation measure status as required.

A record of the MMRP will be maintained at County of Imperial, Department of Planning and Development Services, 801 Main Street, El Centro, CA 92243. All mitigation measures contained in the EIR shall be made conditions of the project as may be further described below.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

PC ORIGINAL PKG

Table 0.4-1. Mitigation Measures

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
Agricultural Resources			
AG-1a: Payment of Agricultural and Other Benefit Fees. Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented: **Mitigation for Non-Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.	Prior to the issuance of a grading permit or building permit (whichever is issued first)	Submit documentation for establishment of Agricultural Conservations easements, Enrollment in Agricultural In-lieu Mitigation Fee program or Public Service Agreement	Imperial County Planning & Development Services (ICPDS)

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
Mitigation for Prime Farmland **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project **Option 4:** *Avoid Prime Farmland.* The Permittee must revise their CUP Application/Site Plan to avoid Prime Farmland.			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
AG-1b: Site Reclamation Plan. In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.	Prior to the issuance of a grading permit	Submit Reclamation Plan to the County for Review	ICPDS

PC ORIGINAL PKG

AG-2: Pest Management Plan. Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following: 1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line); 2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows: • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business; • All treatments must be performed by a qualified applicator or a licensed pest control operator; • "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments; • Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation; • Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture; • Obey all pesticide use laws, regulations, and permit conditions;	Prior to the issuance of a grading permit or building permit (whichever is issued first)	Submit Pest Management Plan to the County for Review	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties; • Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current; • Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, Environmental Protection Agency (EPA) Registration numbers, and application rates. A pesticide use report may be used for this; • Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request. 3. A long-term strategy for weed and pest control and management during the operation of the proposed projects. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis. 4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands. 5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.			
Air Quality			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
AQ-1: Fugitive Dust Control. Pursuant to Imperial County Air Pollution Control District (ICAPCD), all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process. ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control • All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover. • All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material. • All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.	Prior to the issuance of a grading permit	Submit construction dust control plan for Imperial County Air Pollution Control District (ICAPCD) approval	ICAPCD

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line. • The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering. ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control • Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust. • Replace ground cover in disturbed areas as quickly as possible. • Automatic sprinkler system installed on all soil piles. • Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site. • Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees. • Implement a shuttle service to and from retail services and food establishments during lunch hours. Standard Mitigation Measures for Construction Combustion Equipment • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). Enhanced Mitigation Measures for Construction Equipment To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures: • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways. • Implement activity management (e.g., rescheduling activities to reduce short-term impacts).			
AQ-2: Construction Equipment. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.	Prior to the issuance of a grading permit	A list of the construction equipment shall be submitted to the ICPDS and ICAPCD	ICPDS and ICAPCD
AQ-3: Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. During the operational life of the project, the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved	Prior to the issuance of a grading permit	Submit construction dust control plan for ICAPCD approval	ICAPCD

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).			
AQ-4: Dust Suppression Management Plan. Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.	Prior to the issuance of a grading permit	Submit construction dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
AQ-5: Speed Limit. During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.	During construction and operations activities	Submit a construction dust control plan and operations dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
AQ-6: Operational Dust Control Plan. Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval. ICAPCD Rule 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.	Prior to issuance of a Certificate of Occupancy	Submit an operations dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
Biological Resources			
BIO-1: Burrowing Owl Mitigation. Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better	Prior to ground-disturbing activities	Submit report with results of surveys. Submit Burrowing Owl Protection and Mitigation Plan.	ICPDS and California Department of Fish and Wildlife

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. *Focused Burrowing Owl Surveys* To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities. *Pre-Construction Survey and Avoidance Measures* Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:		If incidental take authorization from CDFW is required, submit a copy of the incidental take authorization permit to ICPDS.	

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs. Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation. *Burrowing Owl Protection and Mitigation Plan* If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant. *Incidental Take Authorization* The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.			
BIO-2: Burrowing Owl Habitat Compensation. The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site. Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.	Prior to ground-disturbing activities	Submit documentation for off-site preservation of foraging habitat through a CDFW-approved conservation easement, or payment of an in-lieu fee. If incidental take authorization from CDFW is required,	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		submit a copy of the incidental take authorization permit to ICPDS.	
BIO-3: Worker Awareness Program and Ongoing Training. Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects: • Biology and status of burrowing owl. • California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations. • Protection measures designed to reduce potential impacts on the species. • The function of flagging designated authorized work areas. • Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Prior to project initiation	Submit a copy of the signed training roster to ICPDS	ICPDS
BIO-4: Speed Limit. During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads. **Perimeter Fencing.** Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall	Prior to ground-disturbing activities and during construction	Submit construction plans showing the inclusion of the speed limit and perimeter fencing as specifications.	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.			
BIO-5: Migratory Birds and Other Sensitive Non-Migratory Bird Species. To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial. Construction conservation measures to be incorporated into the ABPP shall include the following: • Minimizing disturbance to vegetation to the maximum extent practicable. • Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest. • Minimizing wildfire potential. • Minimizing activities that attract prey and predators. • Controlling non-native plants. Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following: • Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities. • Minimizing noise. • Minimizing use of outdoor lighting.	Prior to ground-disturbing activities	Submit ABPP to ICPDS	ICPDS

PC ORIGINAL PKG

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
BIO-6: Pre-Construction Bird Surveys and Nest Avoidance. Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species). If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.	Prior to ground-disturbing activities	Submit report with results of surveys, and if necessary Project-specific sensitive species management plan for review.	ICPDS
BIO-7: Focused Bat Surveys and Bat Management Plan. A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors)	Prior to ground-disturbing activities	Submit report with results of surveys to ICPDS. Submit a Bat Management Plan for review and approval to CDFW, and submit documentation of	ICPDS

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.		approved plan to ICPDS.	
BIO-8: Federal and State Agency Permits. Prior to impacts occurring to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.	Prior to impacts occurring to USACE, RWQCB, and CDFW jurisdictional aquatic resources	If permits are required, submit documentation of USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		Agreement to ICPDS.	
Cultural Resources			
CUL-1: Cultural Resources Worker Environmental Awareness Program Training. Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist. The training shall be provided to all personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Prior to construction	Submit a copy of the signed training roster to ICPDS	ICPDS
CUL-2: Archaeological Monitoring. Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards to serve as the principal archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling). In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.	Prior to construction	Submit documentation that the project applicant has retained a qualified professional archaeologist and a traditionally and culturally affiliated Native American Monitor.	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.		Submit monitoring report to ICPDS and South Coastal Information Center.	
CUL-3: Discovery of Human Remains. In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983).If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	During ground-disturbing activities	Discovery of human remains shall result in work stoppage in that area until the coroner and the Native American Heritage Commission are contacted.	ICPDS
Geology and Soils			
GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures. Facility design for all project	Prior to issuance of building permits	A geotechnical and/or civil	Imperial County Public

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: • Site preparation • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Structural foundations • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.		engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval	Works Department, Engineering Division
GEO-2: Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all	Prior to construction and operation	Submit documentation of permits and/or approvals from the Imperial County	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.		Public Health Department, Division of Environmental Health to ICPDS	
GEO-3: Paleontological Resources Monitoring. Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.	Prior to grading	Submit documentation that the project applicant has retained a qualified paleontologist. Submit a report of findings with an appended itemized inventory of specimens to ICPDS.	ICPDS
GEO-4: Paleontological Resources Worker Awareness Program. Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction	Prior to grading	Submit a copy of the signed training roster and training video or transcript to ICPDS	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.			
Hydrology/Water Quality			
HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration. The project applicant or its contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) specific to the project and be responsible for securing coverage under State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and best management practices (BMPs) relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories: • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching) • Sediment control practices (e.g., temporary sediment basins, fiber rolls) • Temporary and post-construction on- and off-site runoff controls • Special considerations and BMPs for water crossings and drainages	Prior to Construction Activities	Submit a SWPPP to the County and SWRCB to review.	Imperial County Planning & Development Services, and SWRCB

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity • Waste management, handling, and disposal control practices • Corrective action and spill contingency measures • Agency and responsible party contact information • Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.			
HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, Imperial Irrigation District (IID) "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.	Prior to issuance of a Certificate of Occupancy	Submit Drainage Plans to the County for Review. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall	Imperial County Public Works Department, Engineering Division Imperial Irrigation District

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		be approved by the IID.	
Tribal Cultural Resources			
TCR-1: Discovery of Unidentified Tribal Cultural Resources. If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.	During to ground-disturbing activities	Submit archaeologist treatment plan and evaluation prepared with tribal consultation for review to the County, and relevant Tribes.	Imperial County Planning & Development Services

PC ORIGINAL PKG

PC ORIGINAL PKG

This page is intentionally blank.

ATTACHMENT "F" GENERAL PLAN AMENDMENT RESOLUTION (GPA)24-0002

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL TO THE IMPERIAL COUNTY BOARD OF SUPERVISORS FOR THE BIG ROCK 2 CLUSTER SOLAR ENERGY GENERATION AND BATTERY STORAGE PROJECT GENERAL PLAN AMENDMENT #24-0002.

WHEREAS, the applicant 90FI 8ME LLC, for the Big Rock 2 Cluster Solar Energy Generation and Battery Storage Project filed a request for a General Plan Amendment #24-0002 to add parcels to the RE overlay map; and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of making recommendations to the Imperial County Board of Supervisors regarding General Plan approval; and,

WHEREAS, the General Plan Amendment #24-0002 has been provided in a timely manner to public agencies; and

WHEREAS, timely public notice of the Planning Commission's hearing on the Project application has been given, and the Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at that public hearing held with respect to this item on September 24, 2025; and,

NOW THEREFORE, the Planning Commission of the County of Imperial DOES HEREBY RESOLVE as follows:

SECTION 1. The Planning Commission independently has reviewed and considered the proposed General Plan Amendment #24-0002. The Planning Commission finds and determines that the Final Environmental Impact Report (FEIR) is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations that all significant impacts are mitigated to less than significant.

SECTION 2. That in accordance with, CEQA, State Planning and Zoning law and the County of Imperial General Plan & Land Use Ordinance, the following findings for the recommendation for approval and certification of the General Plan Amendment (GPA) #24-0002 have been made as follows:

1. That the IS/MND **SCH #22024090063** for the proposed Big Rock 2 Cluster Solar and Battery Storage Project have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's Rules to Implement CEQA as amended, and such findings are incorporated by reference herein.

PC ORIGINAL PKG

2. That the County independently has reviewed, analyzed, and considered the Final Environmental Impact Report, the environmental impacts therein identified for this Project, the candidate CEQA findings and the Mitigation, Monitoring and Reporting Program, and the entire Record of Proceedings prior to recommending approval of this project.

3. The General Plan Amendment for the Big Rock 2 Cluster Solar and Battery Storage Project is consistent with the Imperial County General Plan and allows for development of a solar and BESS facility. Additionally, the Project will not create significant environmental impacts with mitigation incorporated.

4. The General Plan Amendment #24-0002 is not likely to cause substantial environmental damage or substantially and avoidably injure fish, wildlife, or their habitat. Surveys accomplished for biological, and fish and impacts are less than significant with required mitigation.

5. The development and improvements are not likely to cause serious health problems.

NOW, THEREFORE, based on the above findings, the Planning Commission of the County of Imperial **DOES HEREBY RECOMMEND** that the Board of Supervisors approve the proposed General Plan Amendment GPA #24-0002, for the Big Rock 2 Cluster Solar and Battery Storage Project.

Rudy Schaffner, Chairperson
Imperial County Planning Commission

PC ORIGINAL PKG

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025** by the following vote took the preceding resolution:

AYES:

NOES:

ABSENT:

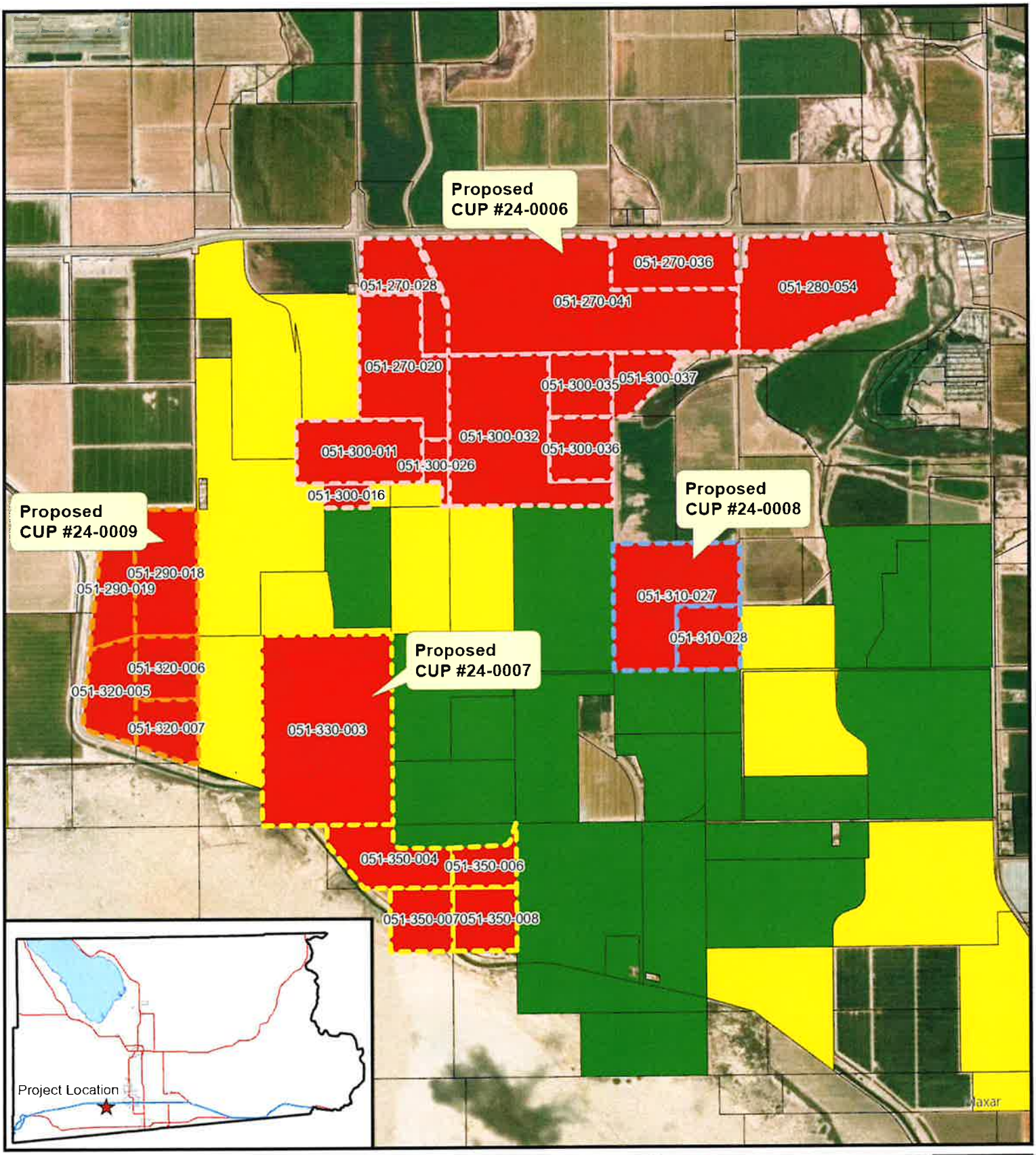
ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\GPA RESOLUTION\GPA24-0002 BR2 GPA resolution.docx

PC ORIGINAL PKG



BIG ROCK CLUSTER 2 RENEWABLE ENERGY OVERLAY CUP #24-0006, CUP #24-0007, CUP #24-0008, CUP #24-0009, APN 051-300-036-000 ET AL

- Big Rock 2 Cluster North
- Big Rock 2 Cluster South
- Big Rock 2 Cluster East
- Big Rock 2 Cluster West
- Parcels
- Operational Solar
- Approved not build
- Pending Entitlement

N

PC ORIGINAL PKG

ATTACHMENT "G"

ZONE CHANGE (ZC)24-0003
RESOLUTION & ORDINANCE

PC ORIGINAL PKG

RESOLUTION NO.

A PLANNING COMMISSION RESOLUTION RECOMMENDING FOR THE BOARD OF SUPERVISORS TO APPROVE ZONE CHANGE #24-0003 FOR THE PROPOSED BIG ROCK 2 CLUSTER SOLAR ENERGY GENERATION AND BATTERY STORAGE PROJECT ZONE FROM A-2, A-2-R AND A-3 TO A-2-RE, A-2-R-RE AND A-3-RE AND THE ADOPTION OF THE ZONE CHANGE TO THE CODIFIED ORDINANCE.

WHEREAS, 90FI 8ME LLC has filed an application for a zone change to include the remaining project parcels into the Renewable Energy (RE) Overlay Zone from A-2, A-2-R and A-3 (General Agricultural Zone, General Agricultural / Rural Zone and Heavy Agricultural Zone) to A-2-RE, A-2-R-RE, and A-3-RE (General Agricultural with Renewable Energy overlay, General Agricultural / Rural Zone with Renewable Energy overlay and Heavy Agricultural Zone with Renewable Energy overlay). The proposed project is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California, consisting of twenty-one (21) parcels Assessor Parcel Number (APN) 051-270-020-000 et al. legally described as LOTS 11&12 SEC 21& NE4 TR81 & POR TR 80 16-12 102.44 AC, et al. The project site is located is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico, west of Drew Road and east and north of Mandapa Road; and,

WHEREAS, the project is designated on the adopted Land Use Element of the County of Imperial's General Plan as "Agriculture" (County of Imperial, 2015). Approval of a Zone Change by the Imperial County Board of Supervisors (Board) is required prior to any significant new use or development in this area, except agricultural use. The County Land Use Ordinance, Division 17, includes the Renewable Energy (RE) Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved Conditional Use Permit (CUP). CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone; and,

WHEREAS, the Zone Change for the proposed Big Rock 2 Cluster Solar and Battery Storage Project will consist of including/classifying APN's 051-270-020-000 et al into the RE Overlay Zone (i.e., Zone Change from A-2, A-2-R, and A-3 to A-2-RE, A-2-R-RE and A-3-RE); and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of making a recommendation to the Board of Supervisors on a decision for changes to Zoning Maps #70 & #71 of the Imperial County Land Use Ordinance; and

WHEREAS, public notice of said application has been given, and the Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at a public hearing held with respect to this item on September 24, 2025; and,

PC ORIGINAL PKG

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Zone Change #24-0003, prior to making a recommendation to the Board of Supervisors on a decision for the proposed amendment to Zoning Maps #70 & #71. Planning Commission finds and determines that the FEIR is adequate and prepared in accordance with the requirements of the California Environmental Quality Act (CEQA), which analyzes environmental effects, based upon the following findings and determinations; and,

SECTION 2. That in accordance with State Planning and Zoning law and the County of Imperial General Plan and zoning ordinances, the following findings for the approval of Zone Change #24-0003 have been made as follows:

1. The proposed Zone Change has been analyzed relative to its potential to be detrimental to the health, safety, comfort and welfare of the persons residing or working within the neighborhood of the proposed Zone Change. Staff concluded that the project does not propose land uses, densities, or development patterns that will jeopardize the health and safety of the persons residing or working within the neighborhood of the property. Health, safety, and welfare will not be degraded as a result of this project.

2. The Zone Change to the County of Imperial General Plan Renewable Energy (RE) and Transmission Element zone A-2-RE, A-2-R-RE and A-3-RE will be consistent with the County Land Use Ordinance, Division 17, which includes the RE Overlay Zone.

3. The site physically is suitable of this type of development and zoning. The project site consists of generally flat terrain with very gentle topography.

4. The change of zones will not conflict with any easements required by the public at large for access through or use of the property with the proposed zone change. Several easements may surround and traverse the area. The easements and their associated facilities will be retained, vacated or realigned as appropriate.

5. The change of zone is also consistent with the General Plan Land Use Element goals and objectives, including objectives to "diversify employment and economic opportunities in the County."

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Planning Commission of the County of Imperial **DOES HEREBY** recommend for the Board of Supervisors to approve the proposed Zone Change #24-0003 to include twenty-one (21) parcels Assessor Parcel Number (APN) 051-270-020-000 et al. into the RE Overlay Zone from the current zoning of A-2, A-2-R, and A-3 (General Agricultural zone, General Agricultural/Rural zone and Heavy Agricultural) and approve the proposed zone change A-2-RE, A-2-R-RE and A-3-RE (General Agricultural with Renewable Energy overlay zone, General Agricultural/Rural with Renewable Energy overlay zone and Heavy Agricultural with Renewable Energy overlay zone) and the proposed change to the Imperial County Codified Zoning Ordinance.

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **September 24 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\ZC24-0003\ZC24-0003 BR2_Zone Change Resolution.doc

PC ORIGINAL PKG

ORDINANCE NO. _____

AN ORDINANCE OF THE COUNTY OF IMPERIAL, STATE OF CALIFORNIA, AMENDING THE CODIFIED ORINANCES OF THE COUNTY OF IMPERIAL RELATING TO ZONES

The Board of Supervisors of the County of Imperial, State of California, does hereby ordain as follows:

SECTION 1: The Codified Ordinances of the County of Imperial is hereby amended by amending Sections **92571.07**, and **92570.13** is added to Chapter 71 of Division 25 of Title 9, of the Codified Ordinances of the County of Imperial, State of California, to read as follows:

The map entitled "Renewable Energy Overlay Map" Zoning Map No. 71 (Section 92571.07 of the Codified Ordinances) is hereby amended in the following particular only.

Section **92571.07** Amendment to Zoning Map No. 71 "Renewable Energy Overlay Zone"

Section **92570.13** is Amendment to "Zoning Map No. "70" Big Rock 2 Cluster Solar. A-2-RE, A-2-R-RE, A-3-RE added to Chapter 70 of Division 25 of Title 9, of the Codified Ordinances of the County of Imperial, State of California, to read as follows:

The map entitled "**Map #70 General Agricultural Area, General Agricultural / Rural Zone, Heavy Agricultural Zone** No. 70 (Section 92570.13 of the Codified Ordinances) is hereby amended in the following only.

The zone classification of this certain parcel(s) of real property situated in the County of Imperial, State of California, and more particularly described as:

LOTS 11&12 SEC 21& NE4 TR81 & POR TR 80 16-12 102.44 AC. ET AL, APN: 051-270-020-000 ET AL. A-2, A-2-R & A-3 (GENERAL AGRICULTURAL ZONE, GENERAL AGRICULTURAL / RURAL ZONE & HEAVY AGRICULTURAL ZONE) CHANGE TO "A-2-RE", "A-2-R-RE" & "A-3-RE"(GENERAL AGRICULTURAL WITH RENEWABLE ENERGY OVERLAY ZONE, GENERAL AGRICULTURAL WITH RENEWABLE ENERGY OVERLAY / RURAL ZONE & HEAVY AGRICULTURAL WITH RENEWABLE ENERGY OVERLAY ZONE).

PC ORIGINAL PKG

SECTION 2: This Ordinance shall take effect and shall be in force thirty (30) days after the date of its adoption, and prior to the expiration of fifteen (15) days from the passage thereof, a summary of this Ordinance shall be published at least once in the Holtville Tribune, a newspaper of general circulation, printed and published in the County of Imperial, State of California, together with the names of the members of the Board of Supervisors voting for and against the same.

SECTION 3: That in accordance with State Planning and Zoning law and the County of Imperial General Plan and zoning ordinances, the following findings for the approval of **Zone Change No. #24-0003** as follows:

1. The proposed Zone Change was analyzed relative to its potential to be detrimental to the health, safety, comfort and welfare of the persons residing or working within the neighborhood of the proposed Zone Change. Staff concluded that the project does not propose land uses, densities, or development patterns that will jeopardize the health and safety of the persons residing or working within the neighborhood of the property. Health, safety, and welfare will not be degraded as a result of this project.

2. The Zone Change No. #24-0003 is consistent with Imperial County's General Plan's underlying land use. The Zone Change will allow for the development of a solar energy generation and battery storage related uses zone.

3. The proposed Zone Change No. #24-0003 is for an A-2-RE General Agriculture with Renewable Energy overlay Zone, A-2-R-RE General Agriculture/ Rural Zone with Renewable Energy overlay, and A-3-RE Heavy Agriculture with Renewable Energy overlay Zone and recommendation is consistent with the uses allowed by Imperial County's Land Use Ordinances 91701.01, Title 9 Division 17. The Proposed overlay zone would only be approved by the County Board of Supervisors if a future renewable energy project is located within a renewable energy overlay zoning and is not located in a sensitive area and would not result in any significant environmental impacts. All impacts have been found less than significant with mitigation incorporated. Additionally, the County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP.

PC ORIGINAL PKG

4. The site physically is suitable of this type of development and zoning. The project site consists of generally flat terrain with very gentle topography.

5. The change of zone will not conflict with any known easements required by the public at large for access through or use of the property with the proposed zone change. Currently, there are no conflicts with easements on proposed project site.

6. The change of zone is also consistent with the General Plan Land Use Element goals and objectives, including objectives to "diversify employment and economic opportunities in the County while preserving agricultural activity" (Goal 2) and to "preserve agriculture and natural resources while promoting diverse economic growth through sound land use planning" (Goal 3, Objective 3.2). No change in the underlying General Plan land use (Agriculture) is proposed.

SECTION 4: A complete executed copy of this Ordinance shall be on file with the Office of the Clerk of the Board of Supervisors. It shall be available for review at the County Administration Center, located at 940 W. Main Street, Suite 209, El Centro, California, 92243. The Clerk of the Board of Supervisors may be reached at (442) 265-1020.

PASSED, ADOPTED, AND APPROVED by the Board of Supervisors of the County of Imperial this September 24, 2025.

AYES:
NOES:
ABSENT:
ABSTAIN:

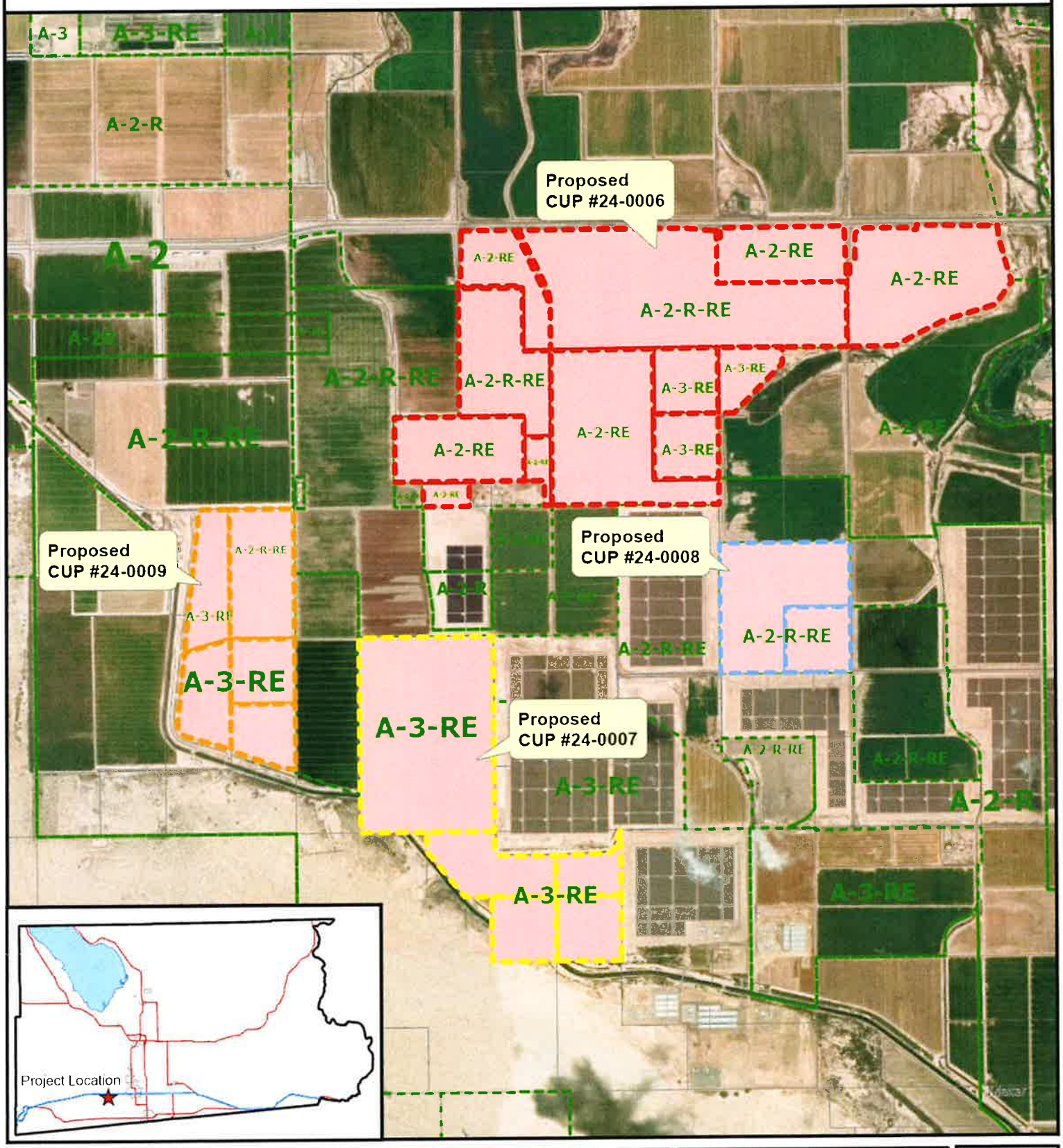
_____
John Hawk, Chairman
Board of Supervisors

ATTEST:_____
Clerk of the Board of Supervisors
County of Imperial, State of California

RY/S:\ALLUSERS\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\ZC24-0003\BR2-ZC ORDINANCE.DOCX

PC ORIGINAL PKG

PROJECT LOCATION MAP



BIG ROCK CLUSTER 2
ZONE CHANGE
CUP #24-0006, CUP #24-0007,
CUP #24-0008, CUP #24-0009,
APN 051-300-036-000 ET AL

- Big Rock 2 Cluster North
- Big Rock 2 Cluster South
- Big Rock 2 Cluster East
- Big Rock 2 Cluster West
- Imperial County Zoning
- Parcels

N

PC ORIGINAL PKG

ATTACHMENT "H"

CUP 24-0006 RESOLUTION & CONDITIONS OF APPROVAL

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL TO THE IMPERIAL COUNTY BOARD OF SUPERVISORS FOR THE "BIG ROCK 2 CLUSTER SOLAR PROJECT" FOR BIG ROCK 2 CLUSTER NORTH CONDITIONAL USE PERMIT #24-0006.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0006 to develop a 100-megawatt (MW) solar facility and up to 140 MW of battery storage system, to be located on 13 parcels comprising approximately 1,030 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of approvals, certifications and making recommendations to the Imperial County Board of Supervisors for approvals of conditional use permits;

WHEREAS, public notice of said application has been given, and the Planning Commission has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on September 24, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Conditional Use Permit #24-0006 prior to recommending approval and the County's consideration of the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

PC ORIGINAL PKG

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site and proposed parcels is "Agriculture" and 11 parcels are zoned "A-2, A-2-R, and A-3" (General Agriculture, General Agriculture within Rural Zone, and Heavy Agriculture respectively) with two additional parcels of the project (APN 051-300-032-000 & 051-300-036) within the Renewable Energy (RE) Overlay Zone. A General Plan Amendment to include the 11 proposed parcels (APN 051-270-020-000 et al) into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-2, A-2-R, A-2-RE, A-3 and A-3-RE (General Agriculture, General Agriculture within Rural Zone, General Agriculture with Renewable Energy Overlay, Heavy Agriculture and Heavy Agriculture with Renewable Energy Zone, respectively). A Zone Change to include/classify eleven (11) parcels into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan with requirements for an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use would be consistent with the zone A-2-RE (General Agriculture with Renewable Energy Zone) and A-3-RE (Heavy Agriculture with Renewable Energy Zone) upon approval of a Zone Change.

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulation of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and

PC ORIGINAL PKG

Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

PC ORIGINAL PKG

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0006 attached hereto and incorporated herein by this reference.

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY RECOMMEND APPROVAL** of Conditional Use Permit #24-0006 to the Board of Supervisors, subject to the attached Conditions of Approval.

_____

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote approved the preceding resolution:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST:

_____

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\7.CUP24-0006 RESOLUTION\CUP24-0006 PC Resolution.docx

PC ORIGINAL PKG

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

**AGREEMENT FOR CONDITIONAL USE PERMIT #24-0006
FOR BIG ROCK 2 CLUSTER NORTH ENERGY PROJECT
APNS: 051-270-020-000, 051-270-028-000, 051-270-036-000, 051-270-041-000, 051-280-054-000, 051-300-011-000, 051-300-016-000, 051-300-026-000, 051-300-035-000, 051-300-037-000, 051-300-032-000 (NORTHERN PORTION), 051-300-032-000 (SOUTHERN PORTION TO BE RE-ENTITLED) & 051-300-036-000 (TO BE RE-ENTITLED)**

Conditional Use Permit #24-0006 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally describe as (OTS 11&12 SEC 21& NE4 TR81 & POR TR 80 16-12 102.44

PC ORIGINAL PKG

AC. et al; in an unincorporated area of the County of Imperial; The project site involves of eleven (11) parcels: Assessor Parcel Numbers (APN) 051-270-020-000 et al, and portions of two (2) parcels to be re-entitled: Assessor Parcel Numbers (APN) 051-300-032-000 (southern portion) and 051-300-036-000.

WHEREAS, Permittee has applied to the County for permission to operate a 100-megawatts (MW) of alternating current photovoltaic solar energy and 140-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0007 (Big Rock 2 Cluster South); CUP #24-0008 (Big Rock 2 Cluster East); and CUP #24-0009 (Big Rock 2 Cluster West) that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS overall; and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0006 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

PC ORIGINAL PKG

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of Planning Director or Commission, and the Board of Supervisors; and, (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

G-3 RECORDATION:

CUP #24-0006 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate

PC ORIGINAL PKG

County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory

PC ORIGINAL PKG

committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability

PC ORIGINAL PKG

insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

PC ORIGINAL PKG

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

PC ORIGINAL PKG

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

PC ORIGINAL PKG

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PC ORIGINAL PKG

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California. The Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP#24-0006 consists of three primary components:

1. Up to 100-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 140-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on 13 parcels comprising approximately 1,030 acres of which approximately 120.3 acres are associated with the previously approved CUP for Laurel Cluster 2 North. Approximately 80 acres of APN 051-300-032 and 40.3 acres of APN 051-300-036 would be re-entitled as part of the proposed project. The Big Rock 2 Cluster North site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

PC ORIGINAL PKG

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0002 related to this CUP#24-0006 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building

PC ORIGINAL PKG

Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all

PC ORIGINAL PKG

operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

PC ORIGINAL PKG

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

PC ORIGINAL PKG

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17- Renewable Energy & Transmission Element regulations.

PC ORIGINAL PKG

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to

PC ORIGINAL PKG

verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.
B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.
D. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).
D. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.

PC ORIGINAL PKG

2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three-hundred-and-sixty-degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.

PC ORIGINAL PKG

4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology.

PC ORIGINAL PKG

Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.

7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

PC ORIGINAL PKG

(TOTAL "S" CONDITIONS are 28)

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024 and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

PC ORIGINAL PKG

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0006 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES A. MINNICK, Director Date
Planning & Development Services Department

PC ORIGINAL PKG

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

PC ORIGINAL PKG

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

PC ORIGINAL PKG

ATTACHMENT "I"

VARIANCE (V)24-0002

RESOLUTION

PC ORIGINAL PKG

RESOLUTION NO. _____

A RESOLUTION OF PLANNING COMMISION OF THE COUNTY OF IMPERIAL CALIFORNIA RECOMMENDING FOR THE BOARD OF SUPERVISORS TO APPROVE "VARIANCE #24-0002" FOR BIG ROCK 2 CLUSTER NORTH CUP#24-0006.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0002 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0006); and,

WHEREAS, Variance #24-0002 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility for recommending the Board of Supervisors approval for Variance #24-0002; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Planning Commission has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect this item on September 24, 2025; and,

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Variance #24-0002 recommending approval. The Planning Commission finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the approval of Variance 24-0002 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-

PC ORIGINAL PKG

2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This Variance 24-0002 would permit a maximum height of 200 feet for the required gen-tie transmission line.
Conditions of Approval imposed on Variance #24-0002 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone.

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

   The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application and, the Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

   Staff has reviewed the request on Variance #24-0002 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, through the variance process, the approval for the construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line potentially mounted on tubular steel poles up to 200 feet in height, may be considered a minimal deviation from the current A-2 and A-3 height limits, therefore, it would not be deemed a variance that adversely impacts the Imperial County General Plan.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Board of Supervisors **DOES HEREBY** recommend for the Board of Supervisors to approve the proposed Variance #24-0002.

_____
Rudy Schaffner, Chairman
Planning Commission

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Jim Minnick, **Director of Planning & Development Services**
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\I. VARIANCE 24-0002\V24-0002 - Resolution.docx

PC ORIGINAL PKG

ATTACHMENT "J"

CUP 24-0007 RESOLUTION & CONDITIONS OF APPROVAL

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL TO THE IMPERIAL COUNTY BOARD OF SUPERVISORS FOR THE "BIG ROCK 2 CLUSTER SOLAR PROJECT" FOR BIG ROCK 2 CLUSTER SOUTH CONDITIONAL USE PERMIT #24-0007.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0007 to develop a 120-megawatt (MW) solar facility and up to 240 MW of battery storage system. The project is to be located on 5 parcels comprising approximately 410 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of approvals, certifications and making recommendations to the Imperial County Board of Supervisors for approvals of conditional use permits;

WHEREAS, public notice of said application has been given, and the Planning Commission has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on September 24, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Conditional Use Permit #24-0007 prior to recommending approval and the County's consideration of the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

PC ORIGINAL PKG

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site is "Agriculture" and 5 parcels are zoned "A-3" (Heavy Agriculture). A General Plan Amendment to include the other proposed parcels (APN 051-330-003-000 et al) into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-3 (Heavy Agriculture). A Zone Change to include/classify five (5) parcels into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan with requirements for an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use would be consistent with the zone A-3-RE (Heavy Agriculture with Renewable Energy Zone) upon approval of a Zone Change.

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

PC ORIGINAL PKG

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0007 attached hereto and incorporated herein by this reference.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY RECOMMEND APPROVAL** of Conditional Use Permit #24-0007 to the Board of Supervisors, subject to the attached Conditions of Approval.

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote approved the preceding resolution:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\J. CUP24-0007\CUP24-0007 PC Resolution.docx

PC ORIGINAL PKG

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

**AGREEMENT FOR CONDITIONAL USE PERMIT #24-0007
FOR BIG ROCK 2 CLUSTER SOUTH ENERGY PROJECT
APNS: 051-330-003-000, 051-350-004-000, 051-350-006-000, 051-350-007-000, AND 051-350-008-000**

Conditional Use Permit #24-0007 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally described as SW4 OF NE4 & SE4 OF NW4 & E2 OF SW4 & W2 OF SE4 SEC 28 16-12. et al; in an unincorporated area of the County of Imperial; The project site involves five (5) parcels: Assessor Parcel Numbers (APN) 051-330-003-000 et al.

PC ORIGINAL PKG

WHEREAS, Permittee has applied to the County for permission to operate 120-megawatts (MW) of alternating current photovoltaic solar energy and 240-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0006 (Big Rock 2 Cluster North); CUP #24-0008 (Big Rock 2 Cluster East/ Laurel Cluster South); and CUP #24-0009 (Big Rock 2 Cluster West) that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS overall; and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0007 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of The Board of Supervisors; and, (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

PC ORIGINAL PKG

G-3 RECORDATION:

CUP #24-0007 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation

PC ORIGINAL PKG

of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

PC ORIGINAL PKG

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

PC ORIGINAL PKG

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

PC ORIGINAL PKG

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

PC ORIGINAL PKG

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

PC ORIGINAL PKG

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PC ORIGINAL PKG

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California, the Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP24#0007 consists of three primary components:

1. Up to 120-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 240-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on five parcels comprising approximately 410 acres. The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

PC ORIGINAL PKG

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0003 related to this CUP#24-0007 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be

PC ORIGINAL PKG

reviewed by the County Building Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall

PC ORIGINAL PKG

be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

PC ORIGINAL PKG

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

PC ORIGINAL PKG

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17 Renewable Energy & Transmission Element regulations

PC ORIGINAL PKG

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to verify the existing conditions of the impacted County roads before construction

PC ORIGINAL PKG

begins. The haul route study shall also include recommended mitigation improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.
B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.
D. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).
C. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.

PC ORIGINAL PKG

2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three-hundred-and-sixty-degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.

PC ORIGINAL PKG

4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology.

PC ORIGINAL PKG

Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.

7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

(TOTAL "S" CONDITIONS are 28)

PC ORIGINAL PKG

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024 and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

PC ORIGINAL PKG

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0007 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES MINNICK, Director Date
Planning & Development Services Department

PC ORIGINAL PKG

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

PC ORIGINAL PKG

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

PC ORIGINAL PKG

ATTACHMENT "K"

VARIANCE (V)24-0003

RESOLUTION

PC ORIGINAL PKG

RESOLUTION NO. _____

A RESOLUTION OF PLANNING COMMISION OF THE COUNTY OF IMPERIAL CALIFORNIA RECOMMENDING TO THE BOARD OF SUPERVISORS TO APPROVE "VARIANCE #24-0003" FOR BIG ROCK 2 CLUSTER SOUTH CUP #24-0007.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0003 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0007); and,

WHEREAS, Variance #24-0003 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility for consideration of approval for Variance #24-0003; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Planning Commission has heard, received and considered all oral and written protest, objections and evidence presented by interested parties at a public hearing held with respect this item on September 24, 2025; and,

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Variance #24-0003 prior to approval. The Planning Commission finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the approval of Variance #24-0003 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

PC ORIGINAL PKG

Variance #24-0003 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0003 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

   The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application; The Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

   Staff has reviewed the request on Variance #24-0003 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, as allowed through the variance process, the granting of the variance for construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, exceeding the height limit would not constitute a grant adversely affecting the Imperial County General Plan.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY** recommend for the Board of Supervisors to approve the proposed Variance #24-0003.

Rudy Schaffner, Chairman
Planning Commission

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, **Director of Planning & Development Services**
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\K. VARIANCE 24-0003\V24-0003 - Resolution.docx

PC ORIGINAL PKG

ATTACHMENT "L"

CUP 24-0008 RESOLUTION & CONDITIONS OF APPROVAL

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL TO THE IMPERIAL COUNTY BOARD OF SUPERVISORS FOR THE "BIG ROCK 2 CLUSTER SOLAR PROJECT" FOR BIG ROCK 2 CLUSTER EAST CONDITIONAL USE PERMIT #24-0008.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0008 to develop a 60-megawatt (MW) solar facility and up to 60 MW of battery storage system. The project is to be located on 2 parcels (APN: 051-310-027-000, and APN: 051-310-028-000) comprising approximately 160 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of approvals, certifications and making recommendations to the Imperial County Board of Supervisors for approvals of conditional use permits;

WHEREAS, public notice of said application has been given, and the Planning Commission has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on September 24, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Conditional Use Permit #24-0008 prior to recommending approval and the County's consideration of the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

PC ORIGINAL PKG

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site is "Agriculture" and is within the Renewable Energy Overlay (RE). Therefore, the proposed uses could be found consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-2-R-RE. (General Agriculture / Rural Zone with Renewable Energy Overlay). The proposed uses are consistent with the zone since they are listed as allowed uses under the A-2-R zone with an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use is consistent with the zone: A-2-R-RE (General Agriculture / Rural Zone with Renewable Energy Overlay).

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

PC ORIGINAL PKG

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0008 attached hereto and incorporated herein by this reference.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY RECOMMEND APPROVAL** of Conditional Use Permit #24-0008 to the Board of Supervisors, subject to the attached Conditions of Approval.

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote approved the preceding resolution:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\L. CUP24-0008\CUP24-0008 PC Resolution.docx

PC ORIGINAL PKG

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0008
FOR BIG ROCK 2 CLUSTER EAST/LAUREL CLUSTER SOUTH SOLAR PROJECT
APNS: 051-310-027-000 AND 051-310-028-000

Conditional Use Permit #24-0008 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally described as S 1/2 OF E 1/2 & W 1/2 TR 53 T16S R12E 120 AC, and W 1/2 OF TR 45B T16S R12E 40 AC; in an unincorporated area of the County of Imperial; The project site involves two(2) parcels: Assessor Parcel Numbers (APN) 051-310-027-000, and 051-310-028-000

PC ORIGINAL PKG

WHEREAS, Permittee has applied to the County for permission to operate a 60-megawatts (MW) of alternating current photovoltaic solar energy and 60-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0006 (Big Rock 2 Cluster North); CUP #24-0007 (Big Rock 2 Cluster South); and CUP #24-0009 (Big Rock 2 Cluster West) that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS overall; and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0008 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of the Board of Supervisors; (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

PC ORIGINAL PKG

G-3 RECORDATION:

CUP #24-0008 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation

PC ORIGINAL PKG

of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

PC ORIGINAL PKG

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

PC ORIGINAL PKG

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

PC ORIGINAL PKG

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

PC ORIGINAL PKG

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

PC ORIGINAL PKG

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PC ORIGINAL PKG

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California, the Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP#24-0008 consists of three primary components:

1. Up to 60-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 60-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on two parcels comprising approximately 160 acres. The 160-acre site is associated with the previously-approved CUP for Laurel Cluster 2 South and will be re-entitled as part of the proposed project. The project site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0004 related to this CUP#24-0008 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-

PC ORIGINAL PKG

3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

PC ORIGINAL PKG

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for

PC ORIGINAL PKG

Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the

PC ORIGINAL PKG

Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

PC ORIGINAL PKG

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17- Renewable Energy & Transmission Element regulations.

PC ORIGINAL PKG

S-21 COUNTY EXECUTIVE OFFICE:[1]

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to

PC ORIGINAL PKG

verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.

C. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).

C. The permittee shall comply with all IID comments and regulations.

PC ORIGINAL PKG

S-25 SHERIFF OFFICE:[5]

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.
2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three-hundred-and-sixty-degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for

PC ORIGINAL PKG

administering and managing the reimbursement process as part of this condition of approval.

2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for

PC ORIGINAL PKG

administering and managing the reimbursement process as part of this condition of approval.

5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology. Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.
7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

PC ORIGINAL PKG

(TOTAL "S" CONDITIONS are 28)

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024 and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

PC ORIGINAL PKG

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0008 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES MINNICK, Director Date
Planning & Development Services Department

PC ORIGINAL PKG

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

PC ORIGINAL PKG

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

PC ORIGINAL PKG

ATTACHMENT "M"

VARIANCE (V)24-0004

RESOLUTION

PC ORIGINAL PKG

RESOLUTION NO. _____

A RESOLUTION OF PLANNING COMMISION OF THE COUNTY OF IMPERIAL CALIFORNIA RECOMMENDING FOR THE BOARD OF SUPERVISORS TO APPROVE "VARIANCE #24-0004" FOR BIG ROCK 2 CLUSTER EAST CUP#24-0008.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0004 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0008); and,

WHEREAS, Variance #24-0004 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility for consideration of approval for Variance #24-0004; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Planning Commission has heard, received and considered all oral and written protest, objections and evidence presented by interested parties at a public hearing held with respect this item on September 24, 2025; and,

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Variance #24-0004 prior to approval. The Planning Commission finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the approval of Variance #24-0004 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

PC ORIGINAL PKG

Variance #24-0004 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0004 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

   The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application; The Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

   Staff has reviewed the request on Variance #24-0004 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, as allowed through the variance process, the granting of the variance for construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, exceeding the height limit would not constitute a grant adversely affecting the Imperial County General Plan.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY** recommend for the Board of Supervisors to approve the proposed Variance #24-0004.

Rudy Schaffner, Chairman
Planning Commission

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, **Director of Planning & Development Services**
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\M. VARIANCE 24-0004\V24-0004- Resolution.docx

PC ORIGINAL PKG

ATTACHMENT "N"

CUP 24-0009 RESOLUTION & CONDITIONS OF APPROVAL

PC ORIGINAL PKG

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, RECOMMENDING APPROVAL TO THE IMPERIAL COUNTY BOARD OF SUPERVISORS FOR THE "BIG ROCK 2 CLUSTER SOLAR PROJECT" FOR BIG ROCK 2 CLUSTER WEST CONDITIONAL USE PERMIT #24-0009.

WHEREAS, 90FI 8ME LLC. has submitted an application for Conditional Use Permit (CUP) #24-0009 to develop a 80-megawatt (MW) solar facility and up to 60 MW of battery storage system. The project is to be located on 5 parcels comprising approximately 249 acres. This Conditional Use Permit is one of four (4) CUP's that are being considered for simultaneous approval that would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS for the Big Rock 2 Cluster Project overall;

WHEREAS, a Final Environmental Impact Report and CEQA Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State CEQA Guidelines, and the County's "Rules and Regulations to Implement CEQA," as Amended;

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of approvals, certifications and making recommendations to the Imperial County Board of Supervisors for approvals of conditional use permits;

WHEREAS, public notice of said application has been given, and the Planning Commission has heard, received and considered all oral and written protests, objections and evidence presented by interested parties at a public hearing held with respect to this item on September 24, 2025, and

WHEREAS, the Draft EIR was received by the State Clearinghouse on May 1, 2025, and circulated for a period of 50 days (**SCH #2024090063**) with the commenting period ending June 20, 2025.

NOW, THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Conditional Use Permit #24-0009 prior to recommending approval and the County's consideration of the Project has been noticed in compliance with law.

SECTION 2. That the Project complies with the requirements of the Imperial County Code and is in accordance with State Planning and Zoning law therefore, the following findings are made pursuant to Imperial County Code § 90203.09 as follows:

PC ORIGINAL PKG

A. The proposed use is consistent with goals and policies of the adopted County General Plan. (Imperial County Code § 90203.09.A)

The current General Plan land use designation of the project site and proposed parcels is "Agriculture" and 5 parcels are zoned "A-2-R and A-3" (General Agricultural / Rural Zone and Heavy Agriculture). A General Plan Amendment to include the other proposed parcels (APN 051-290-018-000 et al) into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used. (Imperial County Code § 90203.09.B)

The proposed project parcels are zoned A-2-R and A-3 (General Agricultural / Rural Zone and Heavy Agriculture). A Zone Change to include five (5) parcels into the RE Overlay Zone would be required for consistency with the County General Plan. With this, the proposed uses could be found to be consistent with the General Plan with requirements for an approved Conditional Use Permit.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.00. (Imperial County Code § 90203.09.C)

The proposed use would be consistent with the zone A-2-R-RE and A-3-RE (General Agricultural / Rural Zone with Renewable Energy Overlay and Heavy Agriculture with Renewable Energy Zone) upon approval of a Zone Change.

D. The proposed use meets the minimum requirements of this Title applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California. (Imperial County Code § 90203.09.D)

The Project complies with the minimum requirements of this Title by, among other things, obtaining a CUP, complying with the California Environmental Quality Act, and participating in the public review and hearing process. Development standards have been established for the Project pursuant to these processes and will be enforced via imposition and enforcement of the Mitigation Monitoring and Reporting Program recommended for approval by separate Resolution, as well as the conditions of approval imposed on this CUP. The Conditions of Approval will further ensure that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project meets the minimum requirements of the Land Use Ordinance, Section 90203.00.

PC ORIGINAL PKG

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity. (Imperial County Code § 90203.09.E)

The Environmental Impact Report (EIR) prepared for the Project analyzed the Project's potential effects on the health, safety, and welfare of the public and property and found that, with mitigation, the Project would have less than significant effects and impacts in all resources areas.

In addition, the project site is not near a residential community and is mostly surrounded by farmland and or open space/recreational land.

F. The proposed use does not violate any other law or ordinance. (Imperial County Code § 90203.09.F)

The proposed project will be subject to the Conditional Use Permit and current Federal, State and Local regulations. State Planning and Zoning Law (Cal. Govt. Code §§ 65000-66035) establishes minimum statewide standards for the regulation of local land use through planning and zoning. The County regulates local land use via Title 9 of the Imperial County Code. As found above, the proposed project is conditioned to be consistent with Imperial County, Title 9, Land Use Ordinance and CEQA mitigation measures and therefore complies with both State and local laws and ordinance.

Pursuant to CEQA, the County has prepared an EIR for the Project, which analyzes the proposed Project's compliance and consistency with other federal, state, and local laws and ordinances regulating the environment. Substantial evidence supports the conclusions in the EIR that the Project complies with said environmental laws, and thus the finds that the proposed use does not violate any other law or ordinance.

G. The proposed use is not granting a special privilege. (Imperial County Code § 90203.09.G)

The proposed Energy Solar and Battery Storage facility is a permitted use subject to approval of the proposed Conditional Use Permit. No special privileges are being offered or will be granted.

SECTION 3. Approval of the Project is conditioned upon the terms and conditions set forth in the Agreement for Conditional Use Permit #24-0009 attached hereto and incorporated herein by this reference.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY RECOMMEND APPROVAL** of Conditional Use Permit #24-0009 to the Board of Supervisors, subject to the attached Conditions of Approval.

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote approved the preceding resolution:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\N. CUP24-0009\CUP24-0009 PC Resolution.docx

PC ORIGINAL PKG

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0009
FOR BIG ROCK 2 CLUSTER WEST SOLAR PROJECT
APNS: 051-290-018-000, 051-290-019-000, 051-320-005-000, 051-320-006-000, AND 051-320-007-000

Conditional Use Permit #24-0009 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of **(MONTH DAY YEAR)**. This Conditional Use Permit is by and between 90FI 8ME LLC (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road, legally described as LOT 1 SEC 29 & POR TR 107 16-12 80 AC et al; in an unincorporated area of the County of Imperial; The project site involves five (5) parcels: Assessor Parcel Numbers (APN) 051-290-018-000 et al.

PC ORIGINAL PKG

WHEREAS, Permittee has applied to the County for permission to operate a 80-megawatts (MW) of alternating current photovoltaic solar energy and 60-MW of battery storage on privately-owned land in the unincorporated area of Imperial County; and,

WHEREAS, this Conditional Use Permit is one of four (4) Conditional Use Permits that have collectively undergone environmental review under the California Environmental Quality Act and are being considered for simultaneous approval composed of CUP #24-0006 (Big Rock 2 Cluster North); CUP #24-0007 (Big Rock 2 Cluster South); and CUP #24-0008 (Big Rock 2 Cluster East/Laurel Cluster South); and,

WHEREAS, the County, after a noticed public hearing, agreed to issue Conditional Use Permit #24-0009 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The Approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) Calendar days after the decision of the Board of Supervisors; (b.) the applicable Conditional Use Permit conditions have been met; and, (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and, (d.) in the case of a decision by the Board of Supervisors there is no 10-day appeal.

PC ORIGINAL PKG

G-3 RECORDATION:

CUP #24-0009 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2," including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions this CUP shall be limited to a maximum of thirty (30) years from the recordation Date of the CUP. The CUP may be extended for an additional ten (10) year period by the appropriate County entity (either the Planning Director, the Planning Commission or the Board of Supervisors as set forth in the applicable Imperial County Ordinances) upon a finding that the Project is in compliance with all conditions of the CUP as stated herein and any applicable Land Use regulation of the County of Imperial. In order to obtain an extension, the Permittee shall file a written extension request with the Planning Director at least sixty (60) days prior to the expiration date of the permit. Such an extension request shall include the appropriate extension fee. Nothing stated or implied within this Permit shall constitute a guarantee that an extension will be granted. An extension may or may not be granted if the Project is in violation

PC ORIGINAL PKG

of any one or all of the conditions or if there is a history of non-compliance with the Permit conditions.

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s) and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.**

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of the staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

PC ORIGINAL PKG

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).
If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shall be entitled to provide his or her own counsel to defend the case and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

PC ORIGINAL PKG

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of 60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon these parcels described herein and may not be transferred to other parcels.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violation and actions required of Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

PC ORIGINAL PKG

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports. The County may request information at any time from the Permittee or other users if applicable; however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. The same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

PC ORIGINAL PKG

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive right or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit Permittee from requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The permittee shall provide the County, upon request, copies and amendments of all such permits.

PC ORIGINAL PKG

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PC ORIGINAL PKG

PROJECT SPECIFIC CONDITIONS:

S-1 AUTHORIZED SCOPE OF ACTIVITIES:

The Big Rock 2 Cluster Energy Project intends to construct and generate 500-megawatts (MW) of alternating current photovoltaic solar energy and 500-MW of battery storage on privately-owned land in the unincorporated area of Imperial County, California, the Big Rock 2 Cluster consist of four (4) Conditional Use Permits (CUPs), a General Plan amendment, Zone Change to include the parcels into the RE overlay, and four (4) Variance requests to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles.

CUP#24-0009 consists of three primary components:

1. Up to 80-megawatt (MW) in capacity photovoltaic (PV) Solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility")
2. Up to 60-MW in capacity Battery Storage BESS; and,
3. Up to 200 feet in height Gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

The project site is located on five parcels identified as Assessor's Parcel Numbers APNs 051-290-018-000, 051-290-019-000, 051-320-005-000, 051-320-006-000 and 051-320-007-000, comprising approximately 249 acres. The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

S-2 ACCESS TO SITE:

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

PC ORIGINAL PKG

S-3 VARIANCE:

Permittee applied for a Variance (V) #24-0005 related to this CUP#24-0009 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones, each "gen-tie" line shall be mounted on tubular steel poles with a maximum height of 200 feet.

S-4 ODORS:

All harmful or noxious emissions and odors shall be controlled to ensure that quantities of air contaminants released as a result of the facility operations do not exceed local, state, or federal standards, or constitute a public nuisance.

S-5 REPORTING:

The permittee shall furnish to the County, within a reasonable time, any relevant reports/information which the County reasonably requires for monitoring purposes to determine whether cause exists for revoking this permit, or to determine compliance with this permit, i.e. relevant reports are those defined within this Permit or requested by the County. The Permittee shall submit all required reports to the Planning Director, County Planning and Development Services Department (ICPDSD), 801 Main Street, El Centro, CA 92243.

S-6 WASTE DISPOSAL:

(A) The Permittee shall insure that all solar plant facilities waste, liquid, gas or solid, which are generated on-site shall be disposed of in compliance with appropriate local, state, and federal regulations, in effect or as subsequently duly-enacted. All solid waste debris and/or any hazardous wastes located on the Project site must be satisfactorily removed to a permitted facility prior to the commencement of grading earthen material at the site.

(B) Littering shall not be allowed. Project personnel shall not deposit or leave any food or waste in the Project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way or on the Project site following completion of construction.

S-7 CONSTRUCTION STANDARDS:

The Big Rock 2 Cluster Solar and Battery Storage facility and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building Official/Planning Director. Building permits shall

PC ORIGINAL PKG

be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 FACILITIES CLOSURE AND SITE RESTORATION:

(A) Permittee shall implement the site restoration plan at the earlier of when the operation of the permitted facilities herein authorized has ceased or the term of the CUP has expired. At such time, all facilities shall be dismantled, and the lands involved restored to their pre-construction condition and available for agricultural production uses as agreed to by the Imperial County Planning and Development Services Director.

(B) Prior to the issuance of a grading Permit, a decommissioning and restoration plan (the Reclamation Plan) shall be submitted and approved by the Imperial County Planning and Development Services Director. The Reclamation Plan shall documents the procedures by which the Project site will be returned to its current agricultural conditions.

(C) Within thirty (30) days prior to ground disturbance, a Bond, or other acceptable surety, in the amount of the estimated site restoration financial calculations/bond, for the developed project area, or other forms of security acceptable to County Counsel's office, shall be filed with the County that guarantees restoration of the land to its condition prior to the permitted solar plant development.

(D) Upon completion of such site restoration, and demonstration that the land has been restored to the agriculturally productive/farmable condition prior to the permitted solar plant development the Bond or other surety shall be released by the County.

(E) The above financial calculations/bond shall be reviewed every five (5) years in December and adjusted on January 1st to add a Consumer Price Index (CPI) (Los Angeles) increase by the Planning and Development Services Director. This readjustment can be made in the County's sole discretion and must be funded by the Permittee within ninety (90) calendars after notice of the additional amount of such adjustment.

S-9 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall

PC ORIGINAL PKG

be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-site, and provided to agencies responsible for preparing for and addressing emergencies, on request. The plan shall include a notification list of response agencies which shall be notified immediately upon the discovery of a reportable unauthorized discharge and the list shall include: Imperial Fire/Office of Emergency Services, Planning & Development Services Department, Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID), Department of Public Works (DPW), Sheriff's office, as applicable.

(b) A Hazardous Materials Business Plan shall be prepared and be submitted to the Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be maintained by the Permittee. The Permittee shall provide adequate safety devices against the hazard of fire and explosion for activities that involve the use and storage of flammable, explosive or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression equipment and devices standard in the industry with compliance with applicable state and local laws as determined by the Imperial County Fire Chief.

(c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County Fire/OES Department, prior to issuance of a building permit.

All designated employees shall be provided with communication devices, cell phones or walkie-talkies, in the event of an emergency situation on-site.

S-10 FIRST AID:

Appropriate first aid provisions for facility operations shall be made for emergency response during project construction and operation with appropriate first aid training for project employees. During construction, a member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies as provided for in the Emergency Response Plan required hereinabove.

PC ORIGINAL PKG

S-11 GEOTECHNICAL:

The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports shall be made available to the County on request.

S-12 ARCHAEOLOGICAL, CULTURAL & PALEONTOLOGICAL RESCOURCES:

The Permittee shall monitor the construction of equipment and if any unusual specimens of bone, stone, or ceramic are discovered during construction of the permitted facilities, all construction affecting the discovery site, shall cease until a qualified archaeologist retained by the Permittee and approved by the County, reviews the specimens. The recommendations of the archaeologist shall be complied with prior to resuming construction.

S-13 SPILLS AND RUNOFF:

The Project site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments. A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained. Blowout prevention equipment shall be used in accordance with the requirements of CALGEM.

S-14 GEOLOGY & SOILS AND MINERAL RESOURCES:

Prior to approval of final engineering and grading plans for the Project, the County shall verify that all recommendations contained in the Geotechnical Report for this Solar Facility and have been incorporated into all final engineering and grading plans. The County's soil engineer and engineering geologist shall review grading plans prior to finalization to verify compliance with the recommendations of the report.

S-15 AIR QUALITY AND DUST EMISSIONS:

The Permittee shall comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules and Imperial County Air Pollution Control District's (ICAPCD) air-monitoring criteria for PM-10 to control dust or other emissions by implementing the APCD Fugitive Dust Control conditions and obtain an Authority to construct and amendment permit to operate prior to any construction/operation of any or modified equipment or operation for the expansion project. The Permittee shall contact the Air District to obtain any required Air Permits.

PC ORIGINAL PKG

S-16 LIGHT & GLARE:

The Permittee is allowed to have security as well as operational lighting. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-17 NOISE:

Control measures shall include, but are not limited to, the following:

(A) During the construction period, heavy truck traffic shall be limited to the hours between 7:00 AM and 7:00 PM.

(B) During construction, in accordance with Imperial County Noise Element of the General Plan, the noise level shall not exceed 75 dBALeq at the property boundary when averaged over an 8-hour period.

(C) During operation of the facility, the maximum permitted continuous sound level shall be not more than 45 dBALeq, as measured at the nearest residence using the "A" scale and measured with a sound level meter and associated octave band analyzer. The level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours.

(D) Haul trucks and other engine-powered equipment shall be muffled and operated with engine exhaust brake use limited to emergencies.

S-18 LATEST CODES GOVERN:

All on-site structures shall be designed and built to comply with the latest edition of the applicable codes.

S-19 OPERATIONS:

Permittee shall have a responsible agent on-site whose name, title, email, address, and telephone number(s) shall be provided to the Department of Public Works (DPW), County Fire/OES, Environmental Health Services, Sheriff Department and Planning & Development Services Department.

S-20 COMPLIANCE:

Permittee shall comply with all ICPDS Title 9-Division 17- Renewable Energy & Transmission Element regulations.

S-21 COUNTY EXECUTIVE OFFICE:[1]

PC ORIGINAL PKG

Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address for all proposed projects, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. The permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained prior to the issuance of any grading permits.

Construction/Material Budget: The permittee will provide the County Executive Office individual project construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.

At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for the individual Cups prior to project being placed on Planning Commission meeting.

Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial for the individual CUPs.

S-22 PUBLIC WORKS:[2]

1. The Transportation Impact Analysis dated December 2024 and prepared for this project identifies two truck access routes in Figure 4. There are two county bridge structures along Evan Hewes highway for each truck access route: one of them over the Westside Main Canal (west of Intersection 10 in Figure 4) and the other over the New River (west of Intersection 10) has an operational capacity of 64,0000 lbs., making it unsuitable for legal loads (80,000 lbs.)
2. The truck access route along Dunaway Road, Evan Hewes Highway and Westside Road to the sites shall be eliminated. An alternative to this truck access route would be using SR-98 and Drew Road, accessing the sites from the south.
3. As per the comment letter from this Department dated November 14, 2024 for CUP's 24-0006, 24-0007, 24-0008 and 24-0009, the applicant shall prepare and submit a haul route study identifying a construction route or routes through public roads. The routes identified on the haul route shall match those routes identified on Section 3.2-Trip Distribution and Assignment Section of the Transportation Impact Analysis prepared for this project. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation

PC ORIGINAL PKG

improvements to impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall included with the study.

The Permittee shall comply with all Imperial County Public Works Department regulations.

S-23 AIR POLLUTION CONTROL DISTRICT:[3]

1. Air District asks for a revised CalEEMod analysis be submitted which models the entire acreage of the project;
2. A satisfactory explanation be included describing how Site Preparation and Grading can be accomplished within the proposed construction schedule, and;
3. The CalEEMod output (Detailed Version) and a memo or explanation of inputs be provided in pdf form.
4. The Permittee will comply with all Air District rules and regulations and would emphasize Regulation VIII – Fugitive Dust Rules.
5. The Permittee shall contact the Air District to obtain any required Air Permits.

S-24 IMPERIAL IRRIGATION DISTRICT:[4]

A. Applicant shall provide a surveyed legal description, and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID's necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

B. Fences should be installed at the boundary of IID's right of way for safety and to allow access for IID operation and maintenance activities. The project's fencing plan should address IID's right of way.

C. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances).

D. The permittee shall comply with all IID comments and regulations.

S-25 SHERIFF OFFICE:[5]

PC ORIGINAL PKG

1. The Imperial County Sheriff's Office requests that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.
2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sited and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three hundred and sixty degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

S-26 FIRE DEPARTMENT:[6]

Imperial County Fire Department requirements are the following:

Solar Requirements:

1. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
2. Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.

PC ORIGINAL PKG

3. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
4. KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
5. Solar array fields shall be clear of all vegetation.
6. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems requirements:

1. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
2. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
3. An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
4. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.
5. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.

PC ORIGINAL PKG

6. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology. Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.
7. Signage shall be provided in accordance California Fire Code Chapter 12
8. Compliance with all required sections of the fire code.
9. Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
10. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
11. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
12. A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
13. All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery:

1. The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training:

1. The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

S-27 ACCEPTANCE:

Acceptance of this permit shall be deemed to constitute agreement by Permittee with all terms and conditions herein contained.

S-28 MITIGATION AND MOINITORING AND REPORTING PROGRAM:

Adhere to all Mitigation Measures as described in the Mitigation Monitoring and Reporting Program (MM&RP) SCH#2024090063.

(TOTAL "S" CONDITIONS are 28)

PC ORIGINAL PKG

1. Imperial County Executive Office comment letter dated: September 5, 2024
2. Imperial County Public Works Department comment letter dated: November 14, 2024, and March 7, 2025
3. Air Pollution Control District comment letters dated: February 05, 2025
4. Imperial Irrigation District comment letters dated: October 7, 2024, and January 30, 2025
5. Imperial County Sheriff Department comment letter dated: September 9, 2024
6. Imperial County Fire Department comment letter dated: August 7, 2025

PC ORIGINAL PKG

NOW THEREFORE, County hereby issues Conditional Use Permit #24-0009 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

90FI 8ME LLC

By:_____ _____
Venkatesh Inti
Chief Development Officer Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____ _____
JAMES MINNICK, Director Date
Planning & Development Services Department

PC ORIGINAL PKG

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

PC ORIGINAL PKG

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

PC ORIGINAL PKG

ATTACHMENT "O"

VARIANCE (V)24-0005

RESOLUTION

PC ORIGINAL PKG

RESOLUTION NO. _____

A RESOLUTION OF PLANNING COMMISION OF THE COUNTY OF IMPERIAL CALIFORNIA RECOMMENDING FOR THE BOARD OF SUPERVISORS TO APPROVE "VARIANCE #24-0005" FOR BIG ROCK 2 CLUSTER WEST CUP#24-0009.

WHEREAS, The applicant 90FI 8ME LLC has submitted an application for Variance (V)#24-0005 to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height (under Conditional Use Permit #24-0009); and,

WHEREAS, Variance #24-0005 has been prepared in accordance with the requirements of the State Planning and Zoning Law, California Environmental Quality Act, the State CEQA Guideline, the County's "Rules and Regulations to Implement CEQA, and the County's Land Use Ordinance, Title 9 as amended; and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility for consideration of approval for Variance #24-0005; and,

WHEREAS, public notice of the public hearing for said application has been given, and the Planning Commission has heard, received and considered all oral and written protest, objections and evidence presented by interested parties at a public hearing held with respect this item on September 24, 2025; and,

NOW THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Variance #24-0005 prior to approval. The Planning Commission finds and determines that the Variance is adequate and prepared in accordance with the requirements of the State Planning and Zoning Law, the County's Land Use Ordinance, Title 9 as amended, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning law; the County's Land Use Ordinance, Title 9 as amended; and the County of Imperial regulations, the following findings for the approval of Variance #24-0005 and Findings have been made as follows:

1. **That there are special circumstances applicable to the property described in the application filed for such variance, or to its intended use, that do not apply generally to the property or class of use in the same zone or vicinity. (Imperial County Code§ 90202.08 A. (1))**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The applicant 90FI 8ME LLC submitted a Variance application to address the gen-tie structures that may exceed the A-2 General Agriculture and A-3 Heavy Agriculture zoning height limitation of 120 feet. This

PC ORIGINAL PKG

Variance #24-0005 would permit a maximum height of 200 feet for the required gen-tie transmission line.

Conditions of Approval imposed on Variance #24-0005 will further ensure that the proposed project is consistent with the General Plan and complies with all applicable regulations of the County of Imperial and the State of California. Therefore, granting this variance will not constitute a grant of special privilege that is not generally available to other property in the vicinity and in the same land use zone.

2. **That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such zone or vicinity in which the property is located. County Code§ 90202.08 A (2)**

   The proposed project was presented and discussed at the County's Airport Land Use Commission (ALUC) Meeting held on February 19, 2025. The ALUC reviewed the proposed application; The Commission found the proposed project consistent with the 1996 Airport Land Use Compatibility Plan (ALUCP) with no conditions. An Environmental Impact Report SCH#2024090063 was completed with mitigation measures that reduced all significant impacts in the project area to a less than significant level of impact. The proposed height variance to deviate from the 120-foot height limit in an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, would comply with all County and State regulations. Therefore, granting such variance will not be materially detrimental to the public welfare or injurious to the property or vicinity in which the property is located.

3. **That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning laws is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classifications. County Code§ 90202.08 A (3)**

   The construction and operation of the Big Rock 2 Cluster North Solar project will require a Gen-tie line that may be mounted on tubular steel poles up to 200 feet in height and would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. There are no special circumstances applicable to the subject property.

4. **That the granting of such variance will not adversely affect the comprehensive General Plan.**

   Staff has reviewed the request on Variance #24-0005 and has determined that through the imposed Conditions of Approval as pursuant to Title 9, Division 2, Section 90202.08, Subsection (B), the proposed project would be consistent with the County's General Plan, Land Use Ordinance (Title 9), and comply with all applicable regulations of the County of Imperial and the State of California. Therefore, as allowed through the variance process, the granting of the variance for construction, installation, operation, and maintenance of an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height, exceeding the height limit would not constitute a grant adversely affecting the Imperial County General Plan.

PC ORIGINAL PKG

NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission **DOES HEREBY** recommend for the Board of Supervisors to approve the proposed Variance #24-0005.

Rudy Schaffner, Chairman
Planning Commission

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **September 24, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, **Director of Planning & Development Services**
Secretary to the Planning Commission

RY/S:\AllUsers\APN\051\300\036\GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005\PC\O. VARIANCE 24-0005\V24-0005- Resolution.docx

PC ORIGINAL PKG

ATTACHMENT "P"

COMMENTS

PC ORIGINAL PKG

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

RECEIVED
AUG 07 2025
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVIC.

August 7, 2025

RE: Big Rock 2 Cluster Solar and Storage Project
CUP 24-0006, CUP 24-0007, CUP 24-0008, and CUP 24-0009

Imperial County Fire Department Fire Prevention Bureau would like to thank you for the opportunity to review and comment on Big Rock 2 Cluster Solar and Storage Project. Big Rock 2 Cluster North CUP #24-0006, Big Rock 2 Cluster South CUP #24-0007, Big Rock 2 Cluster East CUP #24-0008, and Big Rock 2 Cluster West CUP #24-0009

The project description is developing and operating a utility-scale (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated areas of Imperial County. The project would generate up to a combined 500 megawatt (MW) of alternating current (AC) and up to 500 MW of battery storage. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consist of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

Energy storage facilities create extreme hazards for firefighters and emergency responders with the possibility of explosions, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, and chemical burns. Due to limited resources, the hazards listed can create potential significant impacts for fire department personnel to safely perform firefighting operations and hazardous material response to a utility-scale energy storage facility. The remote location of the project will result in longer response times. These long response times may result in incidents that are more difficult to stabilize and require additional resources to manage safely. Utility-scale energy storage requires specialized and reliable equipment to perform firefighting operations safely and effectively to NFPA recommendations, OSHA requirements, and ICFD standards.

Standards and requirements for energy storage system includes but not limited to:
NFPA:
1 Fire Code

PC ORIGINAL PKG

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

70 National Electrical Code
855 Standard for the installation of Energy Storage System
111 Stored Electrical Energy Emergency and Standby Power System
1710 Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medial Operations, and Special Operations to the Public by Career Fire Departments.

OSHA:

29 CFR 1910.134(g)(4)

CFC:

Chapter 12 section 1206 Electrical Energy Storage System
Chapter 9 Fire Protection and Life Safety System

Fire Department requirements are the following:

Solar Requirements

- Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
  - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.

PC ORIGINAL PKG

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

- Access roadways shall provide intersecting roadways to allow unobstructed movement of fire apparatus throughout the project site. Solar array layout shall meet Imperial County Fire Department layout requirements.
- Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
- KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
- Solar array fields shall be clear of all vegetation.
- A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

Battery Energy Storage Systems

- An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
- An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
- An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
- Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
    - In lieu of providing all-weather access roads for fire protection vehicles, the permittee may be allowed to provide compacted native soil roads, provided such roads comply with all applicable Imperial County Air Pollution Control District (ICAPCD) rules and regulations, and subject to approval by the Imperial County Fire Department (ICFD). As a condition of this allowance, and prior to the issuance of any grading permit for the project, the permittee shall be required to purchase a Type 1 fire engine. The specifications, equipment, and final cost of the Type 1 fire engine shall be based on current market value and must be approved by ICFD

PC ORIGINAL PKG

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

prior to issuance of the initial grading permit. The County shall require, as a condition of approval for other projects within the same area, that subsequent developers reimburse the permittee for their proportionate share of the expenses associated with the purchase of the Type 1 fire engine. The permittee shall only be reimbursed for expenses exceeding their proportionate share. The County shall be responsible for administering and managing the reimbursement process as part of this condition of approval.

- Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503.
- Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology. Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.
- Signage shall be provided in accordance California Fire Code Chapter 12
- Compliance with all required sections of the fire code.
- Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
- An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
- A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
- A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
- All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery

- The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Training

PC ORIGINAL PKG

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

- The applicant shall provide training annually to emergency services personnel covering the emergency response to Battery Energy Storage Systems (BESS) emergencies and hazards related to BESS and electrical generation facilities.

Again, thank you for the opportunity to comment. Imperial County Fire Department reserves the right to comment and request additional requirements pertaining to this project regarding fire and life safety measures, California building and fire code, and National Fire Protection Association standards at a later time as we see necessary.

If you have any questions, please contact the Imperial County Fire Prevention Bureau at 442-265-3020 or 442-265-3021.

Sincerely

Andrew Loper *Andrew Loper*
Deputy Fire Marshal
Imperial County Fire Department
Fire Prevention Division

CC: David Lantzer Fire Chief
Imperial County Fire Department

PC ORIGINAL PKG

Jim Minnick, Planning Director
ICPDS
801 Main Street
El Centro, CA 92243
Phone: (442)-265-1736
Email: jimminnick@co.imperial.ca.us

RECEIVED
SEP 09 2025
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

18 August 2025

Letter of Support

Dear Mr. Minnick,

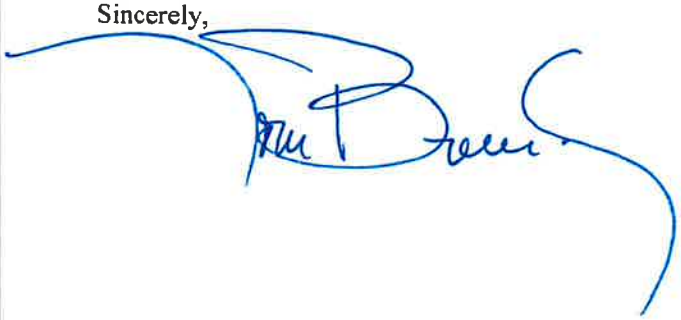
I am writing in support of the Big Rock 2 Solar & Storage Project currently under consideration for Conditional Use Permit (CUP) approval by Imperial County.

As a private property owner, I believe this solar project is the highest and best use of my land, and carefully sited projects such as the Big Rock 2 Solar & Storage Project are an appropriate and important component of our community's development.

The economic benefits to Imperial County include diversifying the County's economy, an investment in future generations by providing much-needed jobs and training opportunities, and both direct and indirect revenues via property tax, sales, tax, and public benefit and services fees.

We need this Project now to help ensure a thriving, future focused Imperial County. Please forward this Letter of Support to the Board of Supervisors who will ultimately approve the CUPs to construct the Big Rock 2 Solar & Storage Project.

Sincerely,



PC ORIGINAL PKG

Docusign Envelope ID: 987F93F9-63FC-4EC8-A0BE-906C8A76A4CB

Jim Minnick, Planning Director
ICPDS
801 Main Street
El Centro, CA 92243
Phone: (442)-265-1736
Email: jimminnick@co.imperial.ca.us

RECEIVED
SEP 11 2025
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

September 10, 2025

Re: Support for the Big Rock 2 Solar and Storage Project

Dear Mr. Minnick,

I grew up in, own property in, and maintain personal contacts in Imperial County, and I write in support of the Big Rock 2 Solar & Storage Project currently under consideration for Conditional Use Permit (CUP) approval by Imperial County. I, and first my family, have farmed Imperial Valley land for close to eighty (80) years. Two members of my close immediate family first entered into option agreements with Avantus (actually its predecessor corporation "8 minute energy" initially) in 2015 to develop two (2) parcels to produce solar energy with the understanding that the projects would take years to realize and complete. When my family members died in 2012 and 2019, I inherited three Imperial Valley properties, two of which have had long-standing options with Avantus. When all things are considered, I have very high regard for the company after interacting with it for many years.

This solar project will produce energy for a very long time and as a landowner and lawyer I believe it is the highest and best use of my land when compared to its value as a producer of alfalfa. I grew up in the Valley, visit often, and have friends here, and projects such as the Big Rock 2 Solar & Storage Project are an appropriate and important component of the Valley's development.

The economic benefits to Imperial County include diversifying the County's economy, an investment in future generations by providing much-needed jobs and training opportunities, and both direct and indirect revenues via property tax, sales, tax, and public benefit and services fees.

We need this Project now to help ensure a thriving, future focused Imperial County. Please forward this Letter of Support to the Board of Supervisors who will ultimately approve the CUPs to construct the Big Rock 2 Solar & Storage Project.

Very truly yours,

Signed by:
0AE428F74C494A7...
Carolyn J. Childers
Imperial Valley Land Owner

PC ORIGINAL PKG

Jim Minnick, Planning Director
ICPDS
801 Main Street
El Centro, CA 92243
Phone: (442)-265-1736
Email: jimminnick@co.imperial.ca.us

RECEIVED
By Imperial County Plannning & Development Services at 9:06 am, Sep 16, 2025

8/12/2025

Letter of Support

Dear Mr. Minnick,

I am writing in support of the Big Rock 2 Solar & Storage Project currently under consideration for Conditional Use Permit (CUP) approval by Imperial County.

As a private property owner, I believe this solar project is the highest and best use of my land, and carefully sited projects such as the Big Rock 2 Solar & Storage Project are an appropriate and important component of our community's development.

The economic benefits to Imperial County include diversifying the County's economy, an investment in future generations by providing much-needed jobs and training opportunities, and both direct and indirect revenues via property tax, sales, tax, and public benefit and services fees.

We need this Project now to help ensure a thriving, future focused Imperial County. Please forward this Letter of Support to the Board of Supervisors who will ultimately approve the CUPs to construct the Big Rock 2 Solar & Storage Project.

Sincerely, Marian Gabrych

[Name] Marian Gabrych

PC ORIGINAL PKG

Jim Minnick, Planning Director
ICPDS
801 Main Street
El Centro, CA 92243
Phone: (442)-265-1736
Email: jimminnick@co.imperial.ca.us

12 August 2025

Letter of Support

Dear Mr. Minnick,

I am writing in support of the Big Rock 2 Solar & Storage Project currently under consideration for Conditional Use Permit (CUP) approval by Imperial County.

As a private property owner, I believe this solar project is the highest and best use of my land, and carefully sited projects such as the Big Rock 2 Solar & Storage Project are an appropriate and important component of our community's development.

The economic benefits to Imperial County include diversifying the County's economy, an investment in future generations by providing much-needed jobs and training opportunities, and both direct and indirect revenues via property tax, sales, tax, and public benefit and services fees.

We need this Project now to help ensure a thriving, future focused Imperial County. Please forward this Letter of Support to the Board of Supervisors who will ultimately approve the CUPs to construct the Big Rock 2 Solar & Storage Project.

Sincerely,

William M. Tomlinson

PC ORIGINAL PKG

LA VALLE SABBIA

FARMING

September 10, 2025

IV Planning Commission Board,

RE: September 24, 2025 – Meeting to discuss Avantus Solor Project – i.e. Big Rock 2 South (Cup #2) – 410 Acres

Dear Planning Commission Board Members,

As the owner of La Valle Sabbia, Inc., I would like to express our support for the broader principle advocated by the Imperial Irrigation District (IID): that productive farmland should be preserved and not converted to solar development.

However, it is essential to distinguish between genuinely productive farmland and land that is no longer viable for agriculture. The parcels currently under consideration for solar development with Avantus—WSM 13/13A—fall into the latter category. These lands are characterized by sandy, saline soils that demand significantly more water and fertilizer than typical farmland to achieve marginal productivity. Despite the use of an efficient pump-back irrigation system, water consumption remains approximately 50% higher than that of productive farmland.

La Valle Sabbia, Inc. fully supports Imperial County's vision of economic diversification, specially through the responsible advancement of renewable energy. When properly sited, solar development offers a strategic path toward conserving resources, improving environmental sustainability, and enhancing regional economic resilience.

Location is a key factor. The WSM 13/13A parcels are located just 1.2 miles from an existing substation and are already surrounded by previously approved solar developments supported by both Imperial County and IID. This proximity to energy infrastructure renders the land impractical for traditional farming and ideal for solar generation.

Moreover, the soil conditions on these parcels require significantly more water than average farmland, further supporting a transition away from inefficient agricultural use. Repurposing this land for solar energy production would allow for conservation of water and focus agricultural efforts on more productive areas—an approach consistent with sound land use and sustainability planning.

In 2011, the Imperial Irrigation District (IID) sold 1,942 acres of highly productive, low water-use farmland—known as "Wisteria Ranch"—for solar energy development. At the time, IID characterized the decision as a sound and prudent exercise of business judgment. However, this move had measurable and lasting negative impacts on the local farming community, reducing viable agricultural land and weakening the region's agricultural economy. More recently, IID has

2015 Silsbee Road, El Centro, California, 92243 USA
Tel. (760) 482-9400 • Fax (760) 482-9500
PC ORIGINAL PKG
www.abatti.com

continued this trend by supporting and expanding large-scale solar projects in El Centro, again removing fertile farmland from production and raising concerns about long-term food security, water rights, and community resilience.

These decisions set clear precedents for IID's willingness to prioritize renewable energy over agricultural preservation, even when the land in question was prime farmland. In stark contrast, IID is now opposing the proposed WSM 13/13A project—despite the fact that this land is far less suitable for farming.

This contradiction raises serious questions about the consistency and motivations behind IID's current position. If IID was willing to displace viable farmland for solar development in the past, why oppose a project on marginal land now?

Furthermore, IID previously filed a lawsuit against CAISO and ultimately reached a settlement, seemingly signaling its intent to work collaboratively within the state's energy framework. Why, then, does IID now resist completing the process it began? Why retreat from a direction it once pursued so decisively?

This shift not only undermines IID's credibility, but also raises broader concerns about policy consistency, regional economic development, and the future of clean energy in the Imperial Valley.

This discrepancy raises important questions. If IID's current stance is rooted in farmland preservation, then its past actions appear contradictory. Alternatively, if the opposition is financially motivated—such as concerns over the inability to secure wheeling charges for power—it is important that this be openly acknowledged in the discussion. Transparency is vital in determining whether this opposition is based on principle or profit.

La Valle Sabbia, Inc. remains committed to responsible land stewardship, environmental accountability, and supporting Imperial County's renewable energy goals. We welcome collaboration, dialogue, and clear communication—but we also believe it is necessary to challenge positions that are inconsistent or not aligned with the broader public interest.

Most recently, in May 2025, the IID Board of Directors approved joining both CAISO-operated electricity markets. IID is expected to begin full participation in 2028. This marks a pivotal step, as it will be the first time all California balancing authorities are integrated into CAISO-operated markets. This integration allows IID—an essential entity managing Colorado River water supply and providing electricity to over 166,000 customers—to engage more deeply and efficiently with the state's power grid and renewable energy future.

This evolving partnership underscores the importance of coordinated infrastructure planning and consistent policy—principles that should also apply to land-use decisions impacting renewable energy development in Imperial County. In closing, it begs the question: why would IID object to completion of a substation connection that was planned more than a decade ago, unless there is an alternative plan that has not yet been disclosed?

PC ORIGINAL PKG

In conclusion, we respectfully request that the Planning Commission approve Avantus' proposal to move forward with solar development on the WSM 13/13A and Fernside 12A parcels of the Big Rock 2 South Cluster (CUP#2) – 410 Acres. The precedent for solar development on even higher-quality land has already been set by IID. Given the poor agricultural suitability of this land, the surrounding solar infrastructure, and the need for water conservation and clean energy, this project represents a smart, sustainable, and forward-looking land use decision.

Thank you for your time and consideration.

Should you have any questions, please contact Rick Bush at 760-455-7778 or myself at 760-482-9400 extension 413.

Sincerely,

Alex Abatti, Jr.
La Valle Sabbia, Inc.
President

Attachments Enclosed:

1. Key Points
2. MAP of Avantus Big Rock Solar 2 – South Cluster (Cup #2) 410 Acres
3. 07.14.2014 - IID Letter Requesting to become a Business Associate in CAISO
4. 10.10.2015 - IID Files Second Lawsuit Against CAISO
5. 08.02.2016 - Federal Judge Rules IID Case Against CAISO Can Move Forward
6. 12.05.2017- IID Rebuts Inaccurate Desert Sun Reporting
7. 03.09.2018 – IID, CAISO Settlement Promotes Local Renewable Energy Development
8. 10.03.2020 – IID Ends Litigation with CAISO

PC ORIGINAL PKG

LA VALLE SABBIA
FARMING

EXHIBIT 1

Avantus Solor Project
Big Rock 2 South (Cup#2) – Total Acres -410 Acres
Westside Main 13 // 13A (APN 051-330-003 (240 AC), 004 (58 AC) and 007 (40 Ac)
Fernside Main 12A (APN 051-350-006 (32 AC) 008 (40 AC)

KEY POINTS

- La Valle Sabbia, Inc. supports Imperial Irrigation District on a broader principle that productive farmland should be preserved and not converted to solar development.

- As a community we must distinguish between genuinely productive farmland & land no longer viable for Agriculture.

- **Westside Main 13 & 13A *(338 Acres)*** along with Fernside 12A fall into the category "no longer viable for agriculture."

- Westside Main 13 // 13A is composed of sandy, saline soil, demanding 50% more water and fertilizer than typical productive farmland to achieve marginal productivity. Achieving even that marginal productivity despite efficient pump-back irrigation system water consumption remains approximately 50% higher than that of productive farmland.

- **Fernside Main 12A *(72 Acres)*** has been out of agricultural production for the past 15 years.

- Westside Main 13 // 13A is 1.2 miles from an existing substation. The surrounding ground has already been previously approved for solar development and supported by both Imperial County and Imperial Irrigation District.

- Repurposing these parcels of land for solar energy production would allow for conservation of water and focus agricultural efforts on more productive areas – an approach consistent with sound land use and sustainability planning.

2015 Silsbee Road, El Centro, California, 92243 USA
Tel. (760) 482-9400 • Fax (760) 482-9500
PC ORIGINAL PKG
www.abatti.com

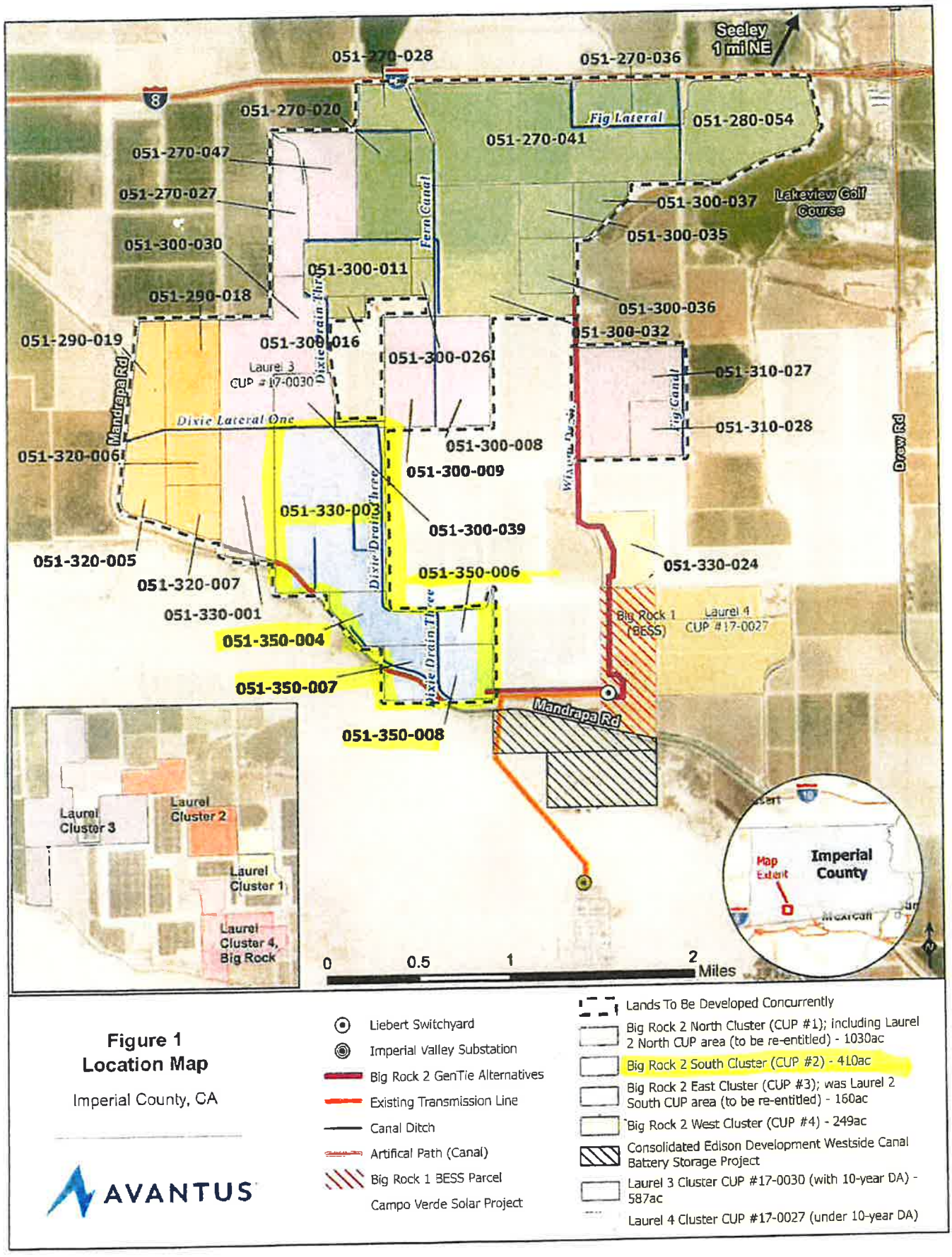


Figure 1
Location Map

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Canal Ditch
- Artifical Path (Canal)
- Big Rock 1 BESS Parcel
- Campo Verde Solar Project
- Lands To Be Developed Concurrently
- Big Rock 2 North Cluster (CUP #1); including Laurel 2 North CUP area (to be re-entitled) - 1030ac
- Big Rock 2 South Cluster (CUP #2) - 410ac
- Big Rock 2 East Cluster (CUP #3); was Laurel 2 South CUP area (to be re-entitled) - 160ac
- Big Rock 2 West Cluster (CUP #4) - 249ac
- Consolidated Edison Development Westside Canal Battery Storage Project
- Laurel 3 Cluster CUP #17-0030 (with 10-year DA) - 587ac
- Laurel 4 Cluster CUP #17-0027 (under 10-year DA)

PC ORIGINAL PKG

EXHIBIT 3

IID

www.iid.com

A century of service.

Via E-Mail

RECEIVED
SEP 11 20
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

July 14, 2014

Ms. Daune Kirrene
Infrastructure Contracts and Management
California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630

Subject: **Application of the Imperial Irrigation District to Become a Participating Transmission Owner and Draft Transmission Owner Tariff**

Dear Ms. Kirrene,

Pursuant to the requirements set forth in Section 4.3 of the California Independent System Operator Corporation ("CAISO") Tariff and Section 2.2 of the Transmission Control Agreement, the Imperial Irrigation District ("IID") respectfully submits its application to become a Participating Transmission Owner with respect to certain Regional Transmission Facilities ("Application"), described further in the attached Application. IID's draft Transmission Owner Tariff is also included in this submission. It is IID's intent to become a Participating Transmission Owner effective May 15, 2015.

If there are any questions relating to this Application, please contact Ms. Jamie Asbury of IID at (760) 482-3379.

Sincerely,

Carl D. Stills
Energy Manager
IMPERIAL IRRIGATION DISTICT

Cc: John Anders (CAISO)
Roni Reese (CAISO)
Judith Sanders (CAISO)
Meghna Khatri (CAISO)
Kristine Bucholz (Pacific Gas & Electric)
Lanette Kozlowski (Pacific Gas & Electric)

PC ORIGINAL PKG

S. Ali Yari (San Diego Gas & Electric)
William Speer (San Diego Gas & Electric)
Kevin M. Payne (Southern California Edison Company)
Stephen E. Pickett (Southern California Edison Company)
Donal O'Callaghan (City of Vernon)
Abraham Alemu (City of Vernon)
Dukku Lee (City of Anaheim)
Linda Andal (City of Anaheim)
George F. Morrow (City of Azusa)
Yarek Lehr (City of Azusa)
Fred Mason (City of Banning)
Jim Steffens (City of Banning)
David H. Wright (City of Riverside)
Reiko Kerr (City of Riverside)
Christopher D. Jones (DATC Path 15, LLC)
Christopher Zibart (DATC Path 15, LLC)
Sonja A. Anderson (Western Area Power Administration, Sierra Nevada Region)
Jeanne E. Haas (Western Area Power Authority, Sierra Nevada Region)
Phyllis E. Currie (City of Pasadena)
Steven K. Endo (City of Pasadena)
James Alligan (Trans Bay Cable, LLC)
Lenneal Gardner (Trans Bay Cable, LLC)
Ali Amirali (GM Startrans IO, LLC)
Christopher Popp (GM Startrans IO, LLC)
Peter F. Smith (Citizens Sunrise Transmission, LLC)
Donald R. Allen (Citizens Sunrise Transmission, LLC)
Paul M. Breakman (Citizens Sunrise Transmission, LLC)
David X. Kolk (City of Colton)
Bonnie S. Blair (City of Colton)
Thomas H. Husted (Valley electric Association, Inc.)
Rick Eckert (Valley Electric Association, Inc.)

PC ORIGINAL PKG

IMPERIAL IRRIGATION DISTRICT

APPLICATION FOR

PARTICIPATING TRANSMISSION OWNER STATUS

JULY 14, 2014

PC ORIGINAL PKG

TABLE OF CONTENTS

1. Description of IID's Transmission Lines and Facilities 3

2. Description of IID's Transmission Entitlements 4

3. Encumbrances 4

4. Transmission Lines and Facilities to be placed under CAISO Operational Control 4

5. Local Reliability Criteria 4

6. Maintenance Practices 5

7. Temporary Waivers 5

8. Proposed Transmission Owner (TO) Tariff 5

9. IID Transmission Revenue Requirement 5

10. Address and Contact Names 5

11. Settlement Account 5

12. IID's Monthly MWh Demands 5

13. Instructions for Encumbrances and Entitlements 6

14. List of Supporting Agreements and Exhibits 6

Appendix A - Entitlements 7

Appendix B - Encumbrances 8

Appendix C - IID Draft TO Tariff 9

Attachment 1 - Approved Project Sponsor Agreement

Exhibit 1 - Imperial Valley Element Diagram

Exhibit 2 - Imperial Valley Element Cutover

Exhibit 3 - General Location Map

PC ORIGINAL PKG

Application of the Imperial Irrigation District to the California Independent System Operator Corporation to Become an Approved Project Sponsor Participating Transmission Owner

July 14, 2014

In accordance with Section 4.3.1.1 of the California Independent System Operator Corporation (CAISO) Tariff and Section 2.2.1 of the Transmission Control Agreement (TCA), the Imperial Irrigation District (IID) respectfully submits its application to become a Participating Transmission Owner (Application) with respect to certain 230 kilovolt (kV) facilities described more particularly herein. While these specified facilities will be turned over to the Operational Control of the CAISO and will be part of the CAISO Balancing Authority Area, IID will remain the Balancing Authority for all other IID facilities and will be solely responsible for the service and planning for IID customers.

In December of 2012, the CAISO initiated an accelerated competitive solicitation process conducted for a policy-driven 230 kV transmission line (S2S Line) and collector station (Liebert Switching Station) in the Imperial Valley area, referred to as the "Imperial Valley Policy Element" (Imperial Valley Element), to which IID responded.[1] The CAISO determined the Imperial Valley Element was needed to support renewable generation in the Imperial Valley area to help meet California's requirement that 33% of utility resource portfolios come from renewable generation by 2020.[2] In July of 2013, IID was selected as the Approved Project Sponsor to finance, own, construct, operate and maintain the Imperial Valley Element.[3] As part of this selection process, IID agreed to a binding cost cap for the Imperial Valley Element of $14,283,122.[4]

After extensive discussions and negotiations with the CAISO, IID and the CAISO entered into an Approved Project Sponsor Agreement (APSA), dated March 10, 2014, which establishes the relationship between IID and CAISO until the Imperial Valley Element is constructed and placed under the Operational Control of the CAISO. A copy of the APSA is provided as Attachment 1 to this Application. On May 23 2014, the CAISO filed the APSA with the Federal Energy Regulatory Commission (FERC),[5] and it is currently pending their approval.

IID is an irrigation district duly organized and existing under the California Water Code, with the power to, among other things, provide irrigation and electric service within its geographic boundaries that cover Imperial Valley and a part of Coachella Valley.

---

[1] http://www.caiso.com/Documents/2012_2013TransmissionPlanningProcessCompetitiveSolicitation-Open.htm

[2] *See* "Proposed Policy-Driven Elements in Imperial Valley Area with Capital Costs of Less Than $50 Million," November 20, 2012, at 3, http://www.caiso.com/Documents/ImperialValleyAreaProposedPolicyDrivenElementsNov20_2012.pdf (Note: other conventions have been used to identify this project, including the "IV Policy Element." In discussions with the CAISO, it was decided to refer to the project as the "Imperial Valley Element," since this was the most recent reference used by the CAISO in its filing of the Approved Project Sponsor Agreement, discussed *infra*.

[3] *See* "Imperial Valley Policy Element Project Sponsor Selection Report," http://www.caiso.com/Documents/ImperialValleyPolicyElement-ProjectSponsorSelectionReport_Jul11_2013.pdf

[4] *Id.* at 19. *See also infra*, Section 9.

[5] *California Independent System Operator Corporation Filing of CAISO Service Agreement No. 3008*, Docket No. ER14-2033-000, http://www.caiso.com/Documents/May23_2014_APSA_ImperialIrrigationDistrict_ER14-2033.pdf.

PC ORIGINAL PKG

IID owns, operates and maintains electric generation, over 1,670 miles of transmission, and 4,348 miles of overhead and underground distribution facilities. IID provides electric power to more than 145,000 customers in the Imperial Valley and parts of Riverside and San Diego counties and controls more than 1,100 megawatts (MW) of energy derived from a diverse resource portfolio that includes its own generation and long- and short-term power purchases.

IID operates its own balancing authority area within the Western Electricity Coordination Council (WECC) and schedules resources through its own control desk. IID controls its own resources, serves and balances its native load for native customers within its metered boundaries.

IID's transmission system is interconnected with the Western Area Power Administration (WAPA) 161 kV system near Blythe, California, and Southern California Edison (SCE) at the Mirage 230 kV substation at the northwest corner of the IID service area. IID's other major interconnections are with the transmission systems of WAPA and Arizona Public Service Corporation in the vicinity of IID's Pilot Knob Substation. IID also has a 230 kV interconnection with San Diego Gas and Electric Company (SDG&E) at the Imperial Valley Substation (IV Substation), and low-capacity, normal-open lines to SDG&E and to SCE at the western and northern edge of the IID's service area.

IID is developing a new point of interconnection with CAISO via the bus tie that will connect IID-owned and operated Fern Switching Station and IID-owned/CAISO-operated Liebert Switching Station, located approximately one mile north of Imperial Valley Substation. The Imperial Valley Element, which comprises the Liebert Switching Station (Liebert) and the 230 kV S2S transmission line that connects Liebert to the IV Substation will become network facilities that will be turned over to CAISO Operational Control once IID's existing S-Line is looped in to Fern Switching Station, as depicted in Exhibit 1.

1. Description of IID's Transmission Lines and Facilities

IID is in the process of developing and constructing the Imperial Valley Element, which consists of a 230 kV collector station, known as the Liebert Switching Station, and the 230 kV S2S Line, a second circuit on the existing 1.4 mile 230kV Campo Verde to Imperial Valley (CVIV) Line.[6] Upon completion and energization, expected in May of 2015, these facilities will be transferred to CAISO Operational Control in accordance with the terms of the APSA,[7] the CAISO Tariff and the TCA. The CVIV Line, a gen-tie, currently runs from Campo Verde Substation, owned by Southern Company, to the IV Substation, jointly owned by SDG&E and IID. Ownership of the CVIV line and associated rights of way are in the process of being transferred to IID, in accordance with the Campo Verde Gen-Tie agreement. IID will modify the CVIV Line by creating the Campo Verde to Liebert (CVLI) Line, the 230 kV gen-tie line which will connect the Campo Verde facilities to Liebert, and the S2S line, which will connect Liebert and the IV Substation. One fiber optic line will connect Campo Verde to Liebert and another will connect Liebert to the IV Substation.

---

[6] The CVIV Line is defined in the "Generation Tie-Line Construction, Ownership, and Operation Agreement," between Campo Verde Solar, LLC and IID, executed on April 11, 2013 (Gen-Tie Agreement)as the 230 kV gen-tie line from the Project Substation (Campo Verde Substation) to the IV Substation, including the CVIV OPGW.

[7] IID will turn the facilities over to the Operational Control of the CAISO on the Commercial Operation Date, as that term is defined in Article 1 of the APSA.

PC ORIGINAL PKG

IID's 230 kV S-Line (renamed S1N Line) will be routed into IID's adjacent Fern Switching Station (Fern). Upon exiting Fern, IID's S-Line will occupy the western circuit on the former CVIV Line (renamed S1S). IID will retain operational control of the S1N Line, Fern, and the S1S Line. Liebert and the S2S Line will become network facilities via the bus tie between Fern and Liebert. The CVLI Line will remain a Gen-Tie between Campo Verde Substation and Liebert. The conversion and cutover described above is illustrated in Exhibit 2 to this Application.

Liebert was to be initially built as a two bay double-bus, double-breaker switching station configuration and prepared for a final twelve bay breaker-and-a-half bus configuration upon final build-out (future). However, the addition of a fifth breaker to support the transfer of the existing interconnection of the existing Campo Verde solar facility from the IV Substation to Liebert changes the initial design to a two bay breaker-and-a-half minimum configuration. Liebert will become a network facility via the bus tie with IID's adjacent Fern Switching Station, since IID's S-Line will be interconnected to Fern. Ownership of the property on which Liebert will be built is in the process of being transferred to IID, in accordance with the terms of the Gen-Tie agreement with Campo Verde.

These facilities are planned to be completed and transferred to CAISO Operational Control by mid-2015.[8] A general map of these facilities is attached as Exhibit 3 to this Application. For purposes of confidentiality, IID has provided a one-line diagram of these facilities to the CAISO in a separate document.

2. Description of IID's Transmission Entitlements

There are no IID Transmission Entitlements associated the Imperial Valley Element described in Section 1. IID will own all of the Approved Project Facilities being placed under the Operational Control of the CAISO.

3. Encumbrances

The facilities associated with the Imperial Valley Element described in Section 1 are new and not subject to any Encumbrances.

4. Transmission Lines and Facilities to be placed under CAISO Operational Control

IID plans to place the facilities described in Section 1 under the Operational Control of the CAISO.

5. Local Reliability Criteria

There are no Local Reliability Criteria applicable to the Imperial Valley Element facilities being placed under the Operational Control of the CAISO. IID shall comply with all Reliability Standards and reliability criteria established by the North American Electric Reliability Corporation (NERC) and WECC and approved by FERC.

[8] Imperial Valley Element project Milestones are set forth in Appendix B of the APSA.

PC ORIGINAL PKG

6. Maintenance Practices

IID's current maintenance practices conform to all NERC and WECC maintenance practices. All of the facilities placed under the Operational Control of the CAISO will be maintained in accordance with Section 14 of the Transmission Control Agreement.

7. Temporary Waivers

IID is not seeking any Temporary Waivers.

8. Proposed Transmission Owner (TO) Tariff

A draft of IID's TO Tariff is attached as Appendix C. Upon approval of the IID Board, IID will file the final draft of its TO Tariff, including its Transmission Revenue Requirement (TRR), with the Federal Energy Regulatory Commission (FERC) under the FERC's rules and procedures for non-jurisdictional rate filings.

9. IID Transmission Revenue Requirement

IID will file its TRR as part of the non-jurisdictional filing as noted in Section 8 above.

Additionally, as set forth in Appendix E of the IID-CAISO Approved Project Sponsor Agreement, IID has agreed to a binding cost cap of $14,283,122 for the facilities described in Section 1. A copy of the APSA is provided as Attachment 1 to this Application.

10. Address and Contact Names

Jamie Asbury Imperial Irrigation District 333 E. Barioni Blvd. P.O. Box 937 Imperial, CA 92215 (760) 482-3379 jlasbury@iid.com	Kevin Smith Braun Blaising McLaughlin & Smith, P.C 915 L Street, Suite 1270 Sacramento, CA 95814 (916) 326-5849 (phone) smith@braunlegal.com

11. Settlement Account

For purposes of confidentiality, IID will provide information to the CAISO regarding settlement accounts in a separate document.

12. IID's Monthly MWh Demands

IID has no demands associated with the Imperial Valley Element facilities described in Section 1. The purpose of the project is to deliver renewable energy resources to CAISO customers.

PC ORIGINAL PKG

13. Instructions for Encumbrances and Entitlements

For reasons described in Section 2 and Section 3 herein, there are no instructions for Encumbrances and/or Entitlements.

14. List of Supporting Agreements and Exhibits

Attachment 1:	Approved Project Sponsor Agreement between IID and CAISO
Exhibit 1:	Imperial Valley Element Diagram
Exhibit 2:	Imperial Valley Element Cutover
Exhibit 3:	General Location Map

PC ORIGINAL PKG

Appendix A

IMPERIAL IRRIGATION DISTRICT
TRANSMISSION SERVICE ENTITLEMENTS

Point of Receipt-Delivery	Parties	Direction	Contract Title	FERC No.	Contract Termination	Contract Amount
NONE						

PC ORIGINAL PKG

Appendix B

IMPERIAL IRRIGATION DISTRICT
TRANSMISSION SERVICE ENCUMBRANCES

Point of Receipt-Delivery	Parties	Direction	Contract Title	FERC No.	Contract Start Date	Contract Termination	Contract Amount
NONE							

PC ORIGINAL PKG

Appendix C

IID Draft TO Tariff

PC ORIGINAL PKG

IMPERIAL IRRIGATION DISTRICT

TRANSMISSION OWNER TARIFF

JULY 14, 2014

PC ORIGINAL PKG

TABLE OF CONTENTS

1. Preamble 6
2. Effective Date 6
3. TO Tariff Definitions 6
3.1 Affected System 6
3.2 Applicable Reliability Criteria 6
3.3 Approved Project Sponsor 6
3.4 Base Transmission Revenue Requirement 6
3.5 Business Day 7
3.6 CAISO ADR Procedures 7
3.7 CAISO Tariff 7
3.8 Completed Application Date 7
3.9 Completed Interconnection Application 7
3.10 Delivery Network Upgrades 7
3.11 Direct Assignment Facilities 7
3.12 Distribution System 7
3.13 Eligible Customer 7
3.14 Encumbrance 7
3.15 End-Use Customer or End-User 8
3.16 Facility Study Agreement 8
3.17 Facility Study 8
3.18 FERC 8
3.19 Generating Unit 8
3.20 Generation 8
3.21 Good Utility Practice 8
3.22 Imperial Valley Element 8
3.23 Interconnection 8
3.24 Interconnection Agreement 9
3.25 Interconnection Application 9
3.26 Interconnection Handbook 9

PC ORIGINAL PKG

3.27 Load 9
3.28 Local Publicly Owned Electric Utility 9
3.29 Local Regulatory Authority 9
3.30 Local Reliability Criteria 9
3.31 Market Participant 9
3.32 NERC 9
3.33 Non-Load-Serving Participating TO 10
3.34 Participating TO or Participating Transmission Owner 10
3.35 Participation Agreement 10
3.36 Peak Reliability 10
3.37 Project Proponent 10
3.38 Project Sponsor 10
3.39 Regional Transmission Facility 10
3.40 Regional Transmission Revenue Requirement ("RTRR") 10
3.41 Reliability Network Upgrades 11
3.42 System Impact Study 11
3.43 System Impact Study Agreement 11
3.44 TO Tariff 11
3.45 Transmission Control Agreement ("TCA") 11
3.46 Transmission Owner ("TO") 11
3.47 Transmission Revenue Balancing Account Adjustment ("TRBAA") 11
3.48 Transmission Revenue Credit 11
3.49 Transmission Revenue Requirement ("TRR") 12
3.50 Uncontrollable Force 12
3.51 Western Electricity Coordinating Council ("WECC") 12
4. Eligibility 12
5. Access Charges 12
5.1 Transmission Revenue Requirement 12
5.2 Transmission Revenue Balancing Account Adjustment 12
6. Billing and Payment 13
7. Obligation to Interconnect or Construct Transmission Expansions and 13
Facility Upgrades 13

PC ORIGINAL PKG

7.1 Participating TO Obligation to Interconnect 13
7.1.1 Interconnection to Transmission System 13
7.1.2 Costs Associated with Interconnection 14
7.1.3 Interconnection Agreement 14
7.1.4 Due Diligence to Construct 15
7.1.5 Energization 15
7.1.6 Coordination with CAISO on Interconnection Requests 15
7.2 Participating TO Obligation to Construct Transmission Expansions or Facility Upgrades 16
7.2.1 Obligation to Construct 16
7.3 Request for FERC Deference Regarding Need Determination 16
8. Expansion Process 16
8.1 Determination of Facilities 16
8.1.1 Payment of Facility Study's Cost 16
8.1.2 Payment Procedure 17
8.1.3 Facility Study Procedures 17
8.2 Obligation to Build 17
8.2.1 Due Diligence to Construct 17
8.2.2 Delay in Construction or Expansion 18
8.3 Provisions Relating To Transmission Construction On Other IID Facilities Or Systems Of Other Entities and Tax-Exempt Financing 19
8.3.1 Responsibility for Third Party Additions 19
8.3.2 Coordination of Third-Party System Additions 19
8.3.3. Preservation of Tax Exempt Status, Contractual Restrictions and Covenants. 19
8.3.4 Expansion by "Local Furnishing Participating TO's." 19
9. Interconnection Process 20
9.1 Applicability 20
9.2 Applications 20
9.3 Interconnection Application 20
9.3.1 Amendment to Completed Interconnection Application 21
9.4 Review of Completed Interconnection Application 21
9.5 Notice of Need for System Impact Study 22

PC ORIGINAL PKG

9.6 Impact Study Cost Reimbursement and Agreement 23
9.6.1 Cost Reimbursement 23
9.6.2 Multiple Parties 23
9.7 System Impact Study Procedures 23
9.7.1 Procedures Upon Completion of System Impact Study 23
9.8 Notice of Need for Facility Study 24
9.9 Facility Study Procedures 24
9.9.1 Execution of Interconnection Agreement 25
9.10 Partial Interim Service 25
9.11 Expedited Interconnection Procedures 25
10. Uncontrollable Forces and Indemnification 26
10.1 Procedures to Follow if Uncontrollable Force Occurs 26
10.2 Indemnification 26
11. Regulatory Filings 26
11.1 Open Access 27
12. Creditworthiness 27
13. Disputes 27
14. [Reserved] 27
15. Miscellaneous 27
15.1 Notices 27
15.2 Waiver 27
15.3 Confidentiality 27
15.3.1 Maintaining Confidentiality If Not for Public Disclosure 27
15.3.2 Disclosure of Confidential Information 28
15.5 Titles 28
15.6 Severability 28
15.7 Preservation of Obligations 28
15.8 Governing Law 28
15.9 Appendices Incorporated 29
15.10 Conflict With CAISO Tariff 29
APPENDIX I - Transmission Revenue Requirement and TRBAA 30
APPENDIX II - Notices 31

PC ORIGINAL PKG

1. **Preamble.** Imperial Irrigation District ("IID") is an Approved Project Sponsor Participating Transmission Owner ("TO") in the California Independent System Operator ("CAISO") solely with respect to the Regional Transmission Facilities it has placed under the CAISO's Operational Control to be operated as part of the CAISO Controlled Grid. This Transmission Owner Tariff ("TO Tariff") sets forth IID's Transmission Revenue Requirement ("TRR") for such Regional Transmission Facilities and certain terms and conditions relating to transmission expansion of and interconnections to those Regional Transmission Facilities.

Service over, expansion of, and interconnections to all other IID transmission facilities and all IID distribution facilities are not governed by either this TO Tariff or the CAISO Tariff. Rather, service over, expansion of, and interconnections to all other IID transmission facilities and all IID distribution facilities are governed by either IID's Open Access Transmission Tariff or IID's retail tariffs for its retail customers.

For the purpose of this TO Tariff, IID is a Non-Load Serving Participating TO because it serves no End-Use Customers within the CAISO's Balancing Authority Area.

2. **Effective Date.** This TO Tariff shall become effective when:

2.1 IID becomes a Participating TO; and

2.2 FERC has made this TO Tariff effective with no material modification or condition unacceptable to the Participating TO.

Once effective, this TO Tariff shall continue to be effective for as long as IID is a party to the Transmission Control Agreement ("TCA").

3. **TO Tariff Definitions.** Capitalized terms used in this TO Tariff shall have the meanings set out below unless otherwise stated. Capitalized terms used in this TO Tariff and not defined below shall have the meanings set out in the CAISO Tariff, as it may be amended from time to time.

3.1 **Affected System**. An electric system, other than the CAISO Controlled Grid, that may be affected by a proposed generator or transmission interconnection, including IID's transmission and distribution facilities that have not been placed under the CAISO's Operational Control.

3.2 **Applicable Reliability Criteria**. The Reliability Standards and reliability criteria established by NERC, WECC or Peak Reliability, and Local Reliability Criteria, as amended from time to time.

3.3 **Approved Project Sponsor.** The person or entity designated under the CAISO Tariff to construct, finance and own transmission additions or upgrades.

3.4 **Base Transmission Revenue Requirement.** The Transmission Revenue Requirement which does not reflect amounts for the Transmission Revenue

PC ORIGINAL PKG

Balancing Account Adjustment.

3.5 Business Day. Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

3.6 CAISO ADR Procedures. The procedures for resolution of disputes or differences set out in Section 13 of the CAISO Tariff.

3.7 CAISO Tariff. The California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it has been and may be modified from time to time.

3.8 Completed Application Date. The date on which an eligible applicant submits an Interconnection Application that satisfies the requirements of a Completed Interconnection Application.

3.9 Completed Interconnection Application. An application that satisfies all of the information and other requirements of Section 9.3 of this TO Tariff, and, if applicable, the information requirements as specified by the CAISO and posted on the CAISO Home Page.

3.10 Delivery Network Upgrades. Transmission Facilities at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in Interconnection studies to relieve Transmission Constraints on the CAISO Controlled Grid.

3.11 Direct Assignment Facilities. Facilities or portions of facilities that are owned by the Participating TO necessary to physically and electrically interconnect a particular party requesting Interconnection under this TO Tariff to the CAISO Controlled Grid at the point of interconnection. Direct Assignment Facilities shall be specified in the Interconnection Agreement that governs Interconnection service to such party.

3.12 Distribution System. The distribution assets of an Investor Owned Utility or Local Publicly Owned Electric Utility.

3.13 Eligible Customer. (1) Any utility (including Participating TOs, Market Participants, Project Sponsors, and any power marketer), Federal power marketing agency, or any person generating Energy for sale or resale; Energy sold or produced by such entity may be Energy produced in the United States, Canada or Mexico; however, such entity is not eligible for transmission service that would be prohibited by Section 212(h)(2) of the Federal Power Act; and (2) any retail customer taking unbundled transmission service pursuant to a state retail access program or pursuant to a voluntary offer of unbundled retail transmission service by the Participating TO.

3.14 Encumbrance. A legal restriction or covenant binding on the Participating TO that affects the operation of any transmission lines or associated facilities and which the CAISO needs to take into account in exercising Operational Control over such transmission lines or associated facilities if the Participating TO is not to risk incurring significant liability. Encumbrances shall include Existing Contracts and may include: (1) other local restrictions or covenants meeting the definition of Encumbrance and arising under other arrangements entered into before the CAISO

PC ORIGINAL PKG

Operations Date, if any; and (2) legal restrictions or covenants meeting the definition of Encumbrance and arising under a contract or other arrangement entered into after the CAISO Operations Date.

3.15 **End-Use Customer or End-User.** A consumer of electric power who consumes such power to satisfy a Load directly connected to the CAISO Controlled Grid or to a Distribution System and who does not resell the power.

3.16 **Facility Study Agreement.** An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participant, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study.

3.17 **Facility Study.** An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the cost and scheduled completion date for such modifications that will be required to provide needed services. For purposes of this TO Tariff, the Facility Study will determine any required modifications to the CAISO Controlled Grid as well as IID's Affected System, including the cost and scheduled completion date for such modifications that will be required to provide needed services.

3.18 **FERC.** The Federal Energy Regulatory Commission or its successor.

3.19 **Generating Unit.** An individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either case, is: (a) located within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a generating unit to the CAISO Balancing Authority Area); (b) connected to the CAISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities or via a Pseudo-Tie; and (c) capable of producing and delivering net Energy (Energy in excess of a generating station's internal power requirements).

3.20 **Generation.** Energy delivered from a Generating Unit.

3.21 **Good Utility Practice.** Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act section 215(a)(4).

3.22 **Imperial Valley Element.** The Regional Transmission Facilities IID placed under the CAISO's Operational Control pursuant to the terms of the TCA, including a transmission line, collector substation, and related equipment.

3.23 **Interconnection.** Transmission facilities, other than additions or replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally

PC ORIGINAL PKG

separate from the CAISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the CAISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the CAISO's Operational Control of the Participating TO's portion of the CAISO Controlled Grid.

3.24 Interconnection Agreement. A contract between a party requesting Interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect.

3.25 Interconnection Application. An application that requests Interconnection to the CAISO Controlled Grid.

3.26 Interconnection Handbook. The handbook developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale Generating Units and Loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. In the event of a conflict between the terms of this TO Tariff and the terms of the Interconnection Handbook, the terms of the TO Tariff shall apply.

3.27 Load. An end-use device of an End-Use Customer that consumes Power. Load should not be confused with Demand, which is the measure of Power that a Load receives or requires.

3.28 Local Publicly Owned Electric Utility. A municipality or municipal corporation operating as a public utility furnishing electric services, a municipal utility district furnishing electric services, a public utility district furnishing electric services, an irrigation district furnishing electric services, a state agency or subdivision furnishing electric services, a rural cooperative furnishing electric services, or a Joint Powers Authority that includes one or more of these agencies and that owns Generation or transmission facilities, or furnishes electric services over its own or its members' electric Distribution System.

3.29 Local Regulatory Authority. The state or local governmental authority or board of directors responsible for the regulation or oversight of a utility. For purposes of this IID TO Tariff, the Local Regulatory Authority is the IID Board of Directors publicly elected by voters.

3.30 Local Reliability Criteria. Reliability criteria unique to the transmission systems of each of the Participating TOs established at the later of: (1) CAISO Operations Date, or (2) the date upon which a new Participating TO places its facilities under the control of the CAISO.

3.31 Market Participant. An entity, including a Scheduling Coordinator, who either: (1) participates in the CAISO Markets through the buying, selling, transmission, or distribution of Energy, capacity, or Ancillary Services into, out of, or through the CAISO Controlled Grid; (2) is a CRR Holder or Candidate CRR Holder, or (3) is a Convergence Bidding Entity.

3.32 NERC. The North American Electric Reliability Corporation or its successor.

PC ORIGINAL PKG

3.33 **Non-Load-Serving Participating TO.** A Participating TO that (1) is not a UDC, MSS Operator or Scheduling Coordinator serving End-Use Customers and (2) does not have Gross Load in accordance with Section 9 of Schedule 3 of Appendix F of the CAISO Tariff.

3.34 **Participating TO or Participating Transmission Owner.** A Party to the Transmission Control Agreement whose application under Section 2.2 of the Transmission Control Agreement has been accepted and who has placed transmission assets and Entitlements under the CAISO's Operational Control in accordance with the Transmission Control Agreement. A Participating TO may be an Original Participating TO or a New Participating TO. For purposes of this TO Tariff, IID is a Participating Transmission Owner solely with respect to the Regional Transmission Facilities placed under the CAISO's Operational Control.

3.35 **Participation Agreement.** An agreement between a Participating TO and a Project Sponsor that specifies the terms and conditions under which the Participating TO will construct a transmission addition or upgrade on behalf of the Project Sponsor.

3.36 **Peak Reliability.** The entity or its successor responsible for reliability coordination for its participants.

3.37 **Project Proponent.** A Market Participant or group of Market Participants that: (1) advocates a transmission addition or upgrade; (2) is unwilling to pay the full cost of the proposed transmission addition and upgrade, and thus is not a Project Sponsor; and (3) initiates proceedings under the CAISO ADR Procedures to determine the need for the proposed transmission addition or upgrade.

3.38 **Project Sponsor.** A Market Participant, group of Market Participants, a Participating TO or a project developer who is not a Market Participant or Participating TO that proposes the construction of a transmission addition or upgrade in accordance with Section 24 of the CAISO Tariff.

3.39 **Regional Transmission Facility**. A transmission facility that is owned by a Participating TO or to which a Participating TO has an Entitlement that is represented by a Converted Right, that is under the CAISO Operational Control, and that is not (1) a Local Transmission Facility or a Location Constrained Resource Interconnection Facility, and supporting facilities, or (2) a Merchant Transmission Facility.

3.40 **Regional Transmission Revenue Requirement ("RTRR")**. The portion of a Participating TO's or an Approved Project Sponsor's Transmission Revenue Requirement associated with and allocable to: 1) the Participating TO's Regional Transmission Facilities and Converted Rights associated with Regional Transmission Facilities, 2) the CAISO's assigned share of Interregional Transmission Project costs, and 3) Location Constrained Resource Interconnection Facilities that are under the CAISO Operational Control or Transmission Facilities not yet in operation, but approved under Section 24 of the CAISO tariff and assigned to the Approved Project Sponsor, that will be Regional Transmission Facilities or, in the case of an Approved Project Sponsor that is not a Participating Transmission Owner, Local Transmission Facilities when placed under the CAISO's Operational Control.

PC ORIGINAL PKG

3.41 Reliability Network Upgrades. The transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or more Generating Facility(ies) safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of one or more Generating Facility(ies), including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for system operating limits, occurring under any system condition, which system operating limits cannot be adequately mitigated through Congestion Management, Operating Procedures, or Special Protection Systems based on the characteristics of the Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Generating Facility's or Transmission Facility's interconnection may have on a path's WECC rating.

3.42 System Impact Study. An engineering study conducted to determine whether a request for Interconnection to the CAISO Controlled Grid would require new transmission additions, upgrades, or other mitigation measures. For purposes of this TO Tariff, the System Impact Study will determine whether the request for Interconnection to the CAISO Controlled Grid would require new transmission additions, upgrades, or other mitigation measures on the CAISO Controlled Grid as well as IID's Affected System.

3.43 System Impact Study Agreement. An agreement between a Participating TO and an entity that has requested Interconnection to the Participating TO's Regional Transmission Facility pursuant to which the entity requesting Interconnection agrees to reimburse the Participating TO for the cost of performing or reviewing a System Impact Study.

3.44 TO Tariff. This Transmission Owner Tariff, as may be amended or superseded.

3.45 Transmission Control Agreement ("TCA"). The agreement between the CAISO and Participating TOs establishing the terms and conditions under which TOs will become Participating TOs and how the CAISO and each Participating TO will discharge its respective duties and responsibilities, as may be modified from time to time.

3.46 Transmission Owner ("TO"). An entity owning transmission facilities or having firm contractual rights to use transmission facilities. For purposes of this TO Tariff, IID is a Transmission Owner of the Regional Transmission Facilities placed under the CAISO's Operational Control.

3.47 Transmission Revenue Balancing Account Adjustment ("TRBAA"). A mechanism established by a Participating TO or Approved Project Sponsor which will ensure that all Transmission Revenue Credits and other credits specified in Sections 6 and 8 of Appendix F, Schedule 3 of the CAISO Tariff, flow through to transmission customers.

3.48 Transmission Revenue Credit. The proceeds a Participating TO received from the CAISO for Wheeling service, plus (a) the revenues received from any LCRIG

PC ORIGINAL PKG

with respect to an LCRIF, unless FERC has approved an alternative mechanism to credit such revenues against the Participating TO's TRR, and (b) the shortfall or surplus resulting from any cost differences between Transmission Losses and Ancillary Service requirements associated with Existing Rights and the CAISO's rules and protocols, minus any Local Access Charge amounts paid for the use of the Local Transmission Facilities of a Non-Load-Serving Participating TO pursuant to Section 26.1 and Appendix F, Schedule 3, Section 13 of the CAISO Tariff.

3.49 **Transmission Revenue Requirement ("TRR").** The total annual authorized revenue requirements associated with transmission facilities and Entitlements turned over to the Operational Control of the CAISO by the Participating TO. The costs of any transmission facility turned over to the Operational Control of the CAISO shall be fully included in the Participating TO's Transmission Revenue Requirement. The Transmission Revenue Requirement includes the costs of transmission facilities and Entitlements and deducts Transmission Revenue Credits and credits for Standby Transmission Revenue and the expected transmission revenue to be actually received by the Participating TO for Existing Rights and Converted Rights.

3.50 **Uncontrollable Force.** Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities or any other cause beyond the reasonable control of the CAISO, IID or other Market Participant which could not be avoided through the exercise of Good Utility Practice.

3.51 **Western Electricity Coordinating Council ("WECC").** The Western Electricity Coordinating Council or its successor.

4. **Eligibility**. Transmission service over IID's Regional Transmission Facilities placed under the CAISO's Operational Control shall be provided only to Eligible Customers as defined in the CAISO Tariff. Any dispute as to whether a customer is eligible for wholesale transmission service shall be resolved through the CAISO ADR Procedures or by FERC and any dispute as to whether an End-Use Customer is eligible for service under this TO Tariff shall be resolved by the Local Regulatory Authority.

5. **Access Charges**. The applicable Access Charges are provided in the CAISO Tariff as may be amended from time to time, including, but not necessarily limited to, the Regional Access Charge and Regional Wheeling Access Charge.

5.1 **Transmission Revenue Requirement.** As set forth in the CAISO Tariff, the Transmission Revenue Requirement for each Participating TO is used to develop the Access Charges in the CAISO Tariff and used by the CAISO to calculate the disbursement of revenues among Participating TOs. IID's Transmission Revenue Requirement is set forth in Appendix I.

5.2 **Transmission Revenue Balancing Account Adjustment.** The Participating TO shall maintain a Transmission Revenue Balancing Account with an annual

PC ORIGINAL PKG

Transmission Revenue Balancing Account Adjustment that will ensure that all Transmission Revenue Credits and adjustments for any over-or under- recovery of its annual Transmission Revenue Requirement, if any, specified in Appendix F, Schedule 3 of the CAISO Tariff, flow through to transmission customers. The TRBAA used to calculate the Regional Revenue Requirement shall include other adjustments specified in Appendix F, Schedule 3 of the CAISO Tariff. The TRBAA shall be equal to:

TRBAA = Cr + Cf +I

Where:

Cr = The balance representing the prior period difference between the projected Transmission Revenue Credits and the actual credits.

Cf = The forecast of Transmission Revenue Credits, if any, for the following calendar year;

I = The interest balance for the TRBA, which shall be calculated using the interest rate pursuant to Section 35.19a of FERC's regulations under the Federal Power Act (18 CFR Section 35.19a). Interest shall be calculated based on the average TRBA principal balance each month, compounded quarterly.

6. Billing and Payment.

6.1 The CAISO, in accordance with the CAISO Tariff, shall pay to IID, among other things, all applicable Access Charge revenues and Wheeling revenues.

6.2 Users of the Regional Transmission Facilities placed by IID under the CAISO's Operational Control shall pay to the CAISO all applicable charges in accordance with the CAISO Tariff.

7. Obligation to Interconnect or Construct Transmission Expansions and Facility Upgrades.

7.1 Participating TO Obligation to Interconnect. Subject to the conditions below, the Participating TO shall, at the request of a third party, interconnect its transmission facilities which have been placed under the CAISO's Operational Control to the wholesale Generating Unit or Load of such third party, or modify an existing wholesale Interconnection to such transmission facilities. Interconnections under this TO Tariff shall be available to entities eligible to request Interconnection consistent with the provisions of Section 210(a) of the Federal Power Act. The procedures for Interconnection of wholesale Generation to the CAISO Controlled Grid shall be governed by the CAISO Tariff.

7.1.1 Interconnection to Transmission System. Interconnection must be consistent with Good Utility Practice, in conformance with all Applicable Reliability

PC ORIGINAL PKG

Criteria, all applicable statutes, regulations, and the Interconnection Handbook. The Participating TO will not accommodate the Interconnection if doing so would impair systems reliability, or would otherwise impair the ability of the Participating TO to honor its Encumbrances existing as of the time an entity submits its Interconnection Application. The Participating TO shall identify any such adverse effect on its Encumbrances in the System Impact Study performed pursuant to Section 9.7 of this TO Tariff. To the extent the Participating TO determines that the Interconnection will have an adverse effect on Encumbrances, the party requesting Interconnection shall mitigate such adverse effect.

7.1.2 **Costs Associated with Interconnection.** Each party requesting Interconnection shall pay the costs of planning, installing, owning, operating, and maintaining any Direct Assignment Facilities, any Reliability Network Upgrades and, if necessary, any Delivery Network Upgrades required to provide the requested Interconnection to the CAISO Controlled Grid as well as costs of any upgrades required to IID's Affected System. In addition, such party shall implement all existing operating procedures necessary to safely and reliability interconnect such party's Generation or wholesale Load to the facilities of the Participating TO and to ensure the CAISO Controlled Grid's conformance with the CAISO Grid Planning Criteria, and shall bear all costs of implementing such operating procedures. Any additional costs associated with accommodating the Interconnection shall be allocated in accordance with the cost responsibility methodology set forth in the CAISO Tariff for transmission expansions or upgrades.

7.1.3 **Interconnection Agreement.** Pursuant to Section 9.4, 9.7.1, or 9.9.1 of this TO Tariff, a party requesting an Interconnection shall request in writing that the Participating TO tender to such party an Interconnection Agreement that will be filed with FERC, or the Local Regulatory Authority, in the case of a Local Publicly Owned Electric Utility. The Interconnection Agreement will include, without limitation, cost responsibilities and payment provisions for any engineering, equipment, and construction, ownership, operation and maintenance costs for any Direct Assignment Facilities, any Reliability Network Upgrades, any Delivery Network Upgrades, if applicable, and for any other mitigation measures. The Interconnection Agreement also will include, without limitation, cost responsibilities and payment provisions for any engineering, equipment, and construction, ownership, operation and maintenance costs for any upgrades to IID's Affected System. For an Interconnection request to remain a Completed Interconnection Application, the party requesting the Interconnection shall execute the Interconnection Agreement and return it to the Participating TO within thirty (30) Business Days of receipt. Alternatively, if an Eligible Customer requesting the Interconnection requests the Participating TO to file an unexecuted Interconnection Agreement and commits to abide by the terms, conditions, and cost assignments determined to be just and reasonable under the CAISO ADR Procedures, including any determination by FERC or on appeal of a FERC determination in accordance with that process, the Participating TO shall

PC ORIGINAL PKG

promptly file an unexecuted Interconnection Agreement. Provided, however, that if the CAISO ADR Procedures concerns whether the requesting entity is an Eligible Customer, the Participating TO shall not be obligated to file an unexecuted Interconnection Agreement or commence construction of the Interconnection facilities or incur other costs under the Interconnection Agreement until a final order determining the just and reasonable rates, terms, and conditions for such Interconnection Agreement has been issued by the applicable court or regulatory authority. The Interconnection Agreement will set forth a payment schedule that enables the Participating TO to recover its costs. If the applicant elects not to execute the Interconnection Agreement and does not request the Participating TO to file an unexecuted Interconnection Agreement, its Completed Interconnection Agreement shall be deemed withdrawn, and the applicant shall reimburse to the Participating TO all costs reasonably incurred in processing the application not covered by any System Impact Study Agreement or Facility Study Agreement. To maintain its queue position, the applicant must timely comply with the interconnection requirements of the CAISO Tariff, if applicable, and Sections 7 and 9 of this TO Tariff. If the applicant fails to timely comply with such Interconnection requirements, such applicant shall pay the reasonable costs of revising the System Impact Studies for other applicants that have established a new queue position due to the applicant either withdrawing its Interconnection Application or because its queue position has been modified pursuant to the queuing provisions in Section 25 of the CAISO Tariff.

7.1.4 Due Diligence to Construct. Subject to Section 8.2 of this TO Tariff, the participating TO shall use due diligence to construct, within a reasonable time, any Direct Assignment Facilities and any Reliability Network Upgrades to its Regional Transmission Facilities that it is obligated to construct to pursuant to this TO Tariff and, as applicable, Section 24 of the CAISO Tariff. The Participating TO's obligation to build will be subject to: (1) its ability, after making a good faith effort, to obtain any necessary approvals and property rights under applicable federal, state, and local laws; (2) the presence of a cost recovery mechanism with cost responsibility assigned to accordance with the CAISO Tariff or applicable FERC precedent; and (3) a signed Interconnection Agreement or, by mutual agreement of the parties, FERC acceptance for filing of an unexecuted Interconnection Agreement.

7.1.5 Energization. The Participating TO shall not be obligated to energize, nor shall the applicant or wholesale Load be entitled to have its interconnection to the CAISO Controlled Grid energized, unless and until an Interconnection Agreement has been executed, or filed at FERC pursuant to Section 7.1.3 of this TO Tariff, and becomes effective and such applicant or wholesale Load has demonstrated to the CAISO's reasonable satisfaction that it has complied with all of the applicable requirements of the CAISO Tariff and the requirements of this TO Tariff and has demonstrated to IID's reasonable satisfaction that impacts on IID's Affected System have been mitigated.

7.1.6 Coordination with CAISO on Interconnection Requests. The Participating

PC ORIGINAL PKG

TO shall coordinate with the CAISO, pursuant to the provisions of the TCA, in developing Interconnection standards and guidelines for processing Interconnection requests under this TO Tariff.

7.2 **Participating TO Obligation to Construct Transmission Expansions or Facility Upgrades.** The Participating TO shall be obligated to: (1) perform System Impact or Facility Studies where the Project Sponsor or the CAISO agrees to pay the study cost and specifies the project objectives to be achieved; and (2) build transmission additions and facility upgrades where the Participating TO is obligated to construct or expand facilities in accordance with and subject to the limitations of this TO Tariff and Section 3 of the CAISO Tariff.

7.2.1 **Obligation to Construct.** A Participating TO shall not be obligated to construct or expand transmission facilities or system upgrades unless and until the conditions stated in Section 8.2.1 of this TO Tariff have been satisfied.

7.3 **Request for FERC Deference Regarding Need Determination**. It is intended that FERC grant substantial deference to the factual determinations of the CAISO, (including the CAISO's ADR Procedures), the IID Board of Directors, WECC, or RTG coordinated planning processes as to the need for or construction of a facility, the need for full cost recovery, and the allocation of costs.

8. **Expansion Process.**

8.1 **Determination of Facilities.** The Participating TO shall perform a Facility Study in accordance with this Section where (1) the Participating TO is obligated to expand its Regional Transmission Facilities in accordance with the CAISO Tariff and this TO Tariff; (2) a Market Participant agrees to pay the costs of the Facility Study and specifies the project objectives to be achieved in terms of increased capacity or reduced congestion; or (3) the Participating TO is required to perform a Facility Study pursuant to the CAISO Tariff.

8.1.1 **Payment of Facility Study's Cost.**

8.1.1.1 **Market Participant to Pay for Facility Study.** Where a Market Participant requests a Facility Study and the need for the transmission addition or upgrade to the Participating TO's Regional Transmission Facilities has not yet been established in accordance with the procedures established herein and the CAISO Tariff, the Market Participant shall pay the cost of the Facility Study.

8.1.1.2 **Project Sponsor or Project Proponent to Pay for Facility Study.** Where the transmission addition or upgrade to the Participating TO's Regional Transmission Facilities has been determined to be needed in accordance with the procedures established herein, the Project Sponsor, Project Proponent, or the CAISO requesting the study shall pay in advance the reasonable cost of the Facility Study. When the

PC ORIGINAL PKG

Participating TO is the Project Sponsor in accordance with the CAISO Tariff, the costs of the Facility Study shall be recovered through the Access Charges and transmission rates.

8.1.1.3 Principal Beneficiaries to Pay for Facility Study. Where the transmission addition or upgrade to the Participating TO's Regional Transmission Facilities has been determined to be needed and the principal beneficiaries have been identified by the CAISO or CAISO ADR Procedures in accordance with the CAISO Tariff, the Project Sponsor and the identified principal beneficiaries shall pay the reasonable cost of the Facility Study, in such proportions as may be agreed, or, failing agreement, as determined in accordance with the CAISO ADR Procedures.

8.1.2 Payment Procedure. Where a Facility Study is being conducted pursuant to this TO Tariff, the Participating TO shall, within thirty (30) days of the receipt of all reasonably required information, tender to the Market Participant, Project Sponsor, Project Proponent, CAISO, or identified principal beneficiaries, as the case may be, a Facility Study Agreement that defines the scope, content, assumptions, and terms of reference for such study, the estimated time required to complete it, and such other provisions as the parties may reasonably require and pursuant to which such Market Participant, Project Sponsor, Project Proponent, the CAISO, or identified principal beneficiaries agree to reimburse the Participating TO the reasonable cost of performing the required Facility Study. If the Market Participant, Project Sponsor, Project Proponent, the CAISO, or identified principal beneficiaries, as the case may be, agree to the terms of the Facility Study Agreement, they shall execute the Facility Study Agreement and return it to the Participating TO within ten Business Days. If such Market Participant, Project Sponsor, Project Proponent, the CAISO, identified principal beneficiary elects not to execute a Facilities Study Agreement, the Participating TO shall have no obligation to complete a Facilities Study.

8.1.3 Facility Study Procedures. Upon receipt of an executed Facility Study Agreement, a copy of which has been provided to the CAISO by the party requesting the Facility Study, the Participating TO will use due diligence to complete the required Facility Study within in accordance with the terms of the Facility Study Agreement.

8.2 Obligation to Build.

8.2.1 Due Diligence to Construct. Subject to Section 8.3.3 of this TO Tariff, the Participating TO shall use due diligence to construct, within a reasonable time, additions or upgrades to its Regional Transmission Facilities that it is obligated to construct pursuant to the CAISO Tariff and this TO Tariff. The Participating TO's obligation to build will be subject to: (1) its ability, after making a good faith effort, to obtain the necessary approvals and property rights under

PC ORIGINAL PKG

applicable federal, state, and local laws; (2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with the CAISO Tariff; and (3) a signed Participation Agreement. The Participating TO will not construct or expand the Regional Transmission Facilities, if doing so would impair system reliability of the CAISO Controlled Grid or IID's Affected System as determined through systems analysis based on the Applicable Reliability Criteria.

8.2.2 Delay in Construction or Expansion. If any event occurs that will materially affect the time for completion of new facilities or the ability to complete them, the Participating TO shall promptly notify: (1) the Project Sponsor with regard to facilities determined to be needed; (2) the Parties to the Participation Agreement with regard to facilities determined to be needed pursuant to the CAISO Tariff where principal beneficiaries were identified; and (3) the CAISO. In such circumstances, the Participating TO shall, within thirty (30) days of notifying such Project Sponsor, Parties to the Participation Agreement, and the CAISO of such delays, convene a technical meeting with such Project Sponsor, Parties to the Participation Agreement, and the CAISO to discuss the circumstances that have arisen and evaluate any options available. Subject to the execution of an appropriate confidentiality agreement, the Participating TO also shall make available to such Project Sponsor, Parties to the Participation Agreement, and the CAISO, as the case may be, studies and work papers related to the cause and extent of the delay and the Participating TO's ability to complete the new facilities, including all information that is in the possession of the Participating TO that is reasonably needed to evaluate the alternatives.

8.2.2.1 Alternatives to the Original Facility Additions. If the review process of Section 8.2.2 of this TO Tariff determines that one or more alternatives exist to the originally planned construction project, the Participating TO shall present such alternatives for consideration to the Project Sponsor, Parties to the Participation Agreement, and the CAISO, as the case may be. If upon review of any alternatives, such Project Sponsor, the CAISO, or Parties to the Participation Agreement wish to evaluate or to proceed with one of the alternative additions or upgrades, such Project Sponsor, the CAISO, or Parties to the Participation Agreement may request that the Participating TO prepare a revised Facility Study pursuant to Sections 8.1.1, 8.1.2, and 8.1.3 of this TO Tariff. In the event the Participating TO concludes that no reasonable alternative exists to the originally planned addition or upgrade and the Project Sponsor or Parties to the Participation Agreement or the CAISO disagree, the dispute shall be resolved pursuant to the CAISO ADR Procedure.

8.2.2.2 Refund Obligation for Unfinished Facility Additions. If the Participating TO and the Project Sponsor, the CAISO, or Parties to the Participation Agreement, as the case may be, mutually agree that no other reasonable alternatives exist, the obligation to construct the requested additions or upgrades shall terminate and any deposit not yet

PC ORIGINAL PKG

applied toward the expended project costs shall be returned with interest pursuant to FERC Regulation 35.19a(a)(2)(iii). However, the Project Sponsor and any identified principal beneficiaries, as the case may be, shall be responsible for all costs prudently incurred by the Participating TO through the time the construction was suspended.

8.3 Provisions Relating To Transmission Construction On Other IID Facilities Or Systems Of Other Entities and Tax-Exempt Financing

8.3.1 Responsibility for Third Party Additions. A Participating TO shall not be responsible for making arrangements for any engineering, permitting, and construction of transmission or distribution facilities on the system(s) of any other entity or for obtaining any regulatory approval for such facilities. The Participating TO will undertake reasonable efforts through the coordinated planning process to assist in making such arrangements, including, without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice subject to the execution of an appropriate confidentiality agreement.

8.3.2 Coordination of Third-Party System Additions. Where transmission additions or upgrades being built pursuant to the CAISO Tariff require additions or upgrades to facilities other than the IID Regional Transmission Facilities, the Participating TO shall coordinate the construction of additions or upgrades to the Regional Transmission Facilities with the construction required to other IID transmission or distribution facilities or other Affected Systems. The Participating TO, after consultation with the CAISO, the Project Sponsor, and Parties to the Participation Agreement, as the case may be, may defer construction if the other new IID transmission or distribution facilities or facilities on another entity's system cannot be completed in a timely manner. The Participating TO shall notify such Project Sponsor, Parties to the Participation Agreement, and the CAISO, in writing, of the basis for any decision to defer construction and the specific problems which must be resolved before it will initiate or resume construction of the additions or upgrades to the Regional Transmission Facilities. Within forty (40) Business Days of receiving written notification by the Participating TO of its intent to defer construction pursuant to this section, such Project Sponsor, Parties to the Participation Agreement, or the CAISO may challenge the decision in accordance with the CAISO ADR Procedure.

8.3.3. Preservation of Tax Exempt Status, Contractual Restrictions and Covenants. Nothing in this TO Tariff shall compel the Participating TO to violate any restrictions applicable to facilities financed with tax-exempt bonds or contractual restrictions and covenants regarding the use of its transmission facilities.

8.3.4 Expansion by "Local Furnishing Participating TO's." Notwithstanding any other provision of this TO Tariff and to the extent that IID is a Local

PC ORIGINAL PKG

Furnishing Participating TO, prior to requesting that such Local Furnishing Participating TO construct upgrades to or expand the Regional Transmission Facilities, or utilize existing facilities, the CAISO or Project Sponsor, if necessary as determined by the Local Furnishing Participating TO, shall tender (or cause to be tendered) an application under Section 211 of the Federal Power Act ("FPA") requesting FERC to issue an order directing the Local Furnishing Participating TO to construct or expand the Regional Transmission Facilities as necessary to provide Interconnection or transmission service as determined pursuant to the CAISO Tariff.

9. Interconnection Process.

9.1 Applicability. All requests for Interconnection directly to the Regional Transmission Facilities from parties eligible to request such Interconnection consistent with Section 210(a) of the FPA shall be processed pursuant to the provisions of this Section 9. All requests for Interconnection of wholesale Generation directly to the CAISO Controlled Grid shall be processed pursuant to the provisions of the CAISO Tariff.

9.2 Applications. A party requesting Interconnection shall submit a written Interconnection Application that provides the information required in Section 9.3 of this TO Tariff to the Participating TO and shall send a copy of the application to the CAISO. The Participating TO shall timestamp the application to establish study priority.

9.3 Interconnection Application. An Interconnection Application shall provide all the information listed in 18 CFR §2.20, including, but not limited to, the following:

(a) the identity, address, telephone number, and facsimile number of the entity requesting interconnection;

(b) the Interconnection point(s) to the CAISO Controlled Grid contemplated by the applicant;

(c) the resultant (or new) maximum amount of Interconnection capacity contemplated by the applicant;

(d) the proposed date for energizing the Interconnection and the term of the Interconnection service;

(e) such other information as the Participating TO reasonably requires to process the application. In addition to the information specified above, the following information may also be provided in order to properly evaluate system conditions:

(f) if the applicant is a wholesale Load, the electrical location of the source of the Power (if known) to be transmitted pursuant to applicant's request for Interconnection. If the source of the power is not known, a system purchase will be

PC ORIGINAL PKG

assumed.

(g) the electrical location of the ultimate Load (if known). If the location of the Load is not known, a system sale will be assumed; and

(g) if an applicant proposes to perform or cause a third party to perform any required System Impact Study or any required Facility Study, it shall so indicate in its Interconnection Application. The results of any study or studies performed by an applicant must be approved by both the CAISO and the Participating TO. Within ten (10) Business Days after receipt of an Interconnection Application, the Participating TO and the CAISO if applicable shall determine whether the application is complete ("Completed Interconnection Application"). Whenever possible, the participating TO will attempt to remedy deficiencies in the Interconnection Application through informal communications with the applicant. If such efforts are unsuccessful, the Participating TO shall return the Interconnection Application to the applicant. The Participating TO will treat the information in the Interconnection Agreement, including the applicant's identity, as confidential at the request of the applicant except to the extent that disclosure of the information is required by this TO Tariff, state law, regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice, or pursuant to RTG or CAISO transmission information sharing agreements. The Participating TO shall treat this information consistent with the standards of conduct contained in Part 37 of FERC's regulations.

9.3.1 Amendment to Completed Interconnection Application. An applicant shall be limited to amending its Completed Interconnection Application only once. Such amendment shall occur on or before ten (10) Business Days following the date the Participating TO tenders any Facility Study Agreement. Specifically, an applicant may submit an amendment to its Completed Interconnection Application to reflect a revised configuration for its new facility. The amended Completed Interconnection Application shall be treated in accordance with Section 25 of the CAISO Tariff and Section 9.5 of this TO Tariff; the applicant's Completed Interconnection Application shall not be deemed withdrawn; and the applicant shall maintain its existing queue position, if (a) the amended Completed Interconnection Application is received by the Participating TO within ten (10) Business Days of the Participating TO's tender of a Facility Study Agreement; and (b) the applicant has not submitted a previous amendment to the Completed Interconnection Application. In the event an applicant amends its Completed Interconnection Application, it will be responsible for any additional study costs that result from that amendment, including costs associated with revisions to studies for other applicants holding later queue positions.

9.4 Review of Completed Interconnection Application. After receiving a Completed Interconnection Application, the Participating TO and the CAISO, if applicable, will determine on a non-discriminatory basis whether a System Impact Study is required. Whenever the Participating TO, and the CAISO, if applicable,

PC ORIGINAL PKG

determines that a System impact Study is not required and that neither Reliability Network Upgrades nor changes in existing operating procedures are required, the Participating TO shall notify the applicant within fifteen (15) Business Days of the Completed Application Date. If the Interconnection can be accommodated without any Direct Assignment Facilities, then within thirty (30) Business Days of such notice from the Participating TO, the applicant shall request the Participating TO to tender to the applicant an Interconnection Agreement within thirty (30) Business Days of such request. The Participating TO shall tender to the applicant an Interconnection Agreement as provided in Section 7.1.3 of this TO Tariff.

9.5 **Notice of Need for System Impact Study.** If the Participating TO, and the CAISO, if applicable, determines that a System Impact Study is necessary to accommodate the requested Interconnection, the Participating TO shall so inform the applicant, as soon as practicable. In such cases, the Participating TO shall within twenty (20) Business Days of receipt of a Completed Interconnection Application, tender a System Impact Study Agreement that defines the scope, content, assumptions, and terms of reference for such study to be completed by the Participating TO, the estimated time required to complete it, and such other provisions as the parties may reasonably require, and pursuant to which the applicant shall agree to reimburse the Participating TO for the reasonable actual costs of performing the required System Impact Study. A description of the Participating TO's transmission assessment practices for completing a System Impact Study is provided in the Participating TO's FERC Form 715. Alternatively, if the applicant will perform the System Impact Study, the Participating TO shall within twenty (20) Business Days of receipt of a Completed Interconnection Application, tender a System Impact Study Agreement that defines the scope, content, assumptions and terms of reference for such study to be reviewed by the Participating TO; the estimated time required to complete it; and such other provisions as the parties may reasonably require, and pursuant to which the applicant shall agree to reimburse the Participating TO for the reasonable actual costs of reviewing the required System Impact Study. For an Interconnection request to remain a Completed Interconnection Application, the applicant shall execute the System Impact Study Agreement and return it to the Participating TO within ten (10) Business Days together with payment for the reasonable estimated cost of performing the System Impact Study or reviewing the applicant's System Impact Study. Alternatively, if the Applicant requests the Participating TO to proceed with the System Impact Study or review thereof and commits to abide by the terms, conditions, and cost assignments ultimately determined under the CAISO ADR Procedures, including any determination by FERC or appeal of a FERC determination in accordance with that process, the Participating TO shall promptly proceed with the System Impact Study provided that such request is accompanied by payment of the reasonable estimated cost of the System Impact Study, and the parties shall submit the disputed terms for resolution under the CAISO's ADR Procedures. If the applicant elects not to execute a System Impact Study Agreement, and does not request that the Participating TO proceed with the System Impact Study or review thereof, its application shall be deemed withdrawn, and the applicant shall reimburse to the Participating TO all costs reasonably incurred in processing the application.

PC ORIGINAL PKG

9.6 Impact Study Cost Reimbursement and Agreement.

9.6.1 Cost Reimbursement. The System Impact Study Agreement shall clearly specify the charge, based on the Participating TO's estimate of the cost and time for completion of the System Impact Study. The charge shall not exceed the reasonable actual cost of the study. In performing the System Impact Study, the Participating TO shall rely, to the extent reasonably practicable, on existing transmission planning studies. The applicant will not be assessed a charge for such existing studies; however, the applicant will be responsible for the reasonable charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact on the applicant's request.

9.6.2 Multiple Parties. If multiple parties request Interconnection at the same location, the participating TO may conduct a single System Impact Study. The costs of that study shall be pro-rated among the parties requesting Interconnection.

9.7 System Impact Study Procedures. Upon receipt of an executed System Impact Study Agreement or initiation of the CAISO ADR Procedures and receipt of payment for estimated study costs, the Participating TO will use due diligence to either (a) complete the required System Impact Study within a sixty (60) calendar day period or (b) complete its review of an applicant's System Impact Study within thirty (30) calendar days of its receipt of the completed study. The System Impact Study will identify whether any Direct Assignment Facilities, any Reliability Network Upgrades, or any Delivery Network Upgrades, are necessary to deliver a new facility's full output over the CAISO Controlled Grid, or any transmission additions or upgrades are necessary to serve a wholesale Load. The System Impact Study will also identify any adverse impact on Encumbrances existing as of the applicant's Completed Application Date. In the event that the Participating TO is unable to complete the required System Impact Study within such time period, it shall so notify the applicant, in writing, and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. Subject to the execution of an appropriate confidentiality agreement, a copy of the completed System Impact Study and related work papers shall be made available to the applicant and the CAISO. The Participating TO shall notify the applicant and the CAISO immediately upon completion of the System Impact Study.

9.7.1 Procedures Upon Completion of System Impact Study. Within fifteen (15) Business Days of completion of the System Impact Study or review and approval of an applicant's System Impact Study, the Participating TO shall notify the applicant whether the Regional Transmission Facilities will be adequate to accommodate a request for Interconnection. If no costs are likely to be incurred for any Direct Assignment Facilities, any Reliability Network Upgrades, or Delivery Network Upgrades implementing any operating procedures, then within thirty (30) Business Days of receipt of written approval

PC ORIGINAL PKG

of the applicant's System Impact Study from the Participating TO and the CAISO, the applicant shall request the Participating TO to tender an Interconnection Agreement within thirty (30) Business Days of such request. The Participating TO shall tender to the applicant an Interconnection Agreement as provided in Section 7.1.3 of this TO Tariff. If costs are likely to be incurred to accommodate a request for Interconnection, the Participating TO shall tender to the applicant a Facility Study Agreement pursuant to Section 9.8 of this TO Tariff.

9.8 **Notice of Need for Facility Study.** If a System Impact Study indicates that additions or upgrades to the CAISO Controlled Grid or IID's Affected System are needed to satisfy an applicant's request for Interconnection, the Participating TO shall, within fifteen (15) Business Days of the date of the System Impact Study or the completion of review and approval of the applicant's System Impact Study by the Participating TO, tender to the applicant a Facility Study Agreement that defines the scope, content, assumptions and terms of reference for such study to be completed by the Participating TO; the estimated time required to complete the required study; and such other provisions as the parties may reasonably require, and pursuant to which the applicant agrees to reimburse the Participating TO for the reasonable actual costs of performing the required Facility Study. Alternatively, if the applicant will perform the Facility Study, the Participating TO shall within fifteen (15) Business Days of the completion date of the System Impact Study or the completion of review and approval of the applicant's System Impact Study, tender a Facility Study Agreement that defines the scope, content, assumptions, and terms of reference for such study to be reviewed by the Participating TO; the estimated time required to complete the required review; and such other provisions as the parties may reasonably require, and pursuant to which the applicant agrees to reimburse the Participating TO for the reasonable actual costs of reviewing the required Facility Study. For an Interconnection Request to remain a Completed Interconnection Application, the applicant shall execute the Facility Studies Agreement and return it to the Participating TO within ten (10) Business Days together with payment for the reasonable estimated costs of performing the Facility Study or reviewing the applicant's Facility Study. Alternatively, if the applicant requests the Participating TO to proceed with the Facility Study or review thereof and commits to abide by the terms, conditions, and cost assignments ultimately determined under the CAISO ADR Procedures, including any determination by FERC or appeal of a FERC determination in accordance with that process, the Participating TO shall promptly proceed with the Facility Study provided that such request is accompanied by payment for the reasonable estimated cost of the Facility Study, and the parties shall submit the disputed terms for resolution under the CAISO ADR Procedures. If the applicant elects not to execute a Facility Study Agreement and does not request that the Participating TO proceed with the Facility Study or review thereof, its application shall be deemed withdrawn and the applicant shall reimburse to the Participating TO all costs reasonably incurred in processing the application not covered by the System Impact Study Agreement.

9.9 **Facility Study Procedures.** Upon receipt of an executed Facility Study Agreement

PC ORIGINAL PKG

or initiation of the CAISO ADR Procedures and receipt of payment for the estimated study costs, the Participating TO will use due diligence to either (a) complete the required Facility Study within a sixty (60) calendar day period or (b) complete its review of an applicant's Facility Study within thirty (30) calendar days of its receipt of the completed Facility Study. In the event that the Participating TO is unable to complete the required Facility Study within such time period, it shall so notify the applicant, in writing, and provide an estimated completion date along with an explanation of, the reasons why additional time is required to complete the required studies. Subject to the execution of an appropriate confidentiality agreement, a copy of the completed Facility Study shall be made available to the applicant.

9.9.1 Execution of Interconnection Agreement. Within thirty (30) Business Days of receipt of the completed Facility Study performed by the Participating TO or receipt of written approval of the applicant's Facility Study from the Participating TO, the applicant shall request the Participating TO to tender an Interconnection Agreement within thirty (30) Business Days of such request. The Participating TO shall tender to the applicant an Interconnection Agreement as provided in Section 7.1.3 of this TO Tariff.

9.10 Partial Interim Service. If the Participating TO determines that there will not be adequate transmission capability to satisfy the full amount requested in a Completed Interconnection Application, the Participating TO nonetheless shall be obligated to offer and provide the portion of the requested Interconnection that can be accommodated to the Regional Transmission Facilities without any additional Direct Assignments Facilities or Reliability Network Upgrades. However, the Participating TO shall not be obligated to provide the incremental amount of requested Interconnection that requires such additional facilities or upgrades until such facilities or upgrades have been placed in service.

9.11 Expedited Interconnection Procedures. In lieu of the procedures set forth above, the applicant shall have the option to expedite the processing of its Completed Interconnection Application. In order to exercise this option, the applicant shall submit in writing a Request for Expedited Interconnection Procedures to the Participating TO within ten (10) Business Days after receiving a copy of the System Impact Study for the proposed Interconnection. Within ten (10) Business Days after receiving a Request for Expedited Procedures, the Participating TO shall tender an Expedited Interconnection Agreement that requires the applicant to compensate the Participating TO for all costs reasonably incurred pursuant to the terms of this TO Tariff for processing the Completed Interconnection Application and providing the requested Interconnection. While the Participating TO agrees to provide the applicant with its best estimate of the costs of any needed Direct Assignment Facilities and, if applicable, Reliability Upgrades and other charges that may be incurred, unless otherwise agreed by the parties, such estimate shall not be binding and the applicant must agree in writing to compensate the Participating TO for all actual interconnection costs reasonably incurred pursuant to the provisions of this TO Tariff. The applicant shall execute and return such Expedited

PC ORIGINAL PKG

Interconnection Agreement within ten (10) Business Days of its receipt or the applicant's request for Interconnection will cease to be a Completed Interconnection Application and will be deemed terminated and withdrawn. In that event, the applicant shall reimburse the Participating TO for all costs reasonably incurred in processing the application not covered by the terms of the System Impact Study Agreement.

10. Uncontrollable Forces and Indemnification.

10.1 Procedures to Follow if Uncontrollable Force Occurs. In the event of the occurrence of an Uncontrollable Force which prevents a Party from performing any of its obligations under this TO Tariff, such Party shall (1) immediately notify the other Parties in writing of the occurrence of such Uncontrollable Force, (2) not be entitled to suspend performance in any greater or longer duration that is required by the Uncontrollable Force, (3) use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform, and resume full performance hereunder, (4) keep the other Parties apprised of such efforts on a continual basis and (5) provide written notice of the resumption of performance hereunder. Notwithstanding any of the foregoing, the settlement of any strike, lockout, or labor dispute constituting an Uncontrollable Force shall be within the sole discretion of the Party to this TO Tariff involved in such strike, lockout, or labor dispute, and the requirement that a Party must use its best efforts to remedy the cause of the Uncontrollable Force and mitigate its effects and resume full performance hereunder shall not apply to strikes, lockouts, or labor disputes. No Party will be considered in default as to any obligation under this TO Tariff if prevented from fulfilling the obligation due to the occurrence of an Uncontrollable Force.

10.2 Indemnification. A Market Participant, Project Sponsor or other Interconnection applicant shall at all times indemnify, defend, and save the Participating TO harmless from any and all damages, losses, claims, (including claims and actions relating to injury or to death of any person or damage to property), demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the Participating TO's performance of its obligations under this TO Tariff on behalf of a Market Participant, Project Sponsor, or other Interconnection applicant, except in cases of negligence or intentional wrongdoing by the Participating TO.

11. Regulatory Filings. Nothing contained herein shall be construed as affecting, in any way, the right of any electric utility (as defined by the Federal Power Act), Participating TO furnishing services in accordance with this TO Tariff, or any tariff and rate schedule which results from or incorporates this TO Tariff, unilaterally to make application to FERC as it deems necessary and appropriate to recover its Transmission Revenue Requirements, or for a change in its rates, including changes in rate methodology, in each case under Section 205 of the FPA and pursuant to the FERC's Rules and Regulations promulgated thereunder. Nothing contained herein shall be construed as affecting in any way the ability of any Eligible Customer receiving services in accordance with this TO Tariff to exercise

PC ORIGINAL PKG

its rights under the Federal Power Act and pursuant to FERC's rules and regulations promulgated thereunder.

11.1 **Open Access.** For purposes of the Stranded Cost Recovery available under Order Nos. 888 and 888-A, this Tariff, combined with the CAISO Tariff and wholesale distribution access tariff, if any, shall be considered an open access tariff under FERC Order Nos. 888 and 888-A.

12. **Creditworthiness**. Creditworthiness rules applicable to End-Users shall be pursuant to the then-current rules of the applicable Local Regulatory Authority.

13. **Disputes.** Except as limited below or as otherwise limited by law, the CAISO ADR Procedures shall apply to all disputes between parties which arise under this TO Tariff or under or in respect of the proposed terms and conditions of a Facility Study Agreement or a System Impact Study Agreement for an Interconnection to the Regional Transmission Facilities. The CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff shall not apply to disputes as to whether rates and charges set forth in this TO Tariff (other than charges for studies) are just and reasonable under the Federal Power Act.

14. **[Reserved]**

15. **Miscellaneous.**

15.1 **Notices.** Any notice, demand, or request in accordance with this TO Tariff, unless otherwise provided in this TO Tariff, shall be in writing and shall be deemed properly served, given, or made: (i) upon delivery if delivered in person, (ii) five days after deposit in the mail if sent by first class United States mail, postage prepaid, (iii) upon receipt of confirmation by return electronic facsimile if sent by facsimile, or (iv) upon Party at the address set forth in Appendix V of this TO Tariff. Any Party may at any time, by notice to the other Parties, change the designation or address of the person specified in Appendix II of this TO Tariff to receive notice on its behalf. Any notice of a routine character in connection with service under this TO Tariff or in connection with operation of facilities shall be given in such a manner as the Parties may determine from time to time, unless otherwise provided in this TO Tariff.

15.2 **Waiver.** Any waiver at any time by any Party of its rights with respect to any default under this TO Tariff, or with respect to any other matter arising in connection with this TO Tariff, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this TO Tariff. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

15.3 **Confidentiality.**

15.3.1 Maintaining Confidentiality If Not for Public Disclosure. The Participating

PC ORIGINAL PKG

TO shall maintain the confidentiality of all of the documents, data, and information provided to it by any other Party that such Party may designate as confidential, provided, however, that the information will not be held confidential by the receiving Party if (1) the designating Party is required to provide such information for public disclosure pursuant to this TO Tariff or applicable regulatory requirements, or (2) the information becomes available to the public on a non-confidential basis (other than from the receiving Party).

15.3.2 **Disclosure of Confidential Information.** Notwithstanding anything in this Section 15.3 to the contrary, if any Party is required by applicable laws or regulations, or in the course of administrative or judicial proceedings, to disclose information that is otherwise required to be maintained in confidence pursuant to this Section 15.3, the Party may disclose such information; provided, however, that as soon as such Party learns of the disclosure requirement and prior to making such disclosure, such Party shall notify the affected Party or Parties of the requirement and the terms thereof if it is permitted to do so by law, regulation or order. The affected Party or Parties may, at their sole discretion and own costs, direct any challenge to or defense against the disclosure requirement and the disclosing Party shall cooperate with such affected Party or Parties to the maximum extent practicable to minimize the disclosure of the information consistent with applicable law. To the extent permitted by law and at the other affected Party's expense, the disclosing Party shall cooperate with the affected Parties to obtain proprietary or confidential treatment of confidential information by the person to whom such information is disclosed prior to any such disclosure.

15.5 **Titles.** The captions and headings in this TO Tariff are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the rates, terms, and conditions of this TO Tariff.

15.6 **Severability.** If any term, covenant, or condition of this TO Tariff or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest, by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this TO Tariff and their application shall not be affected thereby but shall remain in force and effect. The Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination, unless a court or governmental agency of competent jurisdiction holds that such provisions are not severable from all other provisions of this TO Tariff.

15.7 **Preservation of Obligations.** Upon termination of this TO Tariff, all unsatisfied obligations of each Party shall be preserved until satisfied.

15.8 **Governing Law.** This TO Tariff shall be interpreted, governed by, and construed under the laws of the State of California, without regard to the principles of conflict

PC ORIGINAL PKG

of laws thereof, or the laws of the United States, as applicable, as if executed and to be performed wholly within the State of California.

15.9 **Appendices Incorporated.** The several appendices to this TO Tariff, as may be revised from time to time, are attached to this TO Tariff and are incorporated by reference as if fully set forth herein.

15.10 **Conflict With CAISO Tariff.** If a Market Participant identifies a conflict between the TO Tariff and the CAISO Tariff, the Participating TO and the Market Participant shall make good-faith efforts to resolve the conflict. If the parties are unable to informally resolve that conflict, the Parties may use the CAISO ADR Procedures to resolve it as set forth in Section 13 of this TO Tariff.

PC ORIGINAL PKG

APPENDIX I

Transmission Revenue Requirement and TRBAA

Each transmission facility placed by IID under the CAISO's Operational Control is a Regional Transmission Facility as defined by the CAISO Tariff.

The IID Base Regional Transmission Revenue Requirement is $ _____.

The Regional Transmission Revenue Requirement shall be $__, which is composed of a Base Transmission Revenue Requirement for the Regional Transmission Facilities of $ __ and a Regional TRBAA of $0.

The TRBAA will be calculated annually, consistent with the CAISO Tariff.

PC ORIGINAL PKG

APPENDIX II

Notices

Designated Representatives:

Imperial Irrigation District
General Manager
333 East Barioni Boulevard
P.O. Box 937
Imperial CA, 92251

Imperial Irrigation District
Energy Manager
333 East Barioni Boulevard
P.O. Box 937
Imperial CA, 92251

PC ORIGINAL PKG

Attachment 1

Approved Project Sponsor Agreement

PC ORIGINAL PKG

Approved Project Sponsor Agreement California

Independent System Operator Corporation

May 23, 2014

PC ORIGINAL PKG

APPROVED PROJECT SPONSOR AGREEMENT (APSA)

BETWEEN

IMPERIAL IRRIGATION DISTRICT

AND

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

PROJECT: IMPERIAL VALLEY ELEMENT

PC ORIGINAL PKG

TABLE OF CONTENTS

ARTICLE 1. DEFINITIONS 1
ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION 5
ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE 6
ARTICLE 4. SCOPE OF SERVICE 7
ARTICLE 5. FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION 7
ARTICLE 6. TESTING AND INSPECTION 13
ARTICLE 7. METERING 14
ARTICLE 8. COMMUNICATIONS 14
ARTICLE 9. OPERATIONS 15
ARTICLE 10. PERFORMANCE OBLIGATION 15
ARTICLE 11. BILLING AND PAYMENT 16
ARTICLE 12. REGULATORY REQUIREMENTS AND GOVERNING LAWS 16
ARTICLE 13. NOTICES 17
ARTICLE 14. FORCE MAJEURE 18
ARTICLE 15. DEFAULT 18
ARTICLE 16. INDEMNITY AND CONSEQUENTIAL DAMAGES 19
ARTICLE 17. ASSIGNMENT 20
ARTICLE 18. SEVERABILITY 21
ARTICLE 19. COMPARABILITY 21
ARTICLE 20. CONFIDENTIALITY 21
ARTICLE 21. ENVIRONMENTAL RELEASES 24
ARTICLE 22. INFORMATION ACCESS AND AUDIT RIGHTS 24
ARTICLE 23. SUBCONTRACTORS 26
ARTICLE 24. DISPUTES 26
ARTICLE 25. REPRESENTATIONS, WARRANTIES AND COVENANTS 27
ARTICLE 26. MISCELLANEOUS 29

APPENDICES

Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B Milestones

Appendix C Security Arrangements Details

Appendix D Addresses for Delivery of Notices and Billings

Appendix E Approved Project Sponsor's Costs of Project

PC ORIGINAL PKG

APPROVED PROJECT SPONSOR AGREEMENT

IMPERIAL IRRIGATION DISTRICT

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

THIS APPROVED PROJECT SPONSOR AGREEMENT ("APSA") is made and entered into this 10 day of MARCH, 2014, between the Imperial Irrigation District, organized and existing under the laws of the State of California ("Approved Project Sponsor") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Approved Project Sponsor and CAISO each may be referred to as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, CAISO exercises Operational Control over the CAISO Controlled Grid; and

WHEREAS, Approved Project Sponsor intends to construct, finance and own the Imperial Valley Element Project ("Project") consisting of transmission additions or upgrades identified in Appendix A to this APSA; and

WHEREAS, the Parties agree that, upon energization of the Project, Approved Project Sponsor will enter into the Transmission Control Agreement to become a Participating Transmission Owner ("Participating TO") and will turn the Project over to the Operational Control of the CAISO; and

WHEREAS, the Parties recognize that the Approved Project Sponsor has certain rights and obligations related to the Project that arise prior to the date upon which the Approved Project Sponsor becomes a Participating TO and which may remain in effect for a discrete period of time after the Approved Project Sponsor enters into the Transmission Control Agreement; and

WHEREAS, Approved Project Sponsor and CAISO thus have agreed to enter into this APSA for the purpose of identifying rights and obligations associated with the Project that arise prior to the effective date of the Transmission Control Agreement;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1. DEFINITIONS

When used in this APSA, terms with initial capitalization that are not defined in this Article 1 shall have the meanings specified in the Article in which they are used.

PC ORIGINAL PKG

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the Western Electricity Coordinating Council or its successor.

Applicable Reliability Standards shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Project is directly connected, including requirements adopted pursuant to Section 215 of the Federal Power Act.

Balancing Authority shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

Balancing Authority Area shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

Breach shall mean the failure of a Party to perform or observe any material term or condition of this APSA.

Breaching Party shall mean a Party that is in Breach of this APSA.

Business Day shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

CAISO Controlled Grid shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

CAISO Tariff shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Calendar Day shall mean any day including Saturday, Sunday or a federal holiday.

PC ORIGINAL PKG

Commercial Operation Date of the Project shall mean the date on which the Project commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Approved Project Sponsor in writing.

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 20.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 15 of this APSA.

Effective Date shall mean the date on which this APSA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

FERC shall mean the Federal Energy Regulatory Commission or its successor.

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, earthquake, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective

PC ORIGINAL PKG

facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Approved Project Sponsor, CAISO, , or any Affiliate thereof.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Interconnection Facilities shall mean the Participating TO's Interconnection Facilities and the Approved Project Sponsor's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Project and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Project to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, or Network Upgrades.

Interconnection Handbook shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this APSA and the terms of the Participating TO's Interconnection Handbook, the terms in this APSA shall apply.

Interconnection Service shall mean the service defined in Article 4.2 of this Agreement.

Loss shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

Metering Equipment shall mean all metering equipment installed or to be installed for measuring the Balancing Authority Area boundary pursuant to this APSA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

PC ORIGINAL PKG

NERC shall mean the North American Electric Reliability Corporation or its successor organization.

Operational Control shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

Party or Parties shall mean the CAISO, Approved Project Sponsor or the applicable combination of the above.

Project shall mean the transmission additions or upgrades the Approved Project Sponsor has agreed to construct, finance and own pursuant to this Agreement.

Point of Interconnection shall mean the point, as set forth in Appendix A to this APSA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

Reasonable Efforts shall mean, with respect to an action required to be attempted or taken by a Party under this APSA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances and (2) the Approved Project Sponsor's Transmission System from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

Transmission Control Agreement shall mean CAISO FERC Electric Tariff No. 7.

ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

2.1 **Effective Date.** This APSA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable) or, if filed unexecuted, upon the date specified by FERC. The CAISO shall promptly file this APSA with FERC upon execution in accordance with Article 3.1, if required.

PC ORIGINAL PKG

2.2 **Term of Agreement.** Subject to the provisions of Article 2.3, this APSA shall remain in effect until all terms and condition of this Agreement have been fulfilled or default by the Approved Project Sponsor.

2.3 **Termination Procedures.**

2.3.1 **Written Notice.** This APSA may be terminated by the Approved Project Sponsor after giving the CAISO ninety (90) Calendar Days advance written notice, or by the CAISO notifying FERC after the transmission additions or upgrades have been turned over to CAISO Operational Control.

2.3.2 **Default.** A Party may terminate this APSA in accordance with Article 15.

2.3.3 Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination and if applicable, FERC has accepted the notice of termination.

ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

3.1 **Filing.** The CAISO shall file this APSA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Approved Project Sponsor may request that any information so provided be subject to the confidentiality provisions of Article 20. If the Approved Project Sponsor has executed this APSA, or any amendment thereto, the Approved Project Sponsor shall reasonably cooperate with CAISO with respect to such filing and to provide any information reasonably requested by CAISO needed to comply with applicable regulatory requirements.

3.2 **Agreement Subject to CAISO Tariff.** The Approved Project Sponsor will comply with all applicable provisions of the CAISO Tariff.

3.3 **Relationship Between this APSA and the CAISO Tariff.** With regard to rights and obligations between the Approved Project Sponsor, if and to the extent a matter is specifically addressed by a provision of this APSA (including any appendices, schedules or other attachments to this APSA), the provisions of this APSA shall govern. If and to the extent a provision of this APSA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Approved Project Sponsor, the CAISO Tariff shall govern.

3.4 **Requirement to Become a Participating TO.** The Approved Project Sponsor agrees that the Project will be under CAISO Operational Control, and the Approved Project Sponsor further agrees that it will meet the CAISO Tariff requirements to become a Participating TO in accordance with Section 4.3 of the CAISO Tariff.

PC ORIGINAL PKG

3.5 **Relationship Between this APSA and the Transmission Control Agreement.** Once the Approved Project Sponsor has entered into the Transmission Control Agreement, if and to the extent a matter specifically addressed in this APSA is inconsistent with the Transmission Control Agreement, the terms of the Transmission Control Agreement shall govern. Once the rights and obligations under the APSA are completed, the APSA terminates and the Transmission Control Agreement will govern the rights and responsibilities of the Approved Project Sponsor as a Participating Transmission Owner.

ARTICLE 4. SCOPE OF SERVICE

4.1 **Transmission Additions or Upgrades.** The Approved Project Sponsor shall build and connect to the CAISO Controlled Grid the Project identified in Appendix A.

4.2 **Interconnection Service.** Interconnection Service allows the Approved Project Sponsor to connect the Project to the CAISO Controlled Grid. If applicable, the Approved Project Sponsor separately must seek Interconnection Service from the Participating TO to whose facilities the project will interconnect.

4.3 **Approved Project Sponsor to Meet Requirements of the Participating TO's Interconnection Handbook.** If applicable, the Approved Project Sponsor shall comply with the Participating TO's Interconnection Handbook.

4.4 **Performance Standards.** Each Party shall perform all of its obligations under this APSA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this APSA for its compliance therewith. If such Party is the CAISO, then the CAISO shall amend the APSA and submit the amendment to FERC for approval.

ARTICLE 5. FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

5.1 **General.** Interconnection Facilities and Network Upgrades described in this APSA shall be constructed pursuant to Good Utility Practice and shall be based on the assumed accuracy and completeness of all technical information received by the CAISO from the Approved Project Sponsor. Changes to the Interconnection Facilities and Network Upgrades described in this APSA must be approved by the CAISO in accordance with Article 5.11 of this Agreement. Unless otherwise mutually agreed among the Parties, the Approved Project Sponsor shall select the testing date, and the energization date for the Project shall be consistent with the application approved by the CAISO, and such dates shall be set forth in Appendix B, Milestones.

PC ORIGINAL PKG

5.2 **Conditions Applicable.** The Approved Project Sponsor shall comply with all requirements of law and assumes responsibility for the design, procurement and construction of the Project using Good Utility Practice and the standards and specifications provided by the Participating TO that the Project is interconnected to, if applicable.

5.2.1 The CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Project;

5.2.2 Prior to commencement of construction, the Approved Project Sponsor shall provide to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities;

5.2.3 At any time during construction, should any phase of the engineering, equipment procurement, or construction of the Project not meet the standards and specifications provided by the Participating TO, the Approved Project Sponsor shall be obligated to remedy deficiencies in that portion of the Project;

5.2.4 The Approved Project Sponsor shall indemnify the CAISO for claims arising from the Approved Project Sponsor's construction of the Project under the terms and procedures applicable to Article 16.1 Indemnity;

5.2.5 The Approved Project Sponsor shall transfer Operational Control of the Project to the CAISO upon completion of the Project;

5.2.6 The Approved Project Sponsor agrees with the cost estimates and the binding cost cap, if applicable, included in Appendix E. The cost cap will be adjusted to accommodate Force Majeure events addressed in Article 14.

5.2.7 As soon as reasonably practicable, but within twelve months after completion of the construction of the Project, the Approved Project Sponsor shall provide summary of the final cost of the construction of the Project, which summary shall set forth such costs in sufficient detail to enable the CAISO to understand the cost of the Project, including use of contingency and any cost overruns; and

5.2.8 The Approved Project Sponsor shall deliver to the CAISO "as-built" drawings, information, and any other documents that are reasonably required by the CAISO to assure that the Project is built to the standards and specifications required by the Participating TO.

5.3 **Construction Commencement.** The Approved Project Sponsor shall commence construction of the Project for which it is responsible as soon as practicable after the following additional conditions are satisfied by each party:

PC ORIGINAL PKG

5.3.1 Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval; and

5.3.2 Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of the Project.

5.4 Work Progress. The Approved Project Sponsor will keep the CAISO advised monthly as to the progress of the financing, procurement and construction efforts, which can be via email or verbal discussion as agreed upon by the parties.

5.4.1 The Approved Project Sponsor shall provide the CAISO with the Initial Construction Plan one hundred twenty (120) Calendar Days after the Approved Project Sponsor has been selected. The plan shall include: Land acquisition and permits requirements, status and schedule; materials procurement requirements, status and schedule; construction financing status and schedule; and Project contacts, if different than selection process.

5.4.2 Every ninety (90) Calendar Days after the Initial Construction Plan is received until the Project is energized and under CAISO Operational Control, the Approved Project Sponsor shall provide the CAISO with a Construction Plan Status Report which shall include, but is not limited to Project schedule; Permit and license status – environmental, state, local; Right-of-way status; Land acquisition status; Design and engineering status; concern with or change in ability to meet design specifications; status of contracts for project work, including land, procurement, staffing; Participating TO interconnection agreement status; construction status; testing status; risks and obstacles; and Project budget including actuals, estimate to complete, contingency. The format for the report will be in accordance with the Business Practice Manual on Transmission Planning Process.

5.4.3 The CAISO will send Project status reports received in accordance with Section 5.4.2 to the applicable Participating TO(s) and then the CAISO will hold a call with the Participating TO(s) to review the status report, including completion date and items of concern.

5.4.4 Every ninety (90) calendar days until the Project is energized and under CAISO Operational Control, the Participating TO shall provide the CAISO with an Interconnection Facilities Status Report which shall include, but is not limited to project schedule; permit and license status – environmental, state, local; right-of-way status, if required; land acquisition status, if required; design and engineering status; status of contracts for project work, including land, procurement, staffing; construction status; testing status; risks and obstacles; and project budget including actuals, estimate

PC ORIGINAL PKG

to complete, contingency. The format for the report will be in accordance with Business Practice Manual for Transmission Planning Process.

5.4.5 If, at any time, the Approved Project Sponsor determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified energization date, the Approved Project Sponsor will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.

5.5 Delay in Project. If CAISO has received notification from the Approved Project Sponsor of delay in Project energization beyond the date upon which the project was found to be needed, the CAISO shall issue a market notice to market participants stating that the Project is delayed and that, if applicable, a plan is being developed to address potential NERC reliability standard violations as set forth in Section 24.6.3 of the CAISO Tariff as well as any material concerns.

5.5.1 The CAISO shall determine if there is a potential NERC violation, for either the CAISO or applicable Participating TO(s), arising from any Project energization delay and will determine if there are other material issues of concern. If there are potential violations or material issues, the CAISO, Approved Project Sponsor and applicable Participating TO(s) shall develop a plan to address the delay. The plan may include directing the Participating TO to develop a mitigation plan.

5.5.2 If violations or material issues cannot be promptly and adequately addressed, CAISO will take action to resolve the issues, including determining if an alternate project sponsor is required.

5.6 Delay in Approvals, Property Acquisition or Construction. If unreasonable delays in necessary Project approvals, acquisition of any and all real property rights, including but not limited to fee title, right of way grant, easement and license rights essential for construction of the Project or construction timelines, as set forth in Appendix B (Milestones) occur, the CAISO shall consult with the Approved Project Sponsor. If, following such consultation, (a) the CAISO determines that (i) the Approved Project Sponsor cannot secure necessary approvals or property rights or is otherwise unable to construct the Project; or (ii) an alternative Project Sponsor is necessary pursuant to Section 24.6.2 of the CAISO Tariff; or, (b) the Approved Project Sponsor determines that it is unable to proceed with construction and so notifies the CAISO, then CAISO shall take such actions that it determines are appropriate and necessary, including termination of this agreement. If either Party determines that a new Approved Project Sponsor should be selected, the Approved Project Sponsor agrees to work with CAISO, the new Approved Project Sponsor, and, if applicable, the Participating TO to transfer responsibility for the Project to the new Approved Project Sponsor.

PC ORIGINAL PKG

5.7 **Information Exchange.** As soon as reasonably practicable after the Effective Date, the Approved Project Sponsor shall provide information to the CAISO regarding the design and compatibility of the Approved Project Sponsor's Project and Participating TO's Interconnection Facilities and compatibility of the Interconnection Facilities with the Approved Project Sponsor's Project, and shall work diligently and in good faith to make any necessary design changes to the description of the Project set forth in Appendix A.

5.8 **Approved Project Sponsor's Project.** The Approved Project Sponsor shall, at its expense, design, procure, construct, own and install the Project, as set forth in Appendix A.

5.8.1 **Approved Project Sponsor's Project Specifications.** The Approved Project Sponsor shall submit necessary specifications for the Project, including System Protection Facilities, to the CAISO at least one hundred eighty (180) Calendar Days prior to the date that testing will commence and final specifications for review and comment at least ninety (90) Calendar Days prior to the date that testing will commence. The CAISO shall review such specifications to ensure that the Project is compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and will provide any comments on such specifications within thirty (30) Calendar Days of the Approved Project Sponsor's submission. All specifications provided hereunder shall be deemed confidential.

5.8.2 **Participating TO's and CAISO's Review.** The Participating TO's and the CAISO's review of the Approved Project Sponsor's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Project or the Participating TO's Interconnection Facilities, if applicable. As described in Section 5.8 above, Approved Project Sponsor shall make such changes to the Approved Project Sponsor's Project as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Approved Project Sponsor's Project are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.

5.8.3 **Approved Project Sponsor's Project Construction.** The Approved Project Sponsor's Project shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Project has been turned over to CAISO Operational Control, unless the CAISO and Approved Project Sponsor agree on another mutually acceptable deadline, the Approved Project Sponsor shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Approved Project Sponsor's Project, including, as applicable, a one-line diagram, a site plan drawing

PC ORIGINAL PKG

showing the Approved Project Sponsor's Project including Interconnection Facilities, plan and elevation drawings showing the layout of the Approved Project Sponsor's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Approved Project Sponsor's Project, and, if applicable, the impedances (determined by factory tests) for the associated transformers. The Approved Project Sponsor shall provide the Participating TO and the CAISO specifications for the protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Approved Project Sponsor shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this APSA.

5.9 **Permits.** The Approved Project Sponsor shall obtain all permits, licenses and authorization that are necessary to accomplish the Project in compliance with Applicable Laws and Regulations.

5.10 **Tax Status.** Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this APSA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

5.11 **Modification.**

5.11.1 **General.** The Approved Project Sponsor may undertake modifications to its facilities, subject to the approval of the CAISO and the provisions of this APSA and the CAISO Tariff. If the Approved Project Sponsor plans to undertake a modification then it shall provide such information regarding such modification to the CAISO as the CAISO deems necessary to evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications, any technical information and cost impact. The Approved Project Sponsor shall provide the relevant drawings, plans, and specifications to the CAISO at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed. The CAISO shall approve the modification if it determines that the modification is in accordance with the original Project criteria and intent.

5.11.2 **Standards.** Any additions, modifications, or replacements made to the Project's facilities shall be designed, constructed and operated in accordance with this APSA and Good Utility Practice.

PC ORIGINAL PKG

5.12 Interconnection Study Process.

5.12.1 Existing Study Requests. The Approved Project Sponsor shall complete any existing studies for interconnection to the Project that were in the Approved Project Sponsor's queue upon the effective date of this APSA, and CAISO and the Participating TO will perform studies as an Affected System.

5.12.2 Future Study Requests. Any future interconnection requests submitted to the Approved Project Sponsor for the Project, following the execution date of this APSA, shall be directed to the CAISO Interconnection Queue process. The Approved Project Sponsor will assume the functions of a Participating TO in accordance with Appendix DD of the CAISO Tariff, including performing Phase I, Phase II, and reassessment analysis for generator interconnection requests to the Project. The Approved Project Sponsor will be reimbursed actual costs incurred for the analysis similar to the Participating TOs.

5.12.3 Generator Interconnection Agreements. Any Generator Interconnection Agreements for the Project will be executed consistent with the relevant terms and conditions of CAISO Tariff.

5.13 Planning Authority. The CAISO is the Planning Authority, as that term is defined by NERC, for the Project from the time it is identified in the CAISO's Transmission Planning Process and approved by the CAISO Board of Governors, regardless of the status of Project construction or energization. As such, the Approved Project Sponsor shall be subject to the rights and obligations set forth in CAISO Tariff Section 24 that are applicable to Participating TOs as they pertain to the Project.

ARTICLE 6. TESTING AND INSPECTION

6.1 Pre-Commercial Operation Date Testing and Modifications. Prior to energizing the Project for testing, the Participating TO shall test the Participating TO's Interconnection Facilities and the Approved Project Sponsor shall test the Project to ensure their safe and reliable operation. All testing shall be coordinated and approved by the CAISO to ensure grid reliability. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Approved Project Sponsor shall bear the cost of all such testing and modifications. The Approved Project Sponsor shall not commence initial parallel operation of the Project until the Participating TO provides prior written approval to the CAISO and Approved Project Sponsor, which approval shall not be unreasonably withheld.

PC ORIGINAL PKG

6.2 **Right to Observe Testing.** The Approved Project Sponsor shall notify the CAISO at least fourteen (14) Calendar Days in advance of its performance of tests. The CAISO has the right, at its own expense, to observe such testing.

6.3 **Right to Inspect.** The CAISO shall have the right, but shall have no obligation to (i) observe the Approved Project Sponsors' tests and/or inspection of any of its System Protection Facilities and other protective equipment; and (ii) review the settings of the Approved Project Sponsor's System Protection Facilities and other protective equipment. The CAISO may exercise these rights from time to time as it deems necessary upon reasonable notice to the Approved Project Sponsor. The exercise or non-exercise by CAISO of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Project or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that CAISO obtains through the exercise of any of its rights under this Article 6.3 shall be deemed to be Confidential Information and treated pursuant to Article 20 of this APSA.

ARTICLE 7. METERING

7.1 **General.** The Approved Project Sponsor shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements regarding metering. The Approved Project Sponsor and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 of the CAISO Tariff. Power flows to and from the Project shall be measured at or, at the CAISO's option for its respective Metering Equipment, compensated to, the Scheduling Point. The CAISO shall provide metering quantities to the Approved Project Sponsor upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Approved Project Sponsor shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

ARTICLE 8. COMMUNICATIONS

8.1 **Approved Project Sponsor Obligations.** The Approved Project Sponsor shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Approved Project Sponsor shall provide standard voice line, dedicated voice line and facsimile communications at the Project's control room or central dispatch facility through use of either the public telephone system or a voice communications system that does not rely on the public telephone system. The Approved Project Sponsor shall also provide the dedicated data circuit(s) necessary to provide Approved Project Sponsor data to the CAISO and Participating TO as set forth in Appendix C, Security Arrangements Details. The data circuit(s) shall extend from the

PC ORIGINAL PKG

Project to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Approved Project Sponsor. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, and equipment clearances.

ARTICLE 9. OPERATIONS

9.1 **General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council operating requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

9.2 **CAISO Obligations.** The CAISO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner during testing and synchronization, and before the Approved Project Sponsor turns the Project over to CAISO Operational Control. The CAISO may provide operating instructions to the Approved Project Sponsor consistent with this APSA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Approved Project Sponsor.

9.4 **Approved Project Sponsor Obligations.** The Approved Project Sponsor shall at its own expense operate, maintain and control the Project in a safe and reliable manner and in accordance with this APSA in advance of turning over Operational Control to the CAISO. Appendix A, Project Details, sets forth applicable requirements of the CAISO Balancing Authority Area and may be modified to reflect changes to the requirements as they may change from time to time. The Approved Project Sponsor shall not energize the Project with the Participating TO's Transmission System until the Participating TO provides prior written approval.

9.5 **Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Approved Project Sponsor is responsible for the proper energization of the Project to the CAISO Controlled Grid.

ARTICLE 10. PERFORMANCE OBLIGATION

10.1 **Approved Project Sponsor's Project.** The Approved Project Sponsor shall design, procure, construct, install, own and/or control the Approved Project Sponsor's Project described in Appendix A at its sole expense.

PC ORIGINAL PKG

ARTICLE 11. BILLING AND PAYMENT

11.1 **Transmission Revenue Requirement.** The Approved Project Sponsor may apply to FERC for a Transmission Revenue Requirement for Transmission Facilities not yet in operation, but approved under the transmission planning provisions of the CAISO Tariff, that will be Regional Transmission Facilities or Local Transmission Facilities when placed under the CAISO's Operational Control. If FERC approves such Transmission Revenue Requirement, the CAISO shall incorporate the Transmission Revenue Requirement into the Regional Access Charge or Local Access Charge in accordance with the CAISO Tariff.

11.2 **Application of CAISO Tariff.** The CAISO and Approved Project Sponsor shall comply with the billing and payment provisions set forth in the CAISO Tariff.

11.3 **Refund Obligation.** Each Approved Project Sponsor, whether or not it is subject to FERC rate jurisdiction under Section 205 and Section 206 of the Federal Power Act, shall make all refunds, adjustments to its Transmission Revenue Requirement, and adjustments to its Approved Project Sponsor Tariff and do all other things required of a Participating TO to implement any FERC order related to the CAISO Tariff, including any FERC order that requires the CAISO to make payment adjustments or pay refunds to, or receive prior period overpayments from, any Participating TO. All such refunds and adjustments shall be made, and all other actions taken, in accordance with the CAISO Tariff, unless the applicable FERC order requires otherwise.

ARTICLE 12. REGULATORY REQUIREMENTS AND GOVERNING LAWS

12.1 **Regulatory Requirements.** Each Party's obligations under this APSA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this APSA shall require the Approved Project Sponsor to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.

PC ORIGINAL PKG

12.2 Governing Law.

12.2.1 The validity, interpretation and performance of this APSA and each of its provisions shall be governed by the laws of the state of California [where the Point of Interconnection is located], without regard to its conflicts of law principles.

12.2.2 This APSA is subject to all Applicable Laws and Regulations.

12.2.3 Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

ARTICLE 13. NOTICES

13.1 General. Unless otherwise provided in this APSA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by (i) recognized national courier, (ii) depositing the same with the United States Postal Service with postage prepaid for delivery by certified or registered mail, addressed to the Party, or (iii) personal delivery to the Party, at the address set out in Appendix D, Addresses for Delivery of Notices and Billings.

A Party must update the information in Appendix D as information changes. A Party may change the notice information in this APSA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this APSA.

13.2 Alternative Forms of Notice. Any notice or request required or permitted to be given by a Party to another and not required by this APSA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix D.

13.4 Operations Notice. Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

13.5 Project Management. If the Approved Project Sponsor desires to change the identified project management, including key personal, the Approved Project Sponsor shall notify the CAISO in writing thirty (30) days in advance for approval. Such approval shall not be unreasonably withheld.

PC ORIGINAL PKG

ARTICLE 14. FORCE MAJEURE

14.1 Force Majeure.

14.1.1 Economic hardship is not considered a Force Majeure event.

14.1.2 No Party shall be considered to be in Default with respect to any obligation hereunder, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

ARTICLE 15. DEFAULT

15.1 Default.

15.1.1 General. No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this APSA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. The Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

15.1.2 Right to Terminate. If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this APSA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this APSA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this APSA.

PC ORIGINAL PKG

ARTICLE 16. INDEMNITY AND CONSEQUENTIAL DAMAGES

16.1 **Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this APSA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

16.1.1 **Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 16 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 16.1 to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

16.1.2 **Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 16, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

16.1.3 **Indemnity Procedures.** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 16.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the

PC ORIGINAL PKG

Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

16.2 **Consequential Damages.** In no event shall any Party be liable under any provision of this APSA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 17. ASSIGNMENT

17.1 **Assignment.** This APSA may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this APSA without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this APSA including any cost cap; and provided further that the Approved Project Sponsor shall have the right to assign this APSA, without the consent of the CAISO, for collateral security purposes to aid in providing financing for the Project, provided that the Approved Project Sponsor will promptly notify the CAISO of any such assignment. Any financing arrangement entered into by the Approved Project Sponsor pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this APSA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

PC ORIGINAL PKG

ARTICLE 18. SEVERABILITY

18.1 **Severability.** If any provision in this APSA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this APSA.

ARTICLE 19. COMPARABILITY

19.1 **Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

ARTICLE 20. CONFIDENTIALITY

20.1 **Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this APSA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

20.1.1 Term. During the term of this APSA, and for a period of three (3) years after the expiration or termination of this APSA, except as otherwise provided in this Article, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

20.1.2 Scope. Confidential Information shall not include information that the receiving Party can demonstrate (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of

PC ORIGINAL PKG

this APSA; or (6) is required, in accordance with Article 20.1.7 of this APSA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this APSA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

20.1.3 Release of Confidential Information. No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Approved Project Sponsor, or to potential purchasers or assignees of the Approved Project Sponsor, on a need-to-know basis in connection with this APSA, unless such person has first been advised of the confidentiality provisions of this Article and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article.

20.1.4 Rights. Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

20.1.5 No Warranties. The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties or to enter into any further agreements or proceed with any other relationship or joint venture.

20.1.6 Standard of Care. Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this APSA or its regulatory requirements.

20.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for

PC ORIGINAL PKG

production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this APSA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

20.1.8 Termination of Agreement. Upon termination of this APSA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

20.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article.

20.1.10 Disclosure to FERC, its Staff, or a State. Notwithstanding anything in this Article to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this APSA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this APSA prior to

PC ORIGINAL PKG

the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the APSA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

20.1.11 Subject to the exception in Article 20.1.10. Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this APSA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 21. ENVIRONMENTAL RELEASES

21.1 Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Project or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

ARTICLE 22. INFORMATION ACCESS AND AUDIT RIGHTS

22.1 Information Access. Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is

PC ORIGINAL PKG

necessary in order for the other Party to (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this APSA; and (ii) carry out its obligations and responsibilities under this APSA. The Parties shall not use such information for purposes other than those set forth in this Article 22.1 and to enforce their rights under this APSA. Nothing in this Article shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.

22.2 **Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this APSA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this APSA.

22.3 **Audit Rights.** Subject to the requirements of confidentiality under Article 20 of this APSA, the CAISO audit rights shall include audit of the Approved Project Sponsor costs pertaining to performance or satisfaction of obligations under this APSA.

22.3.1 The CAISO shall have the right, during normal business hours, and upon prior reasonable notice to the Approved Project Sponsor, to audit at its own expense the accounts and records pertaining to satisfaction of obligations under this APSA. Subject to Article 22.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to performance and satisfaction of obligations under this APSA. The Approved Project Sponsor shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 22.4.

22.3.2 Notwithstanding anything to the contrary in Article 22.3, the Approved Project Sponsors' rights to audit the CAISO's accounts and records shall be as set forth in Section 21.1 of the CAISO Tariff.

PC ORIGINAL PKG

22.4 Audit Rights Period for Construction-Related Accounts and Records. Accounts and records related to the design, engineering, procurement, and construction of Project constructed by the Approved Project Sponsor shall be subject to audit and verification by the CAISO for a period of twenty-four months following the issuance of a final cost summary in accordance with Article 5.2.7.

ARTICLE 23. SUBCONTRACTORS

23.1 General. Nothing in this APSA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this APSA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this APSA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

23.2 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this APSA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Approved Project Sponsor or its subcontractors with respect to obligations of the Approved Project Sponsor under Article 4 of this APSA. Any applicable obligation imposed by this APSA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

ARTICLE 24. DISPUTES

24.1 General. All disputes arising out of or in connection with this APSA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this APSA. Disputes arising out of or in connection with this APSA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

24.2 Submission. In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this APSA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In

PC ORIGINAL PKG

the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this APSA.

24.3 **External Arbitration Procedures.** Any arbitration initiated under this APSA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article, the terms of this Article shall prevail.

24.4 **Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this APSA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

24.5 **Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

ARTICLE 25. REPRESENTATIONS, WARRANTIES AND COVENANTS

25.1 **General.** Each Party makes the following representations, warranties and covenants:

PC ORIGINAL PKG

25.1.1 **Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this APSA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this APSA.

25.1.2 **Authority.** Such Party has the right, power and authority to enter into this APSA, to become a Party hereto and to perform its obligations hereunder. This APSA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

25.1.3 **No Conflict.** The execution, delivery and performance of this APSA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

25.1.4 **Consent and Approval.** Such Party has sought or obtained, or, in accordance with this APSA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this APSA, and it will provide to any Governmental Authority notice of any actions under this APSA that are required by Applicable Laws and Regulations.

25.1.5 **Existing Ownership and Property Rights.** Nothing in this APSA shall be construed to diminish rights or title to any of its personal or real property in, under or beyond the Project and its facilities, including but not limited to all real property rights held in fee by the Imperial Irrigation District ("IID"), obtained by easement or other right, whether recorded or unrecorded, whether arising before or after the Effective Date and whether obtained by condemnation, prescription, express grant or otherwise.

PC ORIGINAL PKG

ARTICLE 26. MISCELLANEOUS

26.1 **Binding Effect.** This APSA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

26.2 **Conflicts.** In the event of a conflict between the body of this APSA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this APSA shall prevail and be deemed the final intent of the Parties.

26.3 **Rules of Interpretation.** This APSA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this APSA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this APSA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this APSA or such Appendix to this APSA, or such Section to the CAISO Tariff or such Appendix to the CAISO Tariff, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this APSA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

26.4 **Entire Agreement.** This APSA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this APSA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this APSA.

26.5 **No Third Party Beneficiaries.** This APSA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the

PC ORIGINAL PKG

obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

26.6 **Waiver.** The failure of a Party to this APSA to insist, on any occasion, upon strict performance of any provision of this APSA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this APSA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this APSA. Termination or Default of this APSA for any reason by the Approved Project Sponsor shall not constitute a waiver of the Approved Project Sponsor's legal rights to obtain an interconnection from the CAISO. Any waiver of this APSA shall, if requested, be provided in writing.

26.7 **Headings.** The descriptive headings of the various Articles of this APSA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this APSA.

26.8 **Multiple Counterparts.** This APSA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

26.9 **Amendment.** The Parties may by mutual agreement amend this APSA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this APSA upon satisfaction of all Applicable Laws and Regulations.

26.10 **Modification by the Parties.** Except as described in Appendices B and E, the Parties may by mutual agreement amend the Appendices to this APSA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this APSA upon satisfaction of all Applicable Laws and Regulations.

26.11 **Reservation of Rights.** The CAISO has the right to make a unilateral filing with FERC to modify this APSA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this APSA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation. The Approved Project Sponsor and the CAISO shall have the right to make a unilateral filing with FERC to modify this APSA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this APSA shall limit the rights of the Parties or of FERC under

PC ORIGINAL PKG

sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

26.12 No Partnership. This APSA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

26.13 Joint and Several Obligations. Except as otherwise provided in this APSA, the obligations of the CAISO, and the Approved Project Sponsor are several, and are neither joint nor joint and several.

PC ORIGINAL PKG

IN WITNESS WHEREOF, the Parties have executed this APSA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

Imperial Irrigation District

By: James C. Hanks

Name: James C. Hanks

Title: Board President

Date: 3-4-14

California Independent System Operator Corporation

By: _____

Name: _____

Title: _____

Date: _____

PC ORIGINAL PKG

IN WITNESS WHEREOF, the Parties have executed this APSA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

Imperial Irrigation District

By: _____

Name: _____

Title: _____

Date: _____

California Independent System Operator Corporation

By: _____

Name: ~~KEITH E. CASEY, PH.D., VICE PRESIDENT~~ MARKET & INFRASTRUCTURE DEVELOPMENT

Title: _____

Date: 3/10/14

PC ORIGINAL PKG

Appendices to APSA

Appendix A Project Details

Appendix B Milestones

Appendix C Security Arrangements Details

Appendix D Addresses for Delivery of Notices and Billings

Appendix E Approved Project Sponsor's Costs of Project

PC ORIGINAL PKG

Appendix A

Project Details

1. Description:

The CAISO analyzed the location of generation projects in the CAISO queue seeking interconnection to the Imperial Valley ("IV") substation and considered transmission configurations that might reduce permitting and other concerns in the area. The CAISO has also coordinated with IID and has been advised that IID plans to upgrade the IID IV-El Centro line (the "S" line) to enhance its ownership rights at the IV substation. The CAISO has reviewed such plans from IID. Based on this collaboration with IID and the need to provide an efficient means by which CAISO queue generation located in Imperial Valley can move forward to commercial operation, the CAISO has identified a policy-driven need for a 230 kV collector substation (located approximately one mile north of the IV substation) and a 230 kV transmission line connecting the collector substation to the IV substation, contingent upon IID looping the S line into the IID portion of the new collector substation, as depicted below:[1]

2. Interconnection Facilities – Collector Station:

Switching Station Only

Nominal Phase to Phase Voltage: 230 kV

Initial Bus Configuration (DBDB, BAAH, SBSB, etc): Double breaker double bus (DBDB)

Ultimate Bus Configuration (DBDB, BAAH, SBSB, etc): Breaker and a half (BAAH)

Maximum Circuit Breaker Total Fault Clearing Time: 4 cycles

Initial Number of Lines: 2

Ultimate Number of Lines: 12 (Initially the collector station site is to be prepared for four bays and eight lines.)

Initial Number of CBs: 4

Ultimate Number of CBs: 18

Initial Minimum Bus Ampacity: 5,500 Amps Ultimate Bus Ampacity: 5,500 Amps

Minimum CB Ampacity: 4,000 Amps Minimum CB Interrupting Capability: 63 kA

Station Minimum BIL 1,050 kV (900 kV for solidly grounded systems)

Initial Reactive Power Requirements: None

Ultimate Reactive Power Requirements: To be determined

[1] Because the 230 kV line and substation will not become network facilities until IID completes the S line loop-in, these elements cannot be turned over to CAISO operational control until IID completes the network upgrades on its system.

PC ORIGINAL PKG

Telemetering Requirements: Install the necessary equipment, including one RTU to monitor the typical bulk power elements such as MW, MVAR, and phase amps at each line and also kV at lines and buses and all circuit breaker status/control, protection relays status and alarms. The installed equipment will transmit information to the Participating TO's Grid Control Center.

Latest In Service Date: May, 2015

Low Profile Required: Subject to local permitting requirements

Gas Insulation Required: No

3. Network Upgrades:

Overhead Line Construction

Line Terminus 1: SDG&E Imperial Valley 230 kV Bus

Line Terminus 2: Proposed Collector Station 230 kV Bus

Nominal Phase to Phase Voltage: 230 kV

Minimum Continuous Ampacity - Summer: 3,000 Amps

Minimum Continuous Ampacity – Winter: 3,000 Amps

Minimum 4 Hour Emergency Ampacity – Summer: 4,050 Amps

Minimum 4 Hour Emergency Ampacity – Winter: 4,050 Amps

Minimum 30 Minute Emergency Ampacity – Summer: 4,380 Amps

Minimum 30 Minute Emergency Ampacity – Winter: 4,380 Amps

Approximate Line Impedance (Ohms): N/A

Approximate Series Compensation Level: N/A

Approximate Line Length: 1 mile

Latest In Service Date: May, 2015

Support Structures: Full double circuit tower with one side strung

Shield Wire Required: Optical ground wire (minimum 6 pairs of fibers)

Failure Containment Loading Mitigation (anti-cascade structures, etc.): Per applicable codes

Shield Wire Ground Fault Withstand Ampacity: Coordinate with interconnecting PTOs

Aeolian Vibration Control (Conductor and Shield Wire): Vibration dampers must be installed on all conductors and overhead shield wires, with the exception of slack spans.

Transmission Line Minimum BIL: 1,050 kV (900 kV for solidly grounded systems)

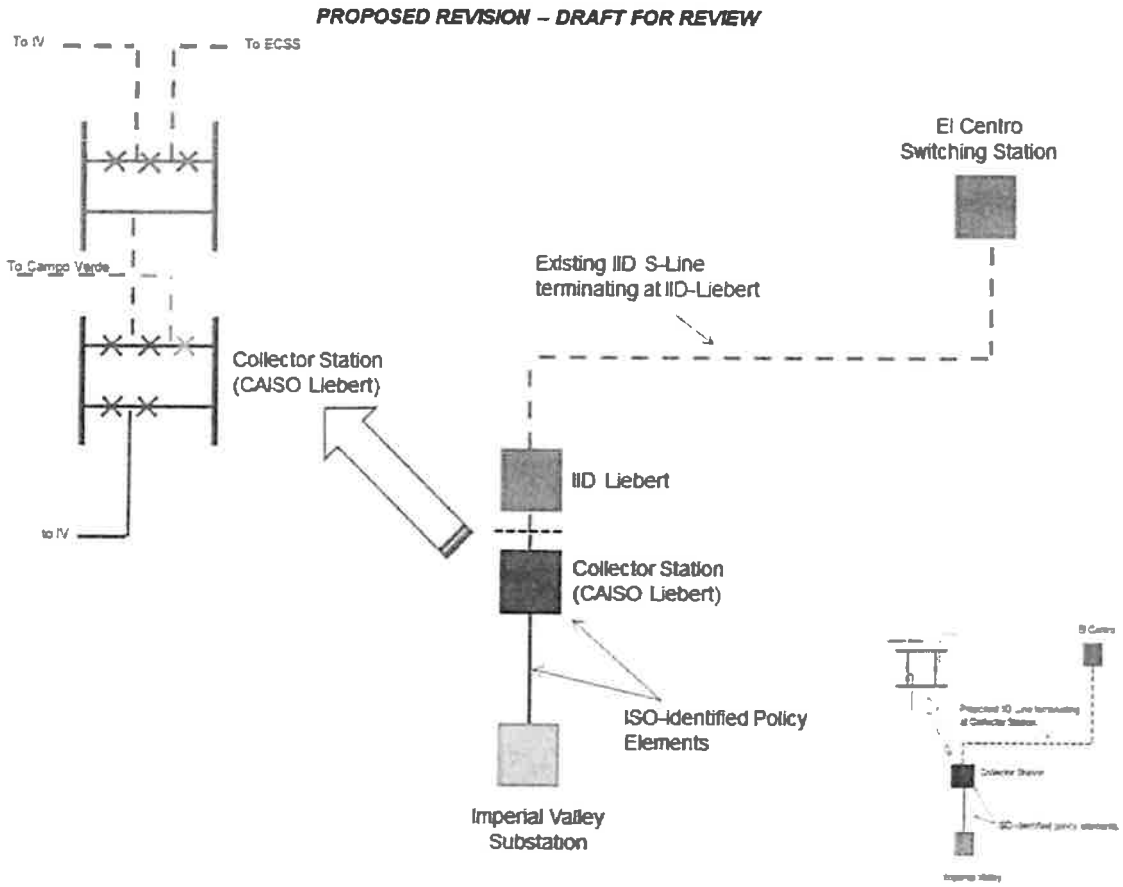
Minimum ROW Width: Per applicable codes

PC ORIGINAL PKG

Governing Design and Construction Standards: (GO 95, NESC Code, applicable municipal codes)

4. **Distribution Upgrades:** None

5. **Diagram of Project:**



PC ORIGINAL PKG

Appendix B

Milestones

1. Milestone Dates:

Item	Milestone	Responsible Party	Due Date [1]
1	Submit Construction Plan in accordance with Article 5.4.1 of this Agreement.	Approved Project Sponsor	Completed
2	Commence development activities including commencement of regulatory approvals; acquisition of land; permits	Approved Project Sponsor	Completed
3	Complete development activities	Approved Project Sponsor	Completed
4	Commence engineering design	Approved Project Sponsor	Completed
5	Commence procurement including material and resources	Approved Project Sponsor	April 7, 2014**
6	Submit Construction Plan Status Report in accordance with Article 5.4.2 of this Agreement.	Approved Project Sponsor	Completed
7	Submit Construction Plan Status Report in accordance with Article 5.4.2 of this Agreement.	Approved Project Sponsor	May 27, 2014**
8	Submit a Participating TO application for the Project to the ISO in accordance with Section 4.3.1.1 of the CAISO Tariff	Approved Project Sponsor	July 1, 2014**
9	Complete engineering design	Approved Project Sponsor	July 2, 2014**
10	Submit Construction Plan Status Report in accordance with Article 5.4.2 of this Agreement.	Approved Project Sponsor	August 25, 2014**
11	Commence Construction	Approved Project Sponsor	September 10, 2014**
12	Submit Project specifications in accordance with Article 5.8.1 of this Agreement	Approved Project Sponsor	October 5, 2014**
13	Provide comments on Project specifications	CAISO	November 4, 2014**
14	Complete procurement including material and resources	Approved Project Sponsor	November 19, 2014**
15	Submit Construction Plan Status Report in accordance with Article 5.4.2 of this Agreement.	Approved Project Sponsor	November 23, 2014**
16	Submit final Project specifications in accordance with Article 5.8.1 of this Agreement	Approved Project Sponsor	January 3, 2015**
17	Provide comments on final Project specifications	CAISO	February 2, 2015**
18	Submit Construction Plan Status Report in accordance with Article 5.4.2 of this Agreement.	Approved Project Sponsor	February 21, 2015**

PC ORIGINAL PKG

Item	Milestone	Responsible Party	Due Date 1/
19	Commence Testing	Approved Project Sponsor	April 3, 2015**
20	Complete Construction	Approved Project Sponsor	May 14, 2015**
21	Energize Project	Approved Project Sponsor	May 15, 2015*
22	In accordance with Article 5.2.8 and 5.8.3 provide final "as-built" drawings, information and other documents.	Approved Project Sponsor	September 12, 2015**
23	In accordance with Article 5.2.7 provide final costs of the Project.	Approved Project Sponsor	May 15, 2016**

1/ Dates in this Appendix B are good faith estimates and can be modified as follows:

* Change in milestone date requires an amendment to this APSA pursuant to Section 26.10

** Change in milestone date can be agreed to in writing by the representatives listed in Appendix D to this APSA without further regulatory approval.

PC ORIGINAL PKG

Appendix C

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, and Approved Project Sponsors interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Approved Project Sponsor shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: http://www.caiso.com/pubinfo/info-security/index.html.

PC ORIGINAL PKG

Appendix D

Addresses for Delivery of Notices and Billings

Notices:

Approved Project Sponsor:

Imperial Irrigation District
Attention: General Manager
333 East Barioni Boulevard
P.O. Box 937
Imperial, CA 92251

With a copy to:

Imperial Irrigation District
Attention: Energy Manager
333 East Barioni Boulevard
P.O. Box 937
Imperial, CA 92251
Email: TransPlan@iid.com

CAISO:

California ISO
Attn: Infrastructure Contracts & Management
250 Outcropping Way
Folsom, CA 95630
Email: QueueManagement@CAISO.com

Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail):

Approved Project Sponsor:

Jamie Asbury
jlasbury@iid.com
(760) 482-3379

CAISO:

Deb Le Vine
dlevine@caiso.com
(916) 351-2144

PC ORIGINAL PKG

Appendix E

Approved Project Sponsor's Costs of Project

The Approved Project Sponsor agrees to a binding cost cap of $14.3 Million for the Project. In addition, IID will not include interest during construction. The estimated cost components for the Project are as follows:

Substation Costs	
Environmental & Real Estate	$ 585,000
Engineering	533,329
Materials & Equipment	3,518,892
Construction/Inspection/Construction Mgmt.	2,731,589
Subtotal	$ 7,368,810
Transmission Cost	
Environmental & Real Estate	$ 215,000
Engineering	162,464
Materials & Equipment	1,441,677
Construction/Inspection/Construction Mgmt.	980,859
Subtotal	$ 2,800,000
Project Management	$ 233,792
Bay Position at IV Substation	$ 1,500,000
Subtotal	$ 11,902,602
Contingencies	2,380,520
Total	**$ 14,283,122**

The Approved Project Sponsor may adjust the amounts in each cost category as needed during the term of the APSA provided the total Project cost does not exceed $14,14,283,122.

In accordance with Article 5.2.7, the Approved Project Sponsor shall provide a summary of the final cost of the construction of the Project as soon as reasonably practicable within twelve months of the completion of construction.

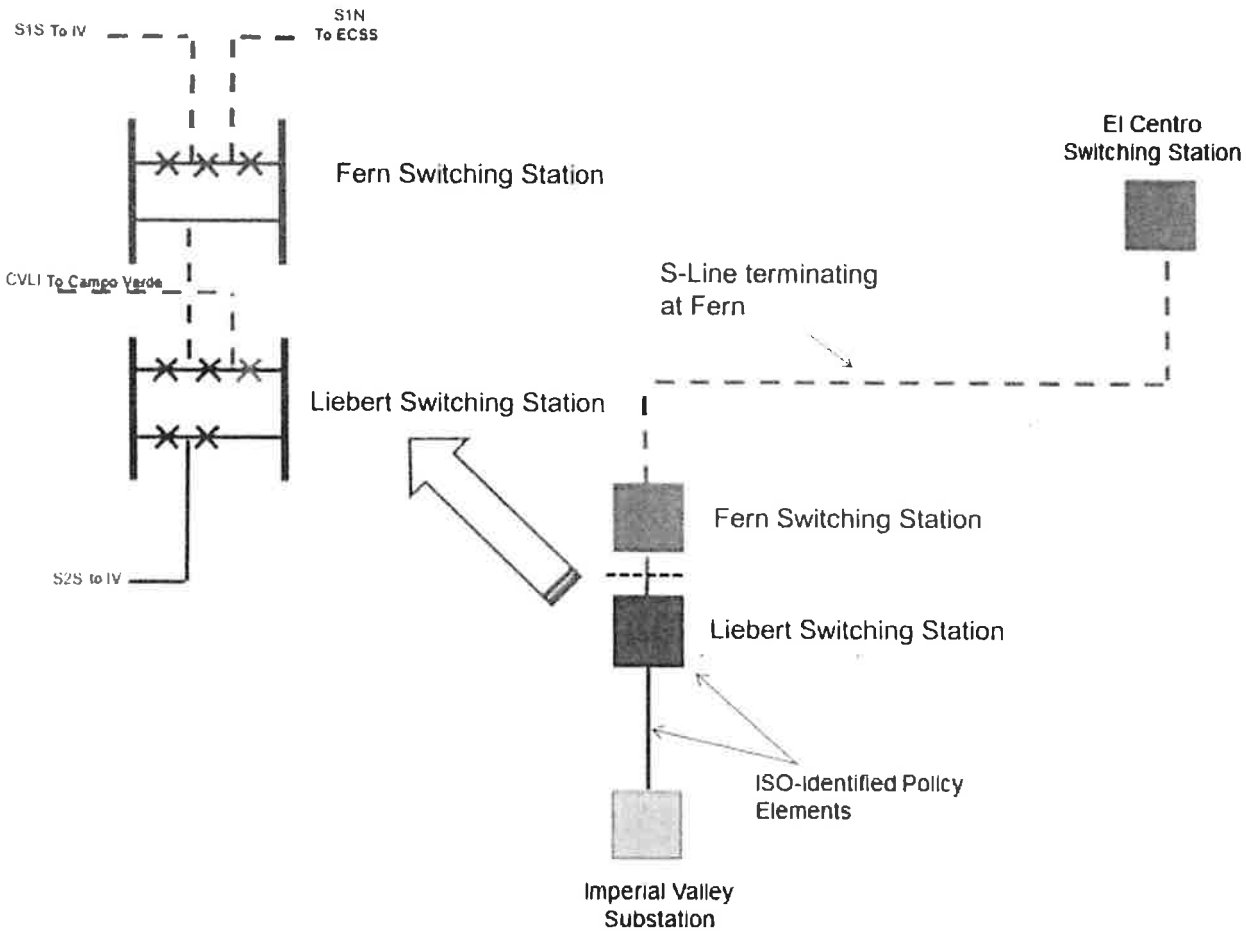
PC ORIGINAL PKG

Exhibit 1

Imperial Valley Element Diagram

PC ORIGINAL PKG

Exhibit 1 – Imperial Valley Element Diagram



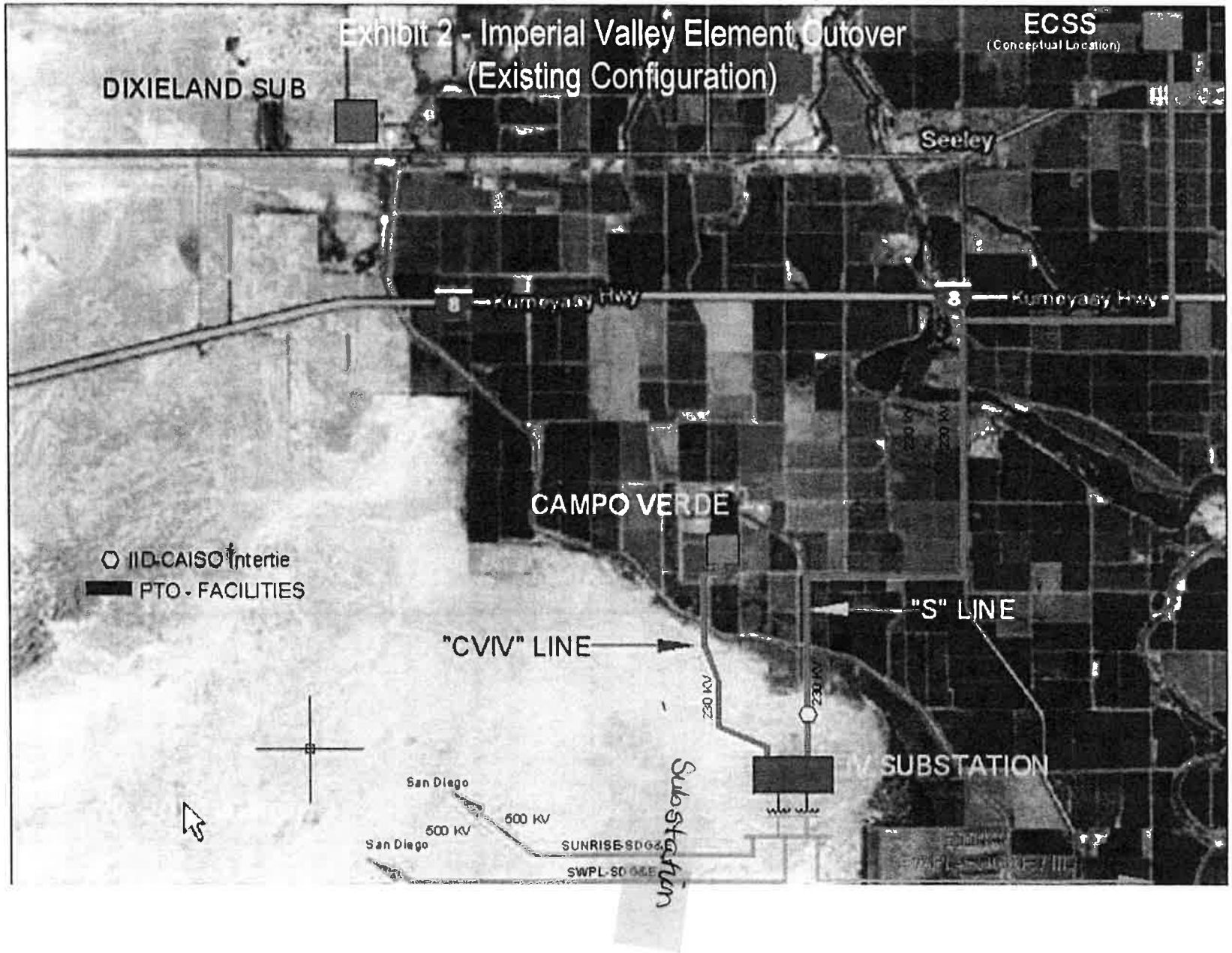
PC ORIGINAL PKG

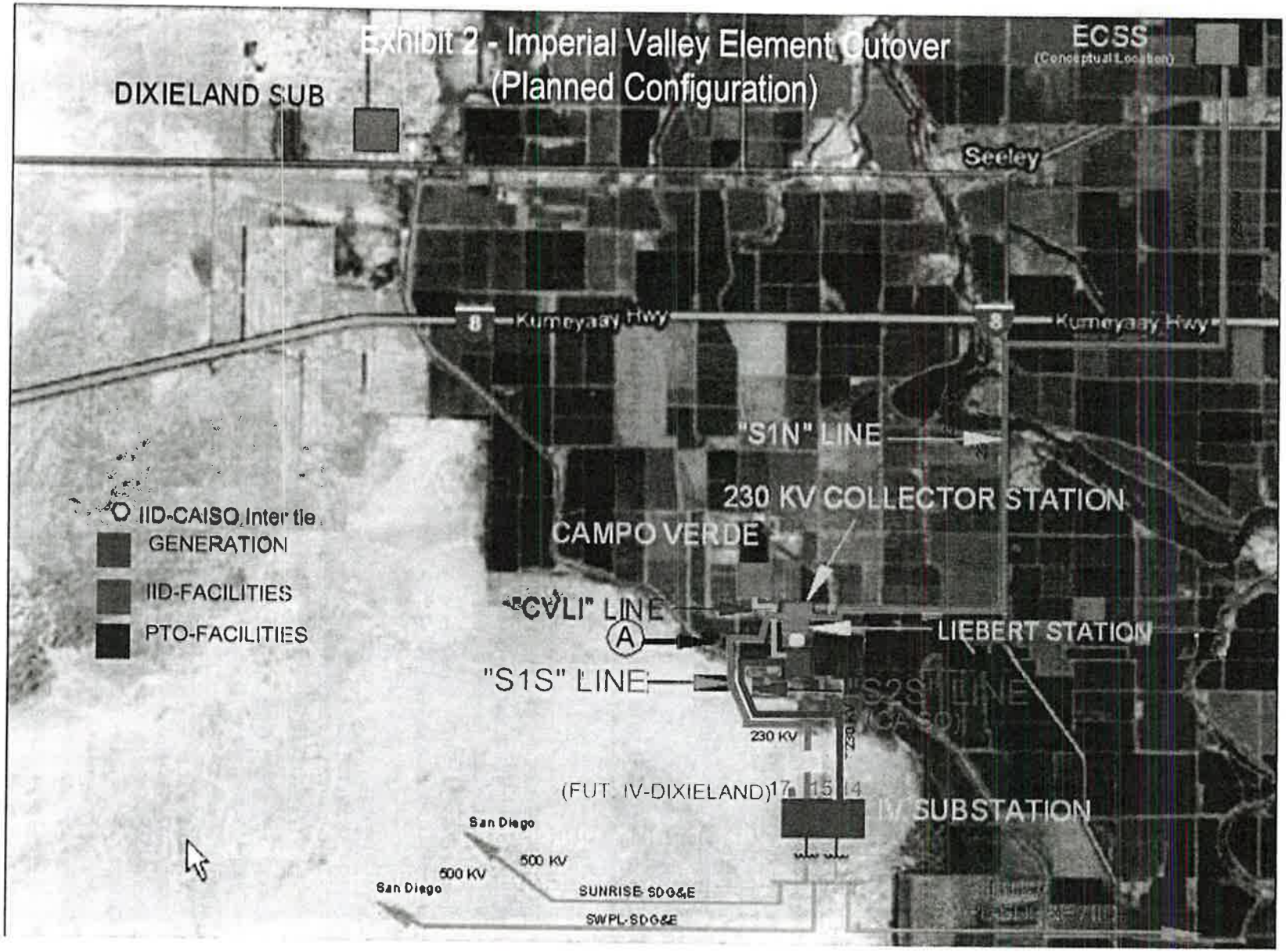
Exhibit 2

Imperial Valley Element Cutover

PC ORIGINAL PKG

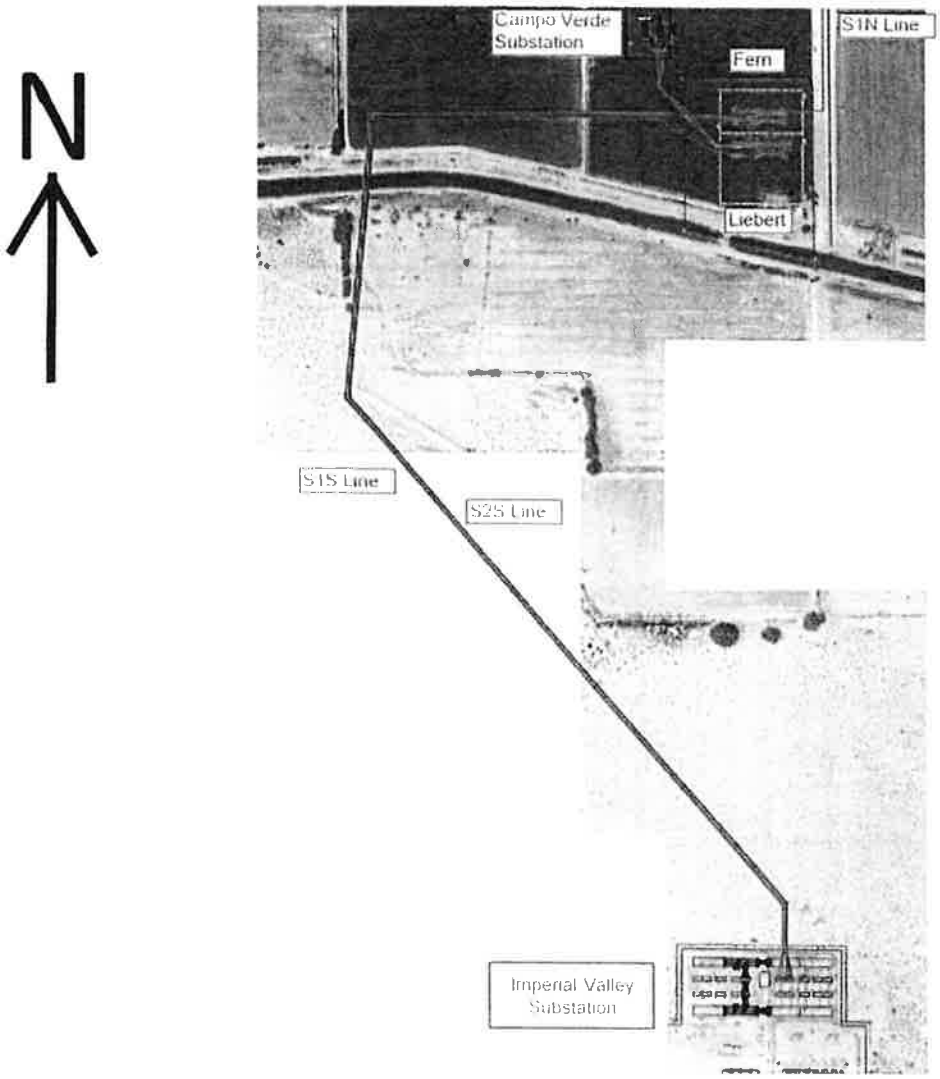
PC ORIGINAL PKG





PC ORIGINAL PKG

Exhibit 3 – General Location Map



PC ORIGINAL PKG

Exhibit 3

General Location Map

PC ORIGINAL PKG

EXHIBIT 4

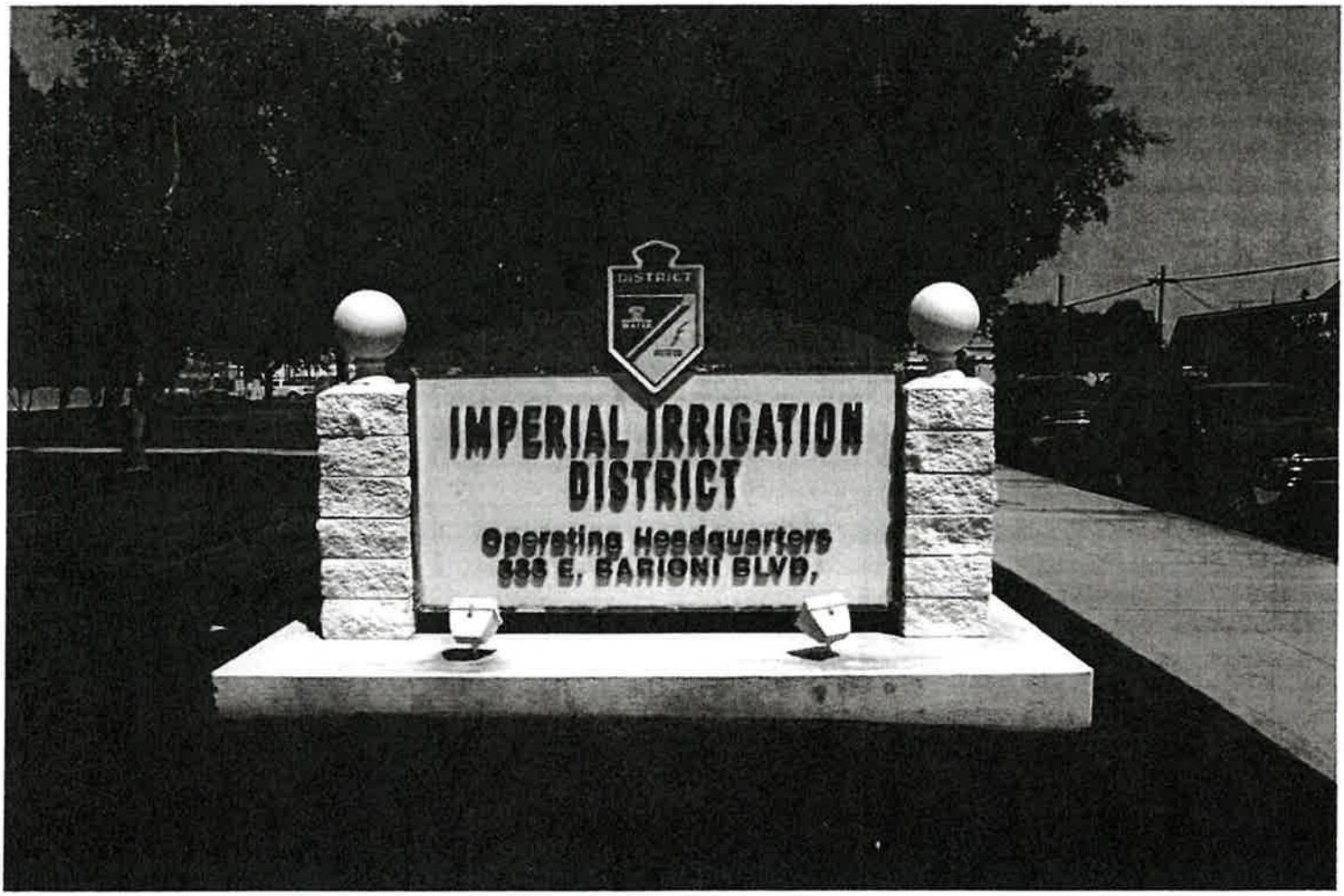
https://www.ivpressonline.com/featured/iid-files-second-lawsuit-against-caiso/article_43c21d5e-6f2d-11e5-afe3-2b2b42b5655c.html

RECEIVED
SEP 11 2025
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

FEATURED

IID files second lawsuit against CAISO

By EDWIN DELGADO, Staff Writer
Oct 10, 2015



The Imperial Irrigation District filed a lawsuit against the California Independent System Operator on Friday after IID's efforts to obtain public records from CAISO have not been met.

The lawsuit has been filed under the Imperial County Supreme Court.

PC ORIGINAL PKG

This is the second lawsuit IID has filed against CAISO, after filing an antitrust lawsuit against the CAISO back in July alleging a deliberate and systematic marginalization when it comes to import capability values, or deliverability of energy through CAISO's grid.

The lawsuit in July was filed to the U.S. District Court, Southern District of California.

IID sued CAISO because it feels they are not allowing IID and the renewable energy industry to grow to its full potential.

This time the issue pertains to CAISO's inability to provide the information that they are supposed to keep on record under California Public Records Law.

IID Governmental Affairs Officer Antonio Ortega said that IID's attorneys made 10 different requests for specific information from July 2 to Aug. 4, but instead of getting the information they requested all they got was PDFs from CAISO's website that were not pertinent to the information IID had requested.

"We are requesting them to produce the requested communication, from emails, written invites for meetings that Involve IID and its Maximum Import Capacity of renewable energy," Ortega said. "We gave them an opportunity to bundle all that information together instead of handling all requests separately and we still have seen no cooperation from them."

The information that IID is interested in is how CAISO determines the maximum import capacity from IID. Ortega said that in the past few years CAISO has constantly changed the amount of megawatts that IID can export out of their service area.

At first IID was allowed to export 1,400 megawatts, but the following year the number was reduced to 600 and last summer they had zero and later went back up to 480.

"Since 2011 there has been a back-and-forth discussion about the transmission capacity of IID, we have challenged their calculations of how many megawatts we can deliver into their grid," Ortega said. "They have constantly changed the numbers that they have given to us, we have repeatedly asked them to provide us information about how their formula works. Our own engineers disagree with their evaluations."

CAISO was not ready to comment on the lawsuit.

PC ORIGINAL PKG

CAISO's intent "to adjust the MIC upward and conduct future planning activities to maintain that level going forward to reflect the generation development that has taken place in IID and have capacity contracts with CAISO load serving entities, once the necessary transmission upgrades are in place," the lawsuit states. "CAISO has failed to produce a single email or record of communication regarding the letter dated July 9, 2015, or the IID's 2016 MIC as determined by CAISO."

PC ORIGINAL PKG

EXHIBIT 5



News Releases

Current IID News

Federal judge says IID case against CAISO can move forward

A federal judge has ruled that IID's court case alleging monopolistic practices by the California Independent System Operator can proceed.

Post Date: 08/02/2016

A federal judge has ruled that Imperial Irrigation District's court case alleging monopolistic practices by the California Independent System Operator can proceed.

In his ruling on Monday, United States District Court Judge Anthony J. Battaglia also stated that IID's case against CAISO threatens competition for generators of renewable energy located within the district's service territory.

"This reduction in competition for generation potentially raises the costs of renewable energy for those entities," the court wrote, and could "ultimately affect the rates passed on to the public."

Judge Battaglia also let stand the IID's claims against CAISO for breach of contract, conversion, unjust enrichment and restitution.

"IID is pleased that the case against CAISO can now move forward," said IID general manager Kevin Kelley. "There is no doubt that the district, its renewable energy generators and ultimately its ratepayers have been harmed by the state's grid operator in denying transmission access to IID's balancing area."

Last July, the district initiated civil litigation, alleging CAISO's deliberate and systematic marginalization of IID, its ratepayers and all renewable energy generators seeking to develop projects in the district's service area. The district alleges that, CAISO, through its actions over many years has exercised its monopoly power to manipulate the import capability values it assigns to IID to stifle competition, create uncertainty in the marketplace and, effectively, take over IID's energy balancing authority area.

The Aug. 1, 2016, ruling is available at: https://www.iid.com/home/showdocument?id=11841

IID's complaint is available at: http://www.iid.com/home/showdocument?id=11815

Return to full list >>

RECEIVED
P 11 20
IMPERIAL COUNTY
DEVELOPMENT S

Imperial Irrigation District and the California Independent System Operator announced this week the two parties have reached a settlement that ends existing litigation between them.

As a result, more climate-friendly energy from the IID service area can be delivered to the rest of California.

"For IID, this has always been about ensuring basic fairness, a level playing field and protecting our balancing authority and our ratepayers for the sustained benefit of the region," said Kevin Kelley, IID general manager.

As part of the settlement, CAISO has agreed to upgrade one of IID's power lines (S-Line) that will allow more electricity to flow from the Imperial Valley to other markets. CAISO has also agreed to do more to help promote geothermal development, a priority for the district, in the Salton Sea Known Geothermal Resource Area.

Both parties also agreed to establish a local coordination working group to address important issues that may arise in the future.

Resolving the dispute gives the parties a common platform to move forward on issues that both agencies care about, Kelley added.

Located in what is considered the "renewable energy capital of the world" IID can serve as a conduit for renewable energy development in the west, helping California meet its aggressive renewable energy and climate goals while creating added economic development and job opportunities in a region that desperately needs them.

###

Return to full list >>

PC ORIGINAL PKG



News Releases

Current IID News

IID Rebuts Inaccurate Desert Sun Reporting

On Tuesday, the IID Board was presented with a report that rebuts the November 26 news article published by the Desert Sun that claims the district "left millions on the table" when it agreed to sell 1,400 acres of farmland in 2011.

Post Date: 12/05/2017 4:59 PM

During its regularly scheduled meeting Tuesday, the IID Board of Directors was presented with a report that rebuts the November 26 news article published by the Desert Sun that claims the district "left millions on the table" when it agreed to sell 1,400 acres of farmland to a solar developer in 2011.

Attorney Mike Aguirre, who has been retained by the board to investigate media accounts and questions raised as to the nature of the relationship between the IID and consultant Zglobal, provided the board with Interim Report No. 3, which details the sale of the property. A certified fraud investigator, Aguirre concluded the allegation that IID left millions of on the table is "factually incorrect".

In his report, Mr. Aguirre goes into great detail explaining how the developer secured a power purchase agreement with San Diego Gas & Electric–enabling it to sell the property for more money than when it was owned by IID. At the time of the sale of the 1,942 acres, not 1,400 acres, IID relied on comparable sales for similar lands.

The premise of the allegations—that the IID board left several million dollars on the table in connection with the Solar Gen 2 land deal—is not correct. As detailed in the report, "the financial details of the land sale, achievement of IID's overarching goal of facilitating transmission connections to the California Independent System Operator, and the realization of water transfer savings all support the conclusion that the Solar Gen 2 transaction was a sound and prudent exercise of the IID board's business judgment."

Director Ortega, who was not on the board at the time of the deal, noted the water rights retention and how that created almost "$50 million in savings to the district. It's important that the public understand this, so they have a better understanding of why this was not a bad deal."

Director Hanks further added, "I was on the board at the time of the vote. When it was sold, this land and the surrounding land was being sold as farmland. Of all the parcels that were sold, the added value that this property brought by connecting IID to the CAISO grid, gave us the highest rate of return as compared to the 20,000+ acres that were sold. It was a tremendous deal for both our energy and water ratepayers."

A full copy of the report and a recording of director and management comments are available at www.iid.com

# # #

Return to full list >>

PG ORIGINAL PKG



News Releases

Current IID News

IID, CAISO settlement promotes local renewable energy development

IID and the CAISO announced this week the two parties have reached a settlement that ends existing litigation between them.

Post Date: 03/09/2018 9:39 PM

Imperial Irrigation District and the California Independent System Operator announced this week the two parties have reached a settlement that ends existing litigation between them.

As a result, more climate-friendly energy from the IID service area can be delivered to the rest of California.

"For IID, this has always been about ensuring basic fairness, a level playing field and protecting our balancing authority and our ratepayers for the sustained benefit of the region," said Kevin Kelley, IID general manager.

As part of the settlement, CAISO has agreed to upgrade one of IID's power lines (S-Line) that will allow more electricity to flow from the Imperial Valley to other markets. CAISO has also agreed to do more to help promote geothermal development, a priority for the district, in the Salton Sea Known Geothermal Resource Area.

Both parties also agreed to establish a local coordination working group to address important issues that may arise in the future.

Resolving the dispute gives the parties a common platform to move forward on issues that both agencies care about, Kelley added.

Located in what is considered the "renewable energy capital of the world" IID can serve as a conduit for renewable energy development in the west, helping California meet its aggressive renewable energy and climate goals while creating added economic development and job opportunities in a region that desperately needs them.

###

Return to full list >>

EXHIBIT 8

https://www.thedesertreview.com/news/iid-ends-litigation-with-caiso/article_36d7736c-01dd-11eb-9fe8-b3a5b4f8b959.html

IID ends litigation with CAISO

by Betty Miller
Oct 3, 2020



EL CENTRO — The Imperial Irrigation District voted at its September 22 meeting to approve a settlement agreement with the California Independent System Operator (CAISO) Corporation and Citizens Energy to dismiss with prejudice a federal district court lawsuit.

PC ORIGINAL PKG

Once the board voted to agree to the settlement, Pete Smith, a Citizens Energy representative said, "Mr. Joe Kennedy regrets he couldn't attend, but wanted me to express to everyone how much he appreciates the vote, and it went really well, and how much he appreciates the partnership and he enjoyed working with the IID board and staff."

The settlement provided that the CAISO will fund up to $40 million toward an upgrade of IID's 230kV S-Line. The settlement also provided that federal district court litigation between the CAISO and IID be dismissed with prejudice once the terms of the agreement are met, including the funding and construction of the S-Line upgrades.

The settlement is subject to CAISO finding a new or existing participating transmission partner to fund the S-Line upgrades. The partner identified was an affiliate of Citizens Energy, Citizens S-Line transmission, LLC — a non-profit energy company run by Joe Kennedy II.

Citizens Energy's website explained its business plan, "Our unique investment model means we partner with investor-owned and public utilities and large energy companies to build crucial pathways from green energy generation to end-users, while using our profits from these projects to provide energy affordability for low-income families in the communities impacted by the construction."

Citizens shall make a payment of $40 million to IID as prepaid rent. IID will provide to Citizens an accounting of all final costs incurred by IID to construct the S-Line upgrade. If the total amount of the construction costs is less than the $40 million, IID will refund the difference.

Director Jim Hanks asked Citizen's Energy Representative Pete Smith how Citizens will generate income to pay for the transfer of $40 million to IID.

"As soon as we transfer the funds to the IID, we have a FERC (Federal Energy Regulatory Commission) approved tariff we will charge CAISO that they will pay every month for thirty to forty years," Smith said. "We will earn a certain return to use to pay for low-income residents."

Citizens has agreed to fund Low Income Energy Programs — which could include one of its own — to low income Imperial Valley residents to help with their power bill. The funding will be an equal amount of its net after-tax cash flow for the year.

PG ORIGINAL PKG

The S-Line in its current configuration is an 18.1 mile, 230kV single circuit wood pole transmission line running from the IID-owned El Centro switching station, to the joint owned SDG&E and IID Imperial Valley Substation. The S-Line upgrade will provide benefits of increased deliverability from the Imperial area, and IID, in particular. The funding and construction of the S-Line upgrade is a key element of the settlement agreement between the CAISO and IID.

The upgrade will have no impact on ownership of the S-Line, the line will remain under IID ownership and within the IID balancing authority.

Citizens will contract with IID for IID to build and reconnect to the CAISO controlled grid at the Imperial Valley Substation.

PC ORIGINAL PKG

Rocio Yee

From: Curtis Blondell
Sent: Wednesday, September 24, 2025 7:44 AM
To: Rocio Yee
Cc: Monica Soucier; Jim Minnick; Michael Abraham; Diana Robinson
Subject: Big Rock Cluster 2 FEIR - APCD comments
Attachments: 01 Big Rock PC_FEIR_Aug2025.pdf; 02 ICAPCD CEQA Air Quality Handbook Discretionary Measures.pdf

RECEIVED
SEP 24 2025
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

Rocio

As discussed over the phone. The Air District has concerns regarding the project identified as the Big Rock 2 Cluster Solar & Storage Project ("Project") going before the Planning Commission today.

Specifically, the Final Environmental Impact Report (FEIR), does not reflect the required changes that would allow the Air District to conclude consistency with the findings as expressed in the comment letter dated June 17, 2025. The concern is sufficient to formally request a copy of the **Draft Conditional Use Permit** to assure that the conditions contains those conditions written in the proper language so as to be consistent and enforceable with the Air District rules, regulations and policies.

The inconsistency and unenforceable language contained in the FEIR and in the response to the Air District comment letter includes but is not limited to making mitigation exclusive to the detriment to the purpose of the rules. For example:

- The first Discretionary Measure listed in MM AQ-1 of the FEIR Planning Commission (PC) packet still retains language inconsistent with that found in section 7.1 of the Imperial County CEQA Air Quality Handbook.
    - Per attachment 01, the current language in the FEIR reads, "Water exposed soil **only** in those areas where active grading and vehicle movement occurs with adequate frequency to **control dust**."
    - Per attachment 02, the actual language contained in the CEQA Handbook should read, "Water exposed soil with adequate frequency for continued **moist soil**."

The language as written in the CEQA Handbook is consistent with the purpose of Regulation VIII to maintain opacity below 20% and when appropriate stabilize a surface area. The FEIR response keeps inconsistent language that is contrary to the APCD rules and regulations.

Another example:

- MM AQ-2 of the FEIR PC packet commits to submitting equipment lists "annually" instead of monthly (see attachment 01). The annually language is unenforceable as written and provides no recourse for corrective action. Additionally, the equipment submissions are to evaluate NOx emissions, not air emissions.

Other examples include:

PC ORIGINAL PKG

ATTACHMENT "Q"

EEC PACKAGE

PC ORIGINAL PKG

PROJECT REPORT

TO: ENVIRONMENTAL EVALUATION COMMITTEE **AGENDA DATE: September 26, 2024**

FROM: PLANNING & DEVELOPMENT SERVICES **AGENDA TIME: 1:30 PM/ No.1**

INFORMATIONAL ONLY

Big Rock 2 Cluster - GPA #240002 and ZC # 24-0003

PROJECT TYPE: CUP #24-0006 - 0009 and V #24-0002 - 0005 SUPERVISOR. DIST #2

LOCATION: 1520 Jessup Rd. APN: 051-300-036-000 et al

El Centro , CA 92243 PARCEL SIZE: +/- 1569 AC

GENERAL PLAN (existing) Agriculture GENERAL PLAN (proposed) RE Overlay Zone

ZONE (existing) A-2 / A-2-R / A-2-RE / A-3 / A-2-R-RE ZONE (proposed) A-2-RE /A-2-R-RE / A-3-RE

GENERAL PLAN FINDINGS ☒ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 09/26/24

INITIAL STUDY: #24-0009

☐ NEGATIVE DECLARATION ☐ MITIGATED NEG. DECLARATION ☒ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☒ NONE	☐ ATTACHED
AG COMMISSIONER	☒ NONE	☐ ATTACHED
APCD	☒ NONE	☐ ATTACHED
DEH/E.H.S.	☒ NONE	☐ ATTACHED
FIRE / OES	☒ NONE	☐ ATTACHED
OTHER	CEO, Imperial County Sheriff's Office	

REQUESTED ACTION:

(See Attached)

Planning & Development Services
801 MAIN ST., EL CENTRO, CA 92243 442-265-1736
(Jim Minnick, Director)

PC ORIGINAL PKG

EEC ORIGINAL PKG

Screencheck Initial Study and NOP

Big Rock 2 Cluster Solar & Storage Project

Initial Study #: 24-0009

CUP #s:

- Big Rock Cluster North: #24-0006
- Big Rock Cluster South: #24-0007
- Big Rock Cluster East/Laurel Cluster South: #24-0008
- Big Rock Cluster West: #24-0009

General Plan Amendment: #24-0002

Zone Change: #24-0003

Variance: #24-0002

Imperial County, CA

September 2024

Reviewed by:

County of Imperial

Planning & Development Services Department

801 Main Street

El Centro, CA 92243

Prepared by:

HDR Engineering, Inc.

591 Camino de la Reina, Suite 300

San Diego, CA 92108

PC ORIGINAL PKG

EEC ORIGINAL PKG



This page is intentionally blank.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Contents

Introduction 1
A. Purpose 1
B. CEQA Requirements and the Imperial County's Rules and Regulations for Implementing CEQA 1
C. Intended Uses of Initial Study and Notice of Preparation 2
D. Contents of Initial Study and Notice of Preparation 2
E. Scope of Environmental Analysis 3
F. Policy-Level or Project-Level Environmental Analysis 3
G. Tiered Documents and Incorporation by Reference 3

Environmental Checklist Form 6
Environmental Factors Potentially Affected 9
Environmental Evaluation Committee Determination 9

Project Summary 11
Project Location 11
Project Summary 13
Environmental Setting 18
General Plan Consistency 19

Evaluation of Environmental Impacts 23
I. Aesthetics 25
II. Agriculture and Forestry Resources 27
III. Air Quality 29
IV. Biological Resources 30
V. Cultural Resources 32
VI. Energy 33
VII. Geology and Soils 34
VIII. Greenhouse Gas Emissions 36
IX. Hazards and Hazardous Materials 37
X. Hydrology and Water Quality 39
XI. Land Use and Planning 41
XII. Mineral Resources 42
XIII. Noise 43
XIV. Population and Housing 44
XV. Public Services 45
XVI. Recreation 46
XVII. Transportation 47
XVIII. Tribal Cultural Resources 48
XIX. Utilities and Service Systems 49
XX. Wildfire 51
XXI. Mandatory Findings of Significance 53

References 55

List of Preparers 56

PC ORIGINAL PKG

EEC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Introduction

A. Purpose

This document is a ☐ policy-level; ☒ project-level Initial Study for evaluation of potential environmental impacts resulting with the proposed Big Rock 2 Cluster Solar & Storage Project.

B. CEQA Requirements and the Imperial County's Rules and Regulations for Implementing CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's Rules and Regulations for Implementing CEQA, an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

☒ According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

☐ According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.

☐ According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will result in potentially significant environmental impacts and therefore, an Environmental Impact Report is deemed as the appropriate document to provide necessary environmental evaluations and clearance for the proposed project.

This Initial Study and Notice of Preparation are prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); the State CEQA Guidelines & County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA; applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning

PC ORIGINAL PKG
EEC ORIGINAL PKG

Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

C. Intended Uses of Initial Study and Notice of Preparation

This Initial Study and Notice of Preparation are informational documents which are intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Initial Study and Notice of Preparation, prepared for the project will be circulated for a period of no less than 35 days for public and agency review and comments.

D. Contents of Initial Study and Notice of Preparation

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

PROJECT SUMMARY, LOCATION AND ENVIRONMENTAL SETTINGS describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

PC ORIGINAL PKG
EEC ORIGINAL PKG

E. Scope of Environmental Analysis

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. No Impact: A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.
2. Less Than Significant Impact: The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
3. Less Than Significant with Mitigation Incorporated: This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact."
4. Potentially Significant Impact: The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. Policy-Level or Project-Level Environmental Analysis

This Initial Study will be conducted under a ☐ policy-level, ☒project-level analysis.

Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures, and therefore, will not be identified in this document.

G. Tiered Documents and Incorporation by Reference

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. **Tiered Documents**

   As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

   "Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

   Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

   "Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development

PC ORIGINAL PKG

EEC ORIGINAL PKG

projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

2. **Incorporation by Reference**

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]).

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR is available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.
- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243, Ph. (442) 265-1736.
- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

PC ORIGINAL PKG
EEC ORIGINAL PKG

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the 'County of Imperial General Plan EIR is SCH #93011023.

The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f])

PC ORIGINAL PKG

EEC ORIGINAL PKG

Environmental Checklist Form

1. **Project Title:** Big Rock 2 Cluster Solar & Storage Project
2. **Lead Agency name and address:** Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243
3. **Contact person and phone number:** Diana Robinson, Planning Division Manager, 442-265-1736
4. **Project location:** The proposed Big Rock 2 Cluster Solar and Storage Project is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately owned land, comprising 24 assessor parcels. The project site includes 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 south will be re-entitled as part of the proposed project.

   The entire Project area is designated Agricultural in the General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.
5. **Project sponsor's name and address:**
   90FI 8ME LLC,
   4370 Town Center Boulevard, Suite 110
   El Dorado Hills, CA 95762
6. **General Plan Designation:** Agriculture
7. **Zoning:** A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), and A-2-RE (General Agricultural - Renewable Energy Overlay).
8. **Description of project:** The Project would include the construction and operation of a PV solar energy generation and battery energy storage system (BESS) facility comprised of up to 500 megawatts alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the San Diego Gas & Electric (SDG&E) Imperial Valley substation via an overhead 230-kV gen-tie line. Two gen-tie line alternatives are proposed.
9. **Surrounding land uses and setting: Briefly describe the project's surroundings:** The project site is surrounded by a mix of agricultural fields, and within and/or adjacent to the Laurel Cluster Solar Farm Project site, formally known as Big Rock 1 Cluster and is adjacent to, and/or in immediate proximity to other solar farms including the VEGA SES Solar Energy Project and Campo Verde Solar project.

PC ORIGINAL PKG
EEC ORIGINAL PKG

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Imperial Irrigation District

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the proposed Project would cross IID facilities with access points and electrical crossings. The proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)

PC ORIGINAL PKG

EEC ORIGINAL PKG

- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    Pursuant to AB-52 and Public Resources Code, Section 21080.3.1(d) Formal Notification of Determination that a Project Application is Complete or Decision to undertake a Project, and Notification of Consultation Opportunity, the County sent the following via certified mail:

    - Campo Band of Mission Indians (June 12, 2024)
    - Quechan Indian Tribe (June 12, 2024)

    (Waiting for response from NAHC, then County sent out SB 18 letters and the GPA/Zone Change on September 3, 2024. The comment period will close on November 27, 2024.).

PC ORIGINAL PKG
EEC ORIGINAL PKG

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☒	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology/Soils	☒	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials
☒	Hydrology / Water Quality	☒	Land Use/Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☒	Public Services
☒	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☒	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

Environmental Evaluation Committee Determination

After Review of the Initial Study, the Environmental Evaluation Committee (EEC) has:

- ☐ Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

PC ORIGINAL PKG

EEC ORIGINAL PKG

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☐	☐	☐
ENVIRONMENTAL HEALTH	☐	☐	☐
OFFICE EMERGENCY SERVICES	☐	☐	☐
APCD	☐	☐	☐
AG	☐	☐	☐
SHERIFF DEPARTMENT	☐	☐	☐
ICPDS	☐	☐	☐

Jim Minnick, Director of Planning/EEC Chairman

Signature

Date:

PC ORIGINAL PKG

EEC ORIGINAL PKG

Project Summary

Project Location

The proposed Big Rock 2 Cluster Solar and Storage Project is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. An overview of the project location from a regional perspective is shown in Figure 1. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately owned land, comprising 24 assessor parcels. The project site includes 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South projects will be re-entitled as part of the proposed project.

The entire Project area is designated Agricultural in the General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

1. **Big Rock Cluster North: CUP No. 24-0006**

   Big Rock Cluster North: CUP No. 24-0006 is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of this site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	85.5
	Sub-total		**910.0**
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
13	051-300-036 (to be re-entitled)	A-3-RE	40.3

PC ORIGINAL PKG

EEC ORIGINAL PKG

	Sub-total		**120.3**
	TOTAL ACRES		**1,030**

2. Big Rock Cluster South: CUP No. 24-0007

Big Rock Cluster South: CUP No. 24-0007 is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410.0**

3. Big Rock Cluster East/Laurel Cluster South: CUP No. 24-0008 (to be re-entitled)

Big Rock Cluster East/Laurel Cluster South: CUP No. 24-0008 is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

	APN	Zoning	Acres
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	TOTAL ACRES		**160.0**

4. Big Rock Cluster West: CUP No. 24-0009

Big Rock Cluster West: CUP No. 24-0009 is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9

PC ORIGINAL PKG
EEC ORIGINAL PKG

5	051-320-007	A-3	35.3
	TOTAL ACRES		**249.0**

Project Summary

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the IID Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. Two gen-tie line alternatives are also under consideration.

In order to implement the project, 90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of the utility-scale [solar energy generation and BESS facility.

It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another. Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

The project will include PV modules, collection, inverter and transformer systems, BESS, substation(s), transmission line and interconnection, an operations and maintenance building, roadway and IID crossings, water use and storage, site security and fencing, and lighting.

PV Module Configuration

The Project would use PV panels or modules on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). Although the panels could stand up to 15 feet in height, depending on the mounting system used, panels are expected to remain between six and eight feet in height.

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV.

PC ORIGINAL PKG
EEC ORIGINAL PKG

PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are shown in Figure 3; however, not all routes will ultimately be developed.

Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet.

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Dedicated Project substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building.

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard/Sub-station via one of the proposed gen-tie line alternatives as shown in Figure 3. Big Rock 2 will transmit electricity to IID via the Liebert Switchyard/Sub-station, currently under construction in the Big Rock

PC ORIGINAL PKG
EEC ORIGINAL PKG

1 Project; therefore, a new IID switchyard/sub-station will not be required, and thus obviating the need for any real estate conveyance to IID specific to Big Rock 2. The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be undergrounded as necessary.

Alternative gen-tie routing(s) is depicted in Figure 2 may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40' x 80' in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels.

Roadway and IID Crossings

The Project may require the following crossing types of IID canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings. The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner's water supply, local irrigation district, or delivered via truck from off-area source(s). A

PC ORIGINAL PKG

EEC ORIGINAL PKG

small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Construction Access. Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic could access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the Project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Workforce (Construction Phase)

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

• Cleaning of PV panels

• Monitoring PV panel and BESS electricity generation

• Providing site security

• Maintenance of stormwater facilities

PC ORIGINAL PKG

EEC ORIGINAL PKG

• Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

Workforce (Operational Phase)

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

Environmental Setting

The project site is surrounded by a mix of agricultural fields and utility-scale solar facilities.

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 3).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 3).

PC ORIGINAL PKG

EEC ORIGINAL PKG

General Plan Consistency

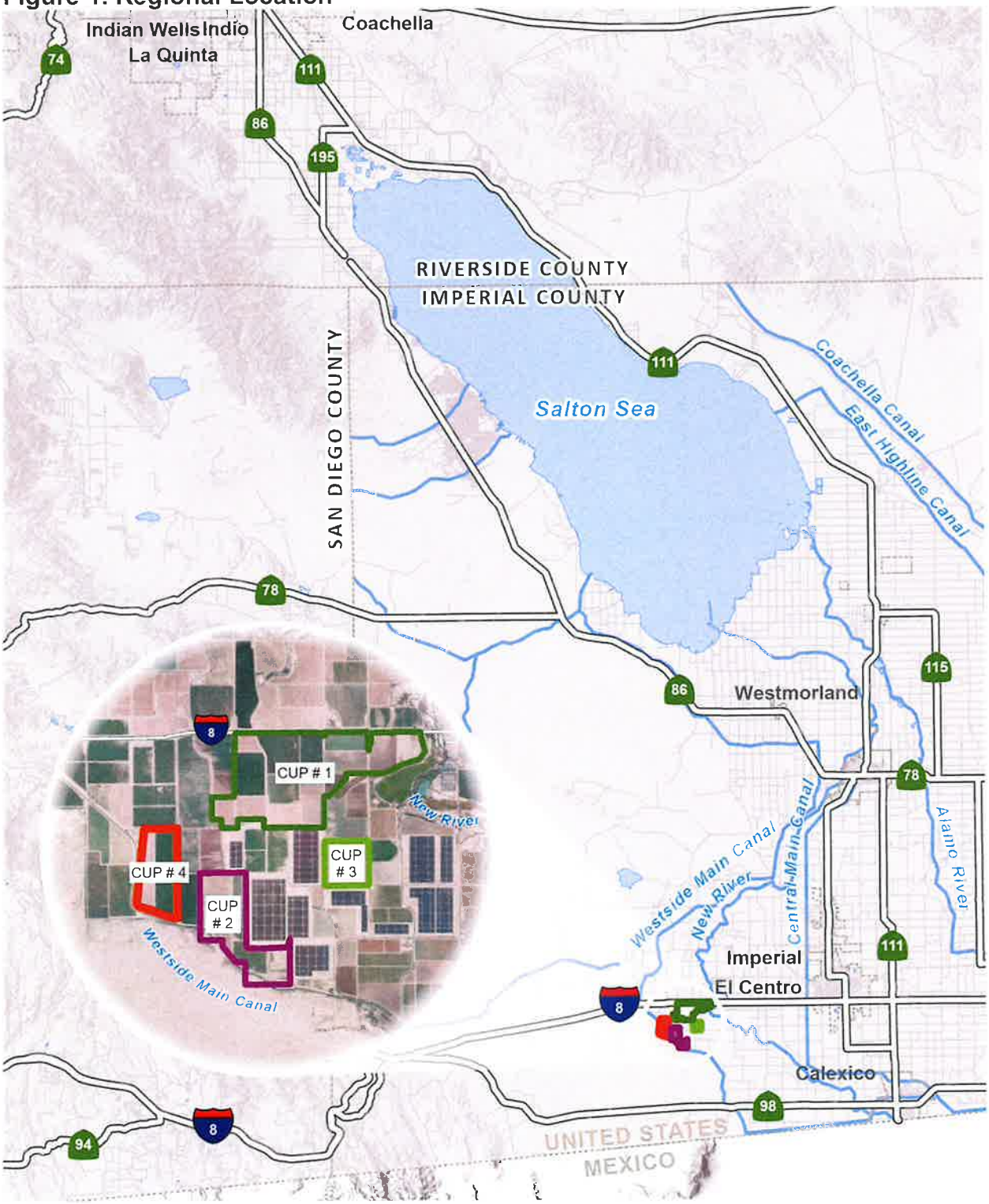
The proposed project is located within an unincorporated area of the County. The existing General Plan land use designation is "Agriculture." The project site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture) and A-2-RE (General Agricultural within the Renewable Energy Overlay). Construction of a solar facility would be allowed within the existing zoning under a Conditional Use Permit (CUP).

The County Land Use Ordinance, Division 17, includes the Renewable Energy (RE) Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved CUP. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overly Zone. The majority of the project site is located outside of the RE Overlay Zone. Therefore, the proposed project requires a General Plan Amendment and Zone Change to include/classify the project parcels into the RE Overlay Zone. No change in the underlying General Plan land use (Agriculture) is proposed.

PC ORIGINAL PKG

EEC ORIGINAL PKG

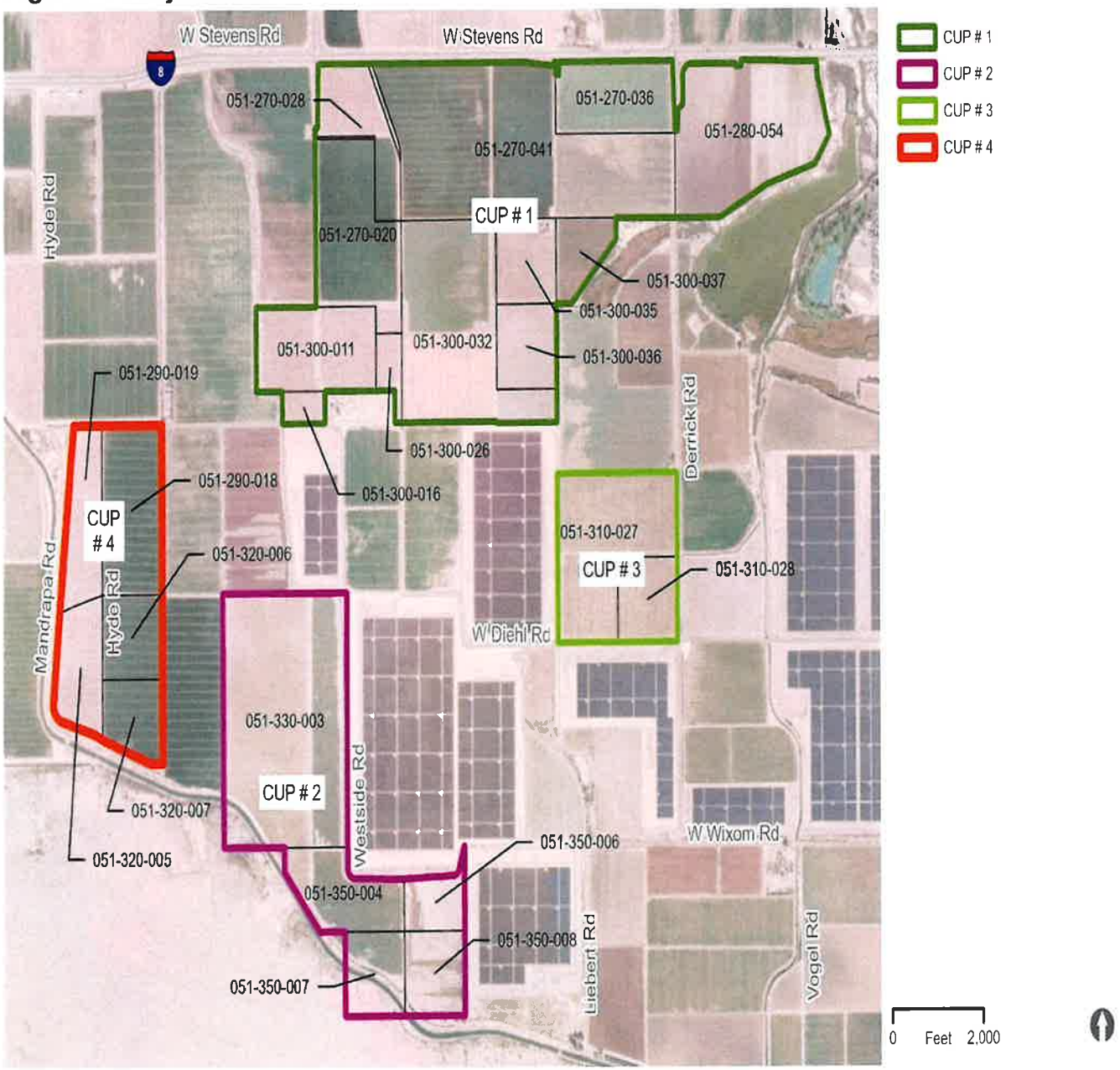
Figure 1. Regional Location



PC ORIGINAL PKG

EEC ORIGINAL PKG

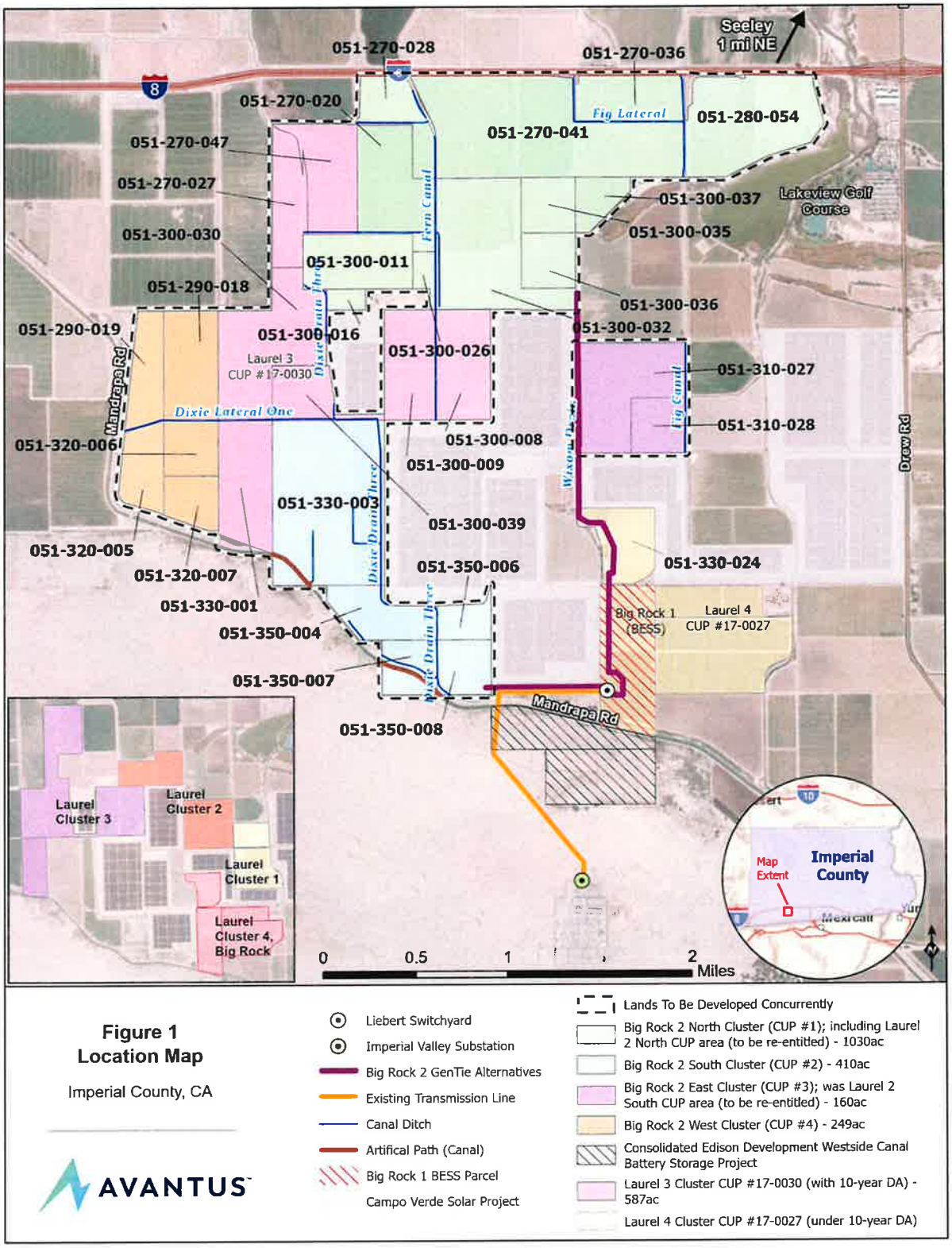
Figure 2. Project Site



PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 3 Detailed Site Plan



PC ORIGINAL PKG

EEC ORIGINAL PKG

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

PC ORIGINAL PKG

EEC ORIGINAL PKG

I. Aesthetics

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Impact Analysis

a) **No Impact.** According to the Conservation and Open Space Element of the Imperial County General Plan, the solar energy facility site is not located within an area that has been formally identified as a federal, state, or county scenic vista. No scenic vistas or areas with high visual quality would be disrupted. Thus, no impact is identified for this issue area and no further analysis is warranted.

b) **No Impact.** According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System (Caltrans 2018), the project site is not located within a state scenic highway corridor, nor are there any state scenic highways located in proximity to the project site. The nearest eligible State scenic highway is the segment of the Sunset Cliffs Boulevard/State Route 98 west of Ocotillo. The project is located approximately 14 miles east of Ocotillo and therefore would not be visible from the project site. The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway. Therefore, no impact is identified for this issue area and no further analysis is warranted.

c) **Potentially Significant Impact.** Although the project site is not located near a scenic highway or designated scenic vista, the proposed project may result in a change to the look and rural character of the area. Therefore, a potentially significant impact is identified for this issue area. A visual assessment will be prepared for the project and this issue will be addressed in the EIR.

d) **Potentially Significant Impact.** The proposed project is located in a rural area of Imperial County and is developed with agricultural uses and utility-scale solar generation facilities. There are no established residential neighborhoods immediately adjacent to the project site. Minimal lighting is required for project operation and is limited to safety and security functions. All lighting will be directed away from any public right-of-way. The Big Rock Cluster 2 North is located along (immediately south of) I-8, and development

PC ORIGINAL PKG

EEC ORIGINAL PKG

setbacks from I-8 are incorporated into the project concept plan for this area. Further, the solar panels will be constructed of low reflective materials; therefore, it is not anticipated that they would result in creating glare. Although the proposed project is not expected to create a new source of substantial light or glare affecting day or nighttime views, a glint and glare assessment will be prepared for the project and this issue will be addressed in the EIR. Therefore, a potentially significant impact is identified for this issue area.

PC ORIGINAL PKG

EEC ORIGINAL PKG

II. Agriculture and Forestry Resources

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's Inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☒	☐	☐	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** According to the California Department of Conservation's California Important Farmland Finder, portions of the project site are designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland (California Department of Conservation 2020). Therefore, implementation of the proposed project has a potential to result in the conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural use. This is considered a potentially significant impact, a Land Evaluation Site Assessment will be prepared for the project and this issue will be analyzed in further detail in the EIR.

PC ORIGINAL PKG

EEC ORIGINAL PKG

b) **Potentially Significant Impact.** The project sites are currently zoned A-2, A-2-R, A-2-RE, A-3 and A-3-RE and designated by the General Plan as "Agriculture." Solar energy facilities are allowed within these zones subject to a conditional use permit; however, project approvals include a General Plan Amendment and zone change for the entire project area. Approval of the General Plan amendment and zone change would add portions of the project area that are not currently within the Renewable Energy overlay to Imperial County's Renewable Energy Overlay only; no land use amendment is requested, and the underlying "Agriculture" designation would remain. Because the project sites are located on land designated for agricultural uses, this issue will be analyzed in further detail. As mentioned above, a Land Evaluation Site Assessment will be prepared for the projects, and this issue will be addressed in the EIR.

As of December 31, 2018, all Williamson Act contracts in Imperial County have been terminated. The project site is not located on Williamson Act contracted land. Therefore, the proposed project would not conflict with a Williamson Act contract and no impact is identified.

c) **No Impact.** There are no existing forest lands, timberlands, or timberland zoned "Timberland Production" within or immediately adjacent to the project site that would conflict with existing zoning or cause rezoning. Therefore, no impact is identified for this issue area.

d) **No Impact.** There are no existing forest lands within or immediately adjacent to the project site. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact is identified for this issue area.

e) **Potentially Significant Impact.** Refer to response II. a) above.

PC ORIGINAL PKG

EEC ORIGINAL PKG

III. Air Quality

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis

a) **Potentially Significant Impact.** The project site is located within the jurisdiction of Imperial County Air Pollution Control District (ICAPCD) in the Imperial County portion of the Salton Sea Air Basin. Construction of the proposed project would create temporary emissions of dust, fumes, equipment exhaust, and other air contaminants that may conflict with the ICAPCD's rules and regulations. These temporary construction emissions have the potential to result in a significant air quality impact.

b) **Potentially Significant Impact.** The criteria pollutants for which the project area is in state nonattainment under applicable air quality standards are O_3 and PM_{10}. Air pollutants transported into the Salton Sea Air Basin from the adjacent South Coast Air Basin (Los Angeles County, San Bernardino County, Orange County, and Riverside County) and Mexicali (Mexico) substantially contribute to the non-attainment conditions in the Salton Sea Air Basin. A potentially significant impact is identified for this issue area. The CalEEMod air quality model will be utilized to estimate the project's air quality emissions and the results will be included in the EIR analysis.

c) **Potentially Significant Impact.** The project site is located in a rural agricultural area of Imperial County, however, the area also has been developed with utility-scale solar projects. The nearest sensitive land use to the project site is a single-family residence located approximately 100 feet west and south of the proposed Big Rock 2 Cluster North facility. This issue is potentially significant and will be addressed in the EIR analysis.

d) **Less Than Significant Impact**. Land uses commonly considered to be potential sources of odorous emissions include wastewater treatment plants, sanitary landfills, food processing facilities, chemical manufacturing plants, rendering plants, paint/coating operations, and concentrated agricultural feeding operations and dairies. The construction and operation of the proposed solar and BESS, and supporting infrastructure and facilities

are not anticipated to result in odor emissions, and impacts would be less than significant.

PC ORIGINAL PKG

EEC ORIGINAL PKG

IV. Biological Resources

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** According to the Conservation and Open Space Element of the General Plan (County of Imperial 2016), numerous special-status plants and special status species occur in the County of Imperial, and of particular concern is western burrowing owl. The project site has the potential to support native habitats and/or sensitive species. Burrowing owls and burrows are commonly found along canals and drains. Canals and laterals traverse portions of the project site, and the site is in relative proximity

PC ORIGINAL PKG
EEC ORIGINAL PKG

to the larger Westside Main Canal, and New River. Therefore, the project site has the potential to be used as burrowing owl foraging habitat, as burrowing owls and burrows are commonly found along canals and drains. Thus, a potentially significant impact is identified for this issue area. A biological resources technical report that will address the proposed project's potential impacts on biological resources will be prepared and this issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Refer to response IV. a) above.

c) **Potentially Significant Impact.** Being situated in an agricultural area, the project site and surrounding areas are traversed by a network of drains, canals, and other irrigation infrastructure administered by the IID, some of which constitute potentially jurisdictional features. An aquatic resources delineation that will address the proposed project's potential impacts on state or federally protected wetlands will be prepared and included in the EIR analysis.

d) **Potentially Significant Impact.** Refer to response IV. a) above.

e) **Potentially Significant Impact .** Refer to response IV. a) above.

f) **No Impact.** The project site is located within the designated boundaries of a Natural Community Conservation Plan & Habitat Conservation Plan (NCCP/HCP), nor is the project site not located within or adjacent to an Area of Critical Environmental Concern. No impact is identified for this issue area.

PC ORIGINAL PKG

EEC ORIGINAL PKG

V. Cultural Resources

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The project site has been disturbed by past farming and farming-related uses. Thus, the presence of significant or undamaged cultural resources on the project site is unlikely. Although the proposed project is not expected to cause a substantial adverse change in the significance of a historical or archaeological resource, this issue will be analyzed further in the EIR. Therefore, a potentially significant impact is identified for this issue area. A cultural resources report that will address the proposed project's potential impacts on historic and prehistoric resources will be prepared and this issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Refer to response V. a) above.

c) **Potentially Significant Impact.** Although unlikely, there is a potential for unknown human remains to be unearthed during earthwork activities. This issue is potentially significant and will be addressed in the EIR analysis.

PC ORIGINAL PKG

EEC ORIGINAL PKG

VI. Energy

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact Analysis

a) **Less than Significant Impact.** The use of energy associated with the proposed project includes both construction and operational activities. Construction activities consume energy through the use of heavy construction equipment and truck and worker traffic. The proposed project will use several energy- and fuel-efficient design features that would help minimize inefficient or wasteful use of energy and increase conservation during construction. The operation of the solar and BESS facilities would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the proposed project would generate renewable energy resources and is considered a beneficial effect.

Based on these considerations, the proposed project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. A less than significant impact has been identified for this issue area.

b) **Less Than Significant Impact.** Construction equipment would comply with federal, state, and regional requirements where applicable. With respect to truck fleet operations the USEPA and the National Highway Traffic Safety Administration (NHTSA) have adopted fuel efficiency standards for medium- and heavy-duty trucks. Construction equipment and trucks are required to comply with CARB's regulations regarding heavy duty truck idling limits of five minutes at a location and the phase in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption for more fuel-efficient engines. Because the main objectives of the project are to assist the state in meeting its obligations under California's RPS Program and assist California in meeting the GHG emissions reduction goal 85 percent below 1990 levels in 2045, the project would be consistent with the applicable recommended actions of CARB's 22022 Climate Change Scoping Plan, as well as applicable federal, state, and local policies. The project would assist the State and regulated utility providers to generate a greater portion of energy from renewable sources consistent with the RPS. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency during construction and operations. Short-term and long-term impacts would be less than significant.

PC ORIGINAL PKG

EEC ORIGINAL PKG

VII. Geology and Soils

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☒	☐	☐	☐
iii. Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risk to life or property?	☒	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

PC ORIGINAL PKG

EEC ORIGINAL PKG

Impact Analysis

ai) **No Impact.** The project site is not located within or near an Alquist-Priolo Special Fault Study Zone. Therefore, no impact is identified for this issue area.

aii) **Potentially Significant Impact.** The project site is located in the seismically-active Imperial Valley in Southern California and considered likely to be subjected to moderate to strong ground motion from earthquakes in the region. The closest mapped earthquake fault zone is an unnamed fault located approximately 2.1 miles west of the project site. Geologic mapping by the USGS of the Imperial Valley after the April 4, 2010 magnitude 7.2MW El Mayor-Cucapah Earthquake indicates movement along several known and unknown faults west of the project site. Due to the project's location in a seismically active area, seismic hazards related to ground shaking could occur on the project site. With the exception of proposed operation and maintenance facilities, the project is not designed for human occupancy; however, the project could pose a threat to emergency personnel and/or persons utilizing operation and maintenance facilities. A potentially significant impact has been identified for this issue area. A geotechnical report that will address the proposed project's potential impacts on geology and soils will be prepared and this issue will be addressed in the EIR.

aiii) **Potentially Significant Impact.** Liquefaction occurs when granular soil below the water table is subjected to vibratory motions, such as vibratory motion produced by earthquakes. With strong ground shaking, an increase in pore water pressure develops as the soil tends to reduce in volume. If the increase in pore water pressure is sufficient to reduce the vertical effective stress (suspending the soil particles in water), the soil strength decreases, and the soil behaves as a liquid (similar to quicksand). Liquefaction can produce excessive settlement, ground rupture, lateral spreading, or failure of shallow bearing foundations.

Four conditions are generally required for liquefaction to occur:

1) The soil must be saturated (relatively shallow groundwater).
2) The soil must be loosely packed (low to medium relative density).
3) The soil must be relatively cohesionless (not clayey).
4) Groundshaking of sufficient intensity must occur to function as a trigger mechanism.

All of these conditions may exist to some degree at the project site. Therefore, there is a potentially significant impact associated with liquefaction. A geotechnical report that will address the proposed project's potential impacts on geology and soils will be prepared and this issue will be addressed in the EIR.

aiv) **No Impact.** According to Figure 2: Landslide Activity in the Seismic and Public Safety Element of the General Plan (County of Imperial 1997), the project site is not located in an area that is prone to landslide hazards. Furthermore, the site topography is flat, and no ancient landslides have been mapped in the area. Development of the project would not directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, no impact is identified for this issue area.

b) **Less than Significant Impact.** Soil erosion can result during construction as grading and construction can loosen surface soils and make soils susceptible to wind and water movement across the surface. Impacts are not considered significant because erosion would be controlled on-site in accordance with Imperial County standards, including preparation, review, and approval of a grading plan by the Imperial County engineer, as well as the applicant's proposed best management practices to control erosion. Implementation of Imperial County standards would reduce the potential impacts to a less than significant level.

c) **Potentially Significant Impact.** Near surface soils within the project site will need to be identified to determine if these soils are unstable. Therefore, this issue is potentially significant and will be analyzed in the EIR.

d) **Potentially Significant Impact.** Near surface soils within the project site will need to be identified to determine if these soils are unstable. Therefore, this issue is potentially significant and will be analyzed in the EIR.

e) **Less than Significant Impact.** The project proposes operations and maintenance facilities, which may include restrooms that would rely on septic tanks or similar wastewater disposal systems. However, the septic system(s) would be installed in accordance with County standards and therefore, the project would have a less than significant impact on the project site soil and its capacity to adequately support the use of septic tanks or alternative wastewater disposal systems.

f) **Potentially Significant Impact.** Many paleontological fossil sites are recorded in Imperial County and have been discovered during construction activities. Paleontological resources are typically impacted when earthwork activities, such as excavation cut into geological deposits (formations) with buried fossils. It is not known if any paleontological resources are located on the project site. The proposed project's potential to impact paleontological resources is considered potentially significant and this issue will be addressed in the EIR.

PC ORIGINAL PKG

EEC ORIGINAL PKG

VIII. Greenhouse Gas Emissions

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The production of greenhouse gas emissions associated with the proposed project includes both construction and operational activities. In the long-term, the project is expected to provide a benefit with respect to reduction of greenhouse gas emissions. However, construction of the project would generate GHG emissions over the anticipated construction period for the project, which is estimated at approximately 18 – 24 months. Exhaust emissions would result from construction equipment and machinery as well as from vehicular traffic generated by construction activities. Thus, a potentially significant impact is identified for this issue area. The CalEEMod air quality model will be utilized to estimate the project's GHG emissions and the results will be included in the EIR analysis.

b) **Potentially Significant Impact.** Refer to response VIII. a) above.

PC ORIGINAL PKG

EEC ORIGINAL PKG

IX. Hazards and Hazardous Materials

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** Construction of the proposed project would require the use of construction vehicles, associated grease, oil, and fuels, and potential use of other hazardous materials. Additionally, the project would include operation and maintenance facilities, which have the potential to store and handle hazardous materials. Vehicle fuels, oils, grease, and other potentially hazardous materials have the potential to be released into the environment through natural events or human error. This is considered a potentially significant impact and will be addressed in the EIR analysis.

PC ORIGINAL PKG

EEC ORIGINAL PKG

b) **Potentially Significant Impact.** Refer to response IX. a) above.

c) **Potentially Significant Impact**. Westside Elementary School is located is located within APN 051-300-016, which is within the Big Rock 2 North project area. Because the project involves the construction and operation of BESS system(s), there is a potentially significant impact related to emitting or handling hazardous or acutely hazardous materials substances or waste within one-quarter mile of an existing or proposed school.

d) **Potentially Significant Impact.** The project site has been utilized for agricultural production and there is the potential that contaminated soils are located within the project site. The project site is not known or anticipated to be listed as a hazardous materials site (Department of Toxic Substances Control 2023, State Water Resources Control Board 2023). However, a potentially significant impact associated with the potential for contaminated soils to be present on the project site has been identified, and a Phase I Environmental Site Assessment will be prepared for the project. This issue will be addressed in the EIR.

e) **No Impact.** The project is not located within 2 miles of a public airport or a public use airport. Therefore, implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact is identified for this issue area.

f) **Less Than Significant Impact.** Imperial County Office of Emergency Services (OES) has provided three plans addressing evacuation and evacuation responsibilities for County Fire, Police, and the OES among other topics related to emergency preparedness that do not identify specific evacuation routes. The project applicant would coordinate any construction activities and use of oversized loads or movement of construction/decommissioning equipment with the Imperial County Department of Public Works (ICDPW) and/or California Department of Transportation (Caltrans) and the El Centro Highway Patrol office. The project applicant will be required to file for an encroachment permit for any work or proposed work in the affected County or Caltrans road rights-of-way and for any and all new, altered or unauthorized existing driveway(s) to access the lot or lots and for any proposed road crossings. Thus, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and would result in a less than significant impact.

g) **No Impact.** The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low (County of Imperial 1997). The project site is not located in areas considered wildlands, as the vast majority of the surrounding area is cultivated farmlands and other utility-scale solar facilities. According to the Fire Hazard Severity Zone Viewer provided by the California Department of Forestry and Fire Protection, the project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). Therefore, there would be no impact associated with risk involving wildland fires.

PC ORIGINAL PKG

EEC ORIGINAL PKG

X. Hydrology and Water Quality

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to create urban non-point source discharge (e.g., synthetic/organic chemicals). No waste discharge requirements have been issued for the proposed project site. However, potentially significant water quality impacts have been identified and will be addressed in the EIR.

PC ORIGINAL PKG

EEC ORIGINAL PKG

b) **No Impact.** The proposed project would not involve the use of groundwater resources. No groundwater wells will be drilled, nor will the project require the use of ground water. No impact on groundwater supply or recharge would occur.

ci) **Less than Significant Impact.** The proposed project would result in the creation of impervious surfaces. Soil erosion could result during construction and earthmoving as well as during site reclamation. However, the project applicant is required to comply with the Construction General Permit and the Industrial General Permit, as well as Imperial County Land Use Ordinance, Title 9, Chapter 10 – Grading Regulations. County standards and compliance with the NPDES require the creation of a Stormwater Pollution Prevention Plan (SWPPP), and the use of best management practices (BMPs) to reduce impacts to surface and ground water quality attributed to erosion or siltation to a level less than significant. Applicant compliance with Imperial County and State standards would ensure the project does not significantly alter the site's drainage resulting in erosion or siltation on-or off-site, and impacts would be less than significant.

cii) **Less than Significant Impact.** Refer to response X. ci) above.

ciii) **Less than Significant Impact.** Refer to response X. ci) above.

civ) **Less Than Significant Impact.** According to the Federal Management Agency (FEMA) Flood Insurance Rate Map (Panel 06025C2075C), the project site is within Zone X, which is an area determined to be outside the 0.2 percent annual chance floodplain (FEMA 2008). Therefore, the proposed project would not impede or redirect flood flows and this is considered a less than significant impact.

d) **No Impact.** According to the Federal Management Agency (FEMA) Flood Insurance Rate Map (Panel 06025C2075C), the project site is within Zone X, which is an area determined to be outside the 0.2 percent annual chance floodplain (FEMA 2008). In addition, there are no large bodies of water near the project site. The Salton Sea is the closest body of water near the project site but is over 28 miles away from the site, and the Pacific Ocean is over 90 miles away. Therefore, the project would not risk release of pollutants due to project inundation by flood, tsunami or seiche. No impact would occur.

e) **Less Than Significant Impact.** No groundwater wells will be drilled, nor will the project require the use of ground water. Any water needed for fugitive dust control, or other BMPs that require water will be obtained through the project applicant's existing IID contract. Furthermore, the project is required to comply with County, State, and Federal water quality standards. The proposed project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This is considered a less than significant impact.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XI. Land Use and Planning

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐

Impact Analysis

a) **No Impact.** The project site is located in a sparsely populated, agriculturally zoned portion of Imperial County. There are no established residential communities located within or in the vicinity of the project site. The nearest established residential community is the community of Seeley located north of the project site and north of I-8. Therefore, implementation of the project would not divide an established community and no impact would occur.

b) **Potentially Significant Impact.** The project site is currently designated by the General Plan as "Agriculture." Existing project site zoning consists of A-2, A-2-R, A-2-RE, A-3 and A-3-RE. The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved conditional use permit. Conditional use permit applications proposed for specific renewable energy projects not located in the Renewable Energy Overlay Zone would not be allowed without an amendment to the Renewable Energy Overlay Zone. The majority of the project site is located outside of the Renewable Energy Overlay Zone. Therefore, a General Plan Amendment and Zone Change is required in order to include/classify the project sites into the Renewable Energy Overlay Zone. Because a General Plan amendment and zone change would be required for project implementation, the proposed project may result in a conflict with an applicable land plan, policy, or regulation. The project site is not located within a Habitat Conservation Plan or Natural Community Conservation Plan.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XII. Mineral Resources

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is not used for mineral resource production. According to Figure 8: Imperial County Existing Mineral Resources of the Conservation and Open Space Element of the General Plan (County of Imperial 2016), no known mineral resources occur within the project site nor does the project site contain mapped mineral resources. Therefore, the proposed project would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of California nor would the proposed project result in the loss of availability of a locally important mineral resource. Thus, no impact is identified for this issue area and no further analysis is warranted.

b) **No Impact.** Refer to response XIII. a) above.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XIII. Noise

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** The Imperial County Title 9 Land Use Ordinance, Division 7, Chapter 2, Section 90702.00 - Sound level limits, establishes one-hour average sound level limits for the County's land use zones. Agricultural/industrial operations are required to comply with the noise levels prescribed under the general industrial zones. Therefore, the proposed project will be required to maintain noise levels below 75 decibels (dB) (averaged over one hour) during any time of day.

The proposed project will also be expected to comply with the Noise Element of the General Plan which states that construction noise, from a single piece of equipment or a combination of equipment, shall not exceed 75 dB, when averaged over an eight-hour period, and measured at the nearest sensitive receptor. Construction equipment operation is also limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m on Saturday. Nevertheless, the proposed project will result in the increase in ambient noise levels during construction. A noise report that will address the proposed project's potential noise impacts will be prepared and this issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Groundborne vibration and noise could originate from earth movement during the construction phase of the proposed project. However, significant vibration is typically associated with activities such as blasting or the use of pile drivers, neither of which would be required during project construction. Construction activities most likely to cause vibration include heavy construction equipment and site grading operations. Although all heavy, mobile construction equipment has the potential to cause at least some perceptible vibration when operating close to buildings, the vibration is usually short term and is not of sufficient magnitude to cause building damage. Heavy equipment such as dozers, loaders, and drill rig equipment would be operated and, depending on the location within the project site, could be close enough to residences or structures to cause vibration impact. Operation of the project would not result in vibrations perceptible to nearby receptors. This issue will be addressed in the EIR.

c) **No Impact.** The project site is not located within an airport land use plan nor is it within two miles of a public airport or public use airport. As such, no impact would occur to people residing or working in the project area related to excessive noise levels.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XIV. Population and Housing

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is currently used for agricultural production. Development of residential uses is not proposed. Project construction would involve the use of temporary workforce, however, once operational, the project will only involve a limited number of employees for periodic maintenance activities. It is assumed that the workforce would be from southern California and would likely not require accommodations. The project would not appear to induce population growth; therefore, the project would have no impact.

b) **No Impact.** No housing exists within the project site. Therefore, the proposed project would not displace any existing people or housing, which would require the construction of replacement housing elsewhere. No impact is identified for this issue area.

PC ORIGINAL PKG
EEC ORIGINAL PKG

XV. Public Services

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire Protection?	☒	☐	☐	☐
ii. Police Protection?	☒	☐	☐	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

Impact Analysis

ai) **Potentially Significant Impact.** Fire protection and emergency medical services in the area are provided by the Imperial County Fire Department. The proposed project would be required to comply with all existing regulations and requirements of the Imperial County Fire Department and would be reviewed for adherence to prevention measures for wildland fires. According to the Imperial County Natural Hazard Disclosure (Fire) Map prepared by the California Department of Forestry and Fire Protection in 2000, the project site may be located within, and/or adjacent to an area identified as a Moderate Fire Hazard Area. Additionally, the project proposes BESS facilities, which require specialized fire suppression equipment and training to contain fires associated with lithium-ion batteries. Construction and operation activities may result in an increased need for fire-fighting personnel and facilities in the area. Therefore, the potential impact on fire services from construction and operation of the proposed projects will be further evaluated in the EIR.

aii) **Potentially Significant Impact.** Police (law enforcement) protection services in the proposed project area are provided by the Imperial County Sheriff's Department. Although the potential is low, the proposed project may attract vandals or other security risks. The increase in construction related traffic could increase demand on law enforcement services. On-site security would be provided and access would be limited to the areas surrounding the project sites during construction and operation, thereby minimizing the need for police surveillance. However, the projects' impacts on sheriff services will be further evaluated in the EIR.

aiii) **Less Than Significant Impact.** The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Also, the number of construction and operational workers coming to the region is low and is not expected to increase demand for schools or require the construction of new schools. Therefore, impacts would be less than significant.

aiv) **Less Than Significant Impact.** The number of construction and operational workers coming to the region is low and is not expected to increase demand on existing or future parks. Therefore, impacts would be less than significant.

av) **Less Than Significant Impact.** The number of construction and operational workers coming to the region is low and is not expected to increase demand for any public services (such as post offices). Therefore, impacts would be less than significant.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XVI. Recreation

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project would not directly or indirectly increase the number of residents keeping the county compliant with the Quimby Act which requires 5 acres of parkland for every 1,000 residents. No new residents will be introduced into the project area. The workforce required to construct the project are anticipated to come from existing populations that live in or commute from the surrounding local community. As there is no increase of residencies or residents, it is reasonably foreseeable that the project would not lead to an increase of use or deterioration of existing neighborhood, regional, or other recreational facilities. Therefore, the project would have no impact on the use or deterioration of existing recreational resources.

b) **No Impact.** The project does not include nor require the construction of a recreational facility as the project does not alter the current ratio of parkland acres to residents. Therefore, the project will have no impact on the construction or expansion of recreational facilities which might have an adverse effect on the environment.

PC ORIGINAL PKG
EEC ORIGINAL PKG

XVII. Transportation

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐
b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** Construction of the proposed project would result in a small increase of traffic to the area, which may result in a potentially significant impact. As proposed, construction access to the project site could occur from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the Project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) for materials deliveries. This impact is considered potentially significant, and a traffic impact study that will address the proposed project's potential impacts on traffic will be prepared. This issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Section 15064.3(b) of the CEQA Guidelines provides guidance on determining the significance of transportation impacts and focuses on the use of vehicle miles traveled (VMT), which is defined as the amount and distance of automobile travel associated with a project. Given the nature of the project, after construction, there would be a nominal amount of vehicle trips generated by the project. Once the proposed project is implemented, the proposed project would require intermittent maintenance requiring a negligible amount of traffic trips on an annual basis. However minimal, the proposed project would increase the number of vehicular trips related to construction and the need for intermittent maintenance on an annual basis. Therefore, this issue is potentially significant and will be addressed in the traffic impact study and EIR analysis.

c) **No Impact.** The project would not result in any changes to any roads, intersections, streets, highways, nor would it provide any incompatible uses to the street and highway system. All vehicles that would be used for travel to and from the project site would be licensed and comply with all appropriate transportation laws and regulations including obtaining and adhering to provisions of any required permits for oversized loads. As such, no impact related to transportation design hazards would occur.

d) **No Impact.** All proposed facilities would be constructed within the property boundaries of the project site and would not affect emergency vehicle access to the facility or any roadway. Emergency vehicle access identified and designated in the project site, would not be changed as result of the proposed project. Therefore, no impacts to emergency access to the plant site or surrounding area would occur under the project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XVIII. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☒	☐	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

Impact Analysis

a-b) **Potentially Significant Impact.** Assembly Bill 52 was passed in 2014 and took effect July 1, 2015. It established a new category of environmental resources that must be considered under CEQA called tribal cultural resources (Public Resources Code 21074) and established a process for consulting with Native American tribes and groups regarding those resources. Assembly Bill 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.

In accordance with AB 52, Imperial County, as the CEQA lead agency, sent an AB 52 consultation request letter to the Campo Band of Mission Indians and Fort Yuma-Quechan Indian Tribe on June 12, 2024. This issue will be further analyzed in the EIR.

Also need to address SB-18 Consultation response

PC ORIGINAL PKG

EEC ORIGINAL PKG

XIX. Utilities and Service Systems

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☒	☐	☐	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact Analysis

a) **Less Than Significant Impact.** Operational use of water resources for the project would be limited to domestic use within operations and maintenance buildings, solar panel washing, and fire protection services. Impacts associated with water facilities would be less than significant. Construction of the proposed facilities would not generate/discharge any wastewater. Impacts associated with water facilities would be less than significant.

No natural gas facilities are located near the project and no natural gas hookup is required for the project. No impacts associated with natural gas facilities would occur. The project will not have an impact on any telecommunications.

The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, impacts would be less than significant.

b) **Potentially Significant Impact.** Although water for operations and maintenance buildings, solar panel washing, and fire protection services during project operation is not anticipated to result in a significant

PC ORIGINAL PKG

EEC ORIGINAL PKG

increase in water demand/use, IID would provide the water required for operations and maintenance and potable water will be trucked onto the site. Thus, a potentially significant impact is identified for the availability of sufficient water supplies to serve the proposed project for the reasonably foreseeable future. The proposed project's potential impacts on water supplies will be analyzed in the EIR.

c) **No Impact.** The proposed project would generate a minimal volume of wastewater during construction, which would be in the form of portable chemical sanitary facilities that would be used by all construction personnel. These facilities will be serviced by a local contractor. In addition, all construction liquids would be disposed of in compliance with all appropriate local, state and federal disposal regulations. Therefore, no impacts to the wastewater treatment utility's service capacity would occur.

d) **Less than Significant Impact.** Solid waste generation would be minor for the construction and operation of the proposed project. Solid waste during construction will be disposed of in an approved solid waste disposal site in accordance with Imperial County Environmental Health Department requirements. Waste will be routinely collected and disposed of at an authorized landfill by a licensed disposal contractor. The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Additionally, because the proposed project would generate solid waste during construction and operation, they will be required to comply with state and local requirements for waste reduction and recycling; including the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991. Also, conditions of the conditional use permit will contain provisions for recycling and diversion of Imperial County construction waste policies. Therefore, a less than significant impact is identified for this issue area.

e) **Less than Significant Impact.** Refer to response XIX. d) above.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XX. Wildfire

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** According to the Fire Hazard Severity Zone Viewer provided by the California Department of Forestry and Fire Protection, the project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impact is identified for this issue area.

b) **No Impact.** The project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). The Seismic and Public Safety Element of the County General Plan also states that the potential for a major fire in the unincorporated areas of the County are generally low (County of Imperial 1997). The project site is located on flat land, which does not pose a risk due to slope. The County's Multi-Jurisdictional Hazard Mitigation Plan (2021) recognizes and manages events of high winds and other extreme weather in Imperial County. The project would not exacerbate wildfire risks associated with slope or prevailing winds; no impact would occur.

c) **No Impact.** The project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). The project will have two double-walled 20,000-gallon isopentane tanks on site which would be equipped with a fire suppression system supported by additional onsite water. This is required by the California Fire Code as adopted by the Imperial County Code. Additionally, the underground interconnection line would be situated along the existing utility lines along Dogwood Road. All infrastructure would comply with existing regulations and would not exacerbate fire risk; no impacts would occur.

PC ORIGINAL PKG

EEC ORIGINAL PKG

d) **No Impact.** According to Figure 2: Landslide Activity in the Seismic and Public Safety Element of the General Plan (County of Imperial 1997), the project site is not located in an area that is prone to landslide hazards. Furthermore, the site topography is flat, and no ancient landslides have been mapped in the area. The project would not alter the existing drainage pattern surrounding the project site and it would comply with regulations that reduce the potential for excess runoff waters from the project site. The project would not expose people or structures to significant risks as a result of runoff, post-fire instability, or drainage changes, therefore no impact would occur.

PC ORIGINAL PKG

EEC ORIGINAL PKG

XXI. Mandatory Findings of Significance

Environmental Issue Area:	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would the project:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to result in significant environmental effects on biological resources and cultural resources, which could directly or indirectly cause adverse effects on the environment. These issues will be further evaluated in the EIR.

b) **Potentially Significant Impact.** Implementation of the proposed project has the potential to result in impacts related to: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology/soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, transportation, tribal cultural resources, and utilities/service systems. The proposed project has the potential to result in cumulative impacts with regards to the identified issue areas. Cumulative impacts will be discussed and further analyzed in the EIR.

c) **Potentially Significant Impact.** Implementation of the proposed project has the potential to result in impacts related to: air quality, geology/soils, and hazards and hazardous materials. These potential environmental effects could cause substantial adverse effects on human beings. These issues will be further evaluated in the EIR.

PC ORIGINAL PKG

EEC ORIGINAL PKG

PC ORIGINAL PKG

EEC ORIGINAL PKG

References

California Department of Conservation (DOC). 2020. California Important Farmland Finder. Available on-line at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed December 8, 2023.

California Department of Forestry and Fire Protection. 2023. Fire Hazard Severity Zone Viewer. Available on-line at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed December 8, 2023.

California Department of Resources Recycling and Recovery (CalRecycle). 2019 Facility/Site Summary Details: Calexico Solid Waste Site (13-AA-0004). https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4179?siteID=591. Accessed December 11, 2023.

California Department of Transportation (Caltrans). 2018. California Scenic Highway Mapping System. Available on-line at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. December 8, 2023.

County of Imperial. 1997. County of Imperial General Plan. Seismic and Public Safety Element. https://www.icpds.com/assets/planning/seismic-and-public-safety.pdf.

——— 2016. County of Imperial General Plan. Conservation and Open Space Element. Available on-line at: https://www.icpds.com/planning/land-use-documents/general-plan/conservation-and-open-space-element.

——— 2021. Imperial County Multi-Jurisdictional Hazard Mitigation Plan. January 2021. Available on-line at: https://firedept.imperialcounty.org/wp-content/uploads/2021/01/Imperial-County-MHMP-2021-Plan-Update-2021_01_11.pdf.

Department of Toxic Substances Control. 2023. EnviroStor. Available on-line at: https://www.envirostor.dtsc.ca.gov/public/. Accessed December 8, 2023.

Federal Emergency Management Agency (FEMA). 2008. Flood Insurance Rate Map (Panel 06025C2075C).

State Water Resources Control Board. GeoTracker. Available on-line at: https://geotracker.waterboards.ca.gov/. Accessed on December 8, 2023.

PC ORIGINAL PKG

EEC ORIGINAL PKG

List of Preparers

This Initial Study was prepared for the Imperial County Planning and Development Services Department by HDR at 591 Camino de la Reina, Suite 300, San Diego, CA 92108. The following professionals participated in its preparation:

Imperial County Planning and Development Services Department

Jim Minnick, Planning and Development Services Director

Michael Abraham, AICP, Assistant Planning and Development Services Director

Diana Robinson, Planning Director

Rocio Yee, Planner I

HDR

Tim Gnibus, Principal/Project Manager

Anitra Rice, Deputy Project Manager

Regan Del Rosario, Deputy Project Manager

Anders Burvall, Senior Geographic Information Systems Analyst

Sharon Jacob, Geographic Information Systems Analyst

Katherine Turner, Document Production Administrator

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPLICANT SUBMITTAL

PC ORIGINAL PKG

EEC ORIGINAL PKG

AVANTUS™

29 April 2024

Jim Minnick, Planning Director
C/o Michael Abraham, and Diana Robinson
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
Phone: 442-265-1736

Letter of Request

Dear Mr. Minnick,

90FI 8me LLC (applicant) would like to request a General Plan Amendment to add the assessor parcel numbers (APNs) (in the attached) to the Imperial County Renewable Energy Overlay.

These APNs constitute the proposed Big Rock 2 Cluster Solar Farm Project, for which the following Conditional Use Permit (CUP) application packages are currently under consideration by Planning and Development Services Department:

1. CUP 24-0006
2. CUP 24-0007
3. CUP 24-0008
4. CUP 24-0009

1. 051-270-020
2. 051-270-028
3. 051-270-036
4. 051-270-041
5. 051-280-054
6. 051-290-018
7. 051-290-019
8. 051-300-011
9. 051-300-016
10. 051-300-026
11. 051-300-035
12. 051-300-037
13. 051-320-005
14. 051-320-006
15. 051-320-007
16. 051-330-003
17. 051-350-004
18. 051-350-006
19. 051-350-007
20. 051-350-008
21. 051-300-032
22. 051-300-036
23. 051-310-027
24. 051-310-028

Note: APNs 051-300-032, 051-300-036, 051-310-027, and 051-310-028 were previously amended (-RE) under the previously entitled Laurel Cluster Solar Farms Project (Laurel 2 North and South); however, since the active CUPs are expiring at the end of 2024, the applicant seeks to re-entitle those APNs under the CUP application package listed above.

@ 2022 Avantus LLC | Proprietary and Confidential

PC ORIGINAL PKG
EEC ORIGINAL PKG

With this request to add the parcels to the Renewable Energy Overlay, no amendment is requested to their underlying "agricultural" designations under the Imperial County General Plan.

Please contact me if you should need any additional information or materials at this time to fulfill this request at (303) 588-3855 or at jjackson@avantus.com.

Sincerely,



Jennifer Jackson
DIRECTOR, PERMITTING
(303) 588-3855 **MOBILE**

PC ORIGINAL PKG

EEC ORIGINAL PKG

AVANTUS™

29 April 2024

Jim Minnick, Planning Director
C/o Michael Abraham, and Diana Robinson
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
Phone: 442-265-1736

Letter of Request

Dear Mr. Minnick,

90FI 8me LLC (applicant) seeks a variance to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project (Project) to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height.

This variance is being requested for the Project, for which the following Conditional Use Permit (CUP) application packages are currently under consideration by Planning and Development Services Department:

- CUP 24-0006
- CUP 24-0007
- CUP 24-0008
- CUP 24-0009

Variance applications for each CUP are included herein. Please contact me if you should need any additional information or materials at this time to fulfill this request at (303) 588-3855 or at jjackson@avantus.com.

Sincerely,

Jennifer Jackson
DIRECTOR, PERMITTING
(303) 588-3855 **MOBILE**

PC ORIGINAL PKG

EEC ORIGINAL PKG

AVANTUS™

RECEIVED
MAR 15 2024
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

Indemnification Forms and Owner Affidavits

Cover Letter

13 March 2024

Jim Minnick, Planning Director
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
Phone: 442-265-1736

RE: Indemnification Forms and Affidavits associated with Conditional Use Permit Application(s) for the Big Rock 2 Cluster Solar Storage Project

Dear Mr. Minnick,

Please find included in this package the original fully-executed Indemnification Forms and Affidavts associated with the Conditional Use Permit (CUP) application packages for the Big Rock 2 Solar Storage Project (Project).

We look forward to working with you to bring this renewable energy generation and energy storage project to Imperial County. Please contact me if you should need any additional information or materials at this time to fulfill this request at (303) 588-3855 or at jjackson@avantus.com.

Sincerely,

Jennifer Jackson
DIRECTOR, PERMITTING
(303) 588-3855 **MOBILE**

90FI 8me LLC
1801 Century Park East, Suite 700
Los Angeles, CA, 90067
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762
+1 (323) 525-0900
www.avantus.com

PC ORIGINAL PKG
EEC ORIGINAL PKG

AVANTUS™

29 April 2024

Jim Minnick, Planning Director
C/o Michael Abraham, and Diana Robinson
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
Phone: 442-265-1736

Letter of Request

Dear Mr. Minnick,

90FI 8me LLC (applicant) seeks a variance to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project (Project) to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height.

This variance is being requested for the Project, for which the following Conditional Use Permit (CUP) application packages are currently under consideration by Planning and Development Services Department:

- CUP 24-0006
- CUP 24-0007
- CUP 24-0008
- CUP 24-0009

Variance applications for each CUP are included herein. Please contact me if you should need any additional information or materials at this time to fulfill this request at (303) 588-3855 or at jjackson@avantus.com.

Sincerely,

Jennifer Jackson
DIRECTOR, PERMITTING
(303) 588-3855 **MOBILE**

@ 2022 Avantus LLC | Proprietary and Confidential

PC ORIGINAL PKG

EEC ORIGINAL PKG

AVANTUS™

29 April 2024

Jim Minnick, Planning Director
C/o Michael Abraham, and Diana Robinson
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
Phone: 442-265-1736

Letter of Request

Dear Mr. Minnick,

90FI 8me LLC (applicant) seeks a variance to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project (Project) to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height.

This variance is being requested for the Project, for which the following Conditional Use Permit (CUP) application packages are currently under consideration by Planning and Development Services Department:

- CUP 24-0006
- CUP 24-0007
- CUP 24-0008
- CUP 24-0009

Variance applications for each CUP are included herein. Please contact me if you should need any additional information or materials at this time to fulfill this request at (303) 588-3855 or at jjackson@avantus.com.

Sincerely,

Jennifer Jackson
DIRECTOR, PERMITTING
(303) 588-3855 **MOBILE**

@ 2022 Avantus LLC | Proprietary and Confidential

PC ORIGINAL PKG

EEC ORIGINAL PKG

29 April 2024

Jim Minnick, Planning Director
C/o Michael Abraham, and Diana Robinson
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243
Phone: 442-265-1736

Letter of Request

Dear Mr. Minnick,

90FI 8me LLC (applicant) seeks a variance to deviate from the 120-foot height limit for non-residential structures in the A-2 and A-3 Zones. The applicant is asking for a height limit increase on private lands associated with the Big Rock 2 Cluster Solar Farm Project (Project) to construct an overhead transmission "gen-tie" line that may be mounted on tubular steel poles up to 200 feet in height.

This variance is being requested for the Project, for which the following Conditional Use Permit (CUP) application packages are currently under consideration by Planning and Development Services Department:

- CUP 24-0006
- CUP 24-0007
- CUP 24-0008
- CUP 24-0009

Variance applications for each CUP are included herein. Please contact me if you should need any additional information or materials at this time to fulfill this request at (303) 588-3855 or at jjackson@avantus.com.

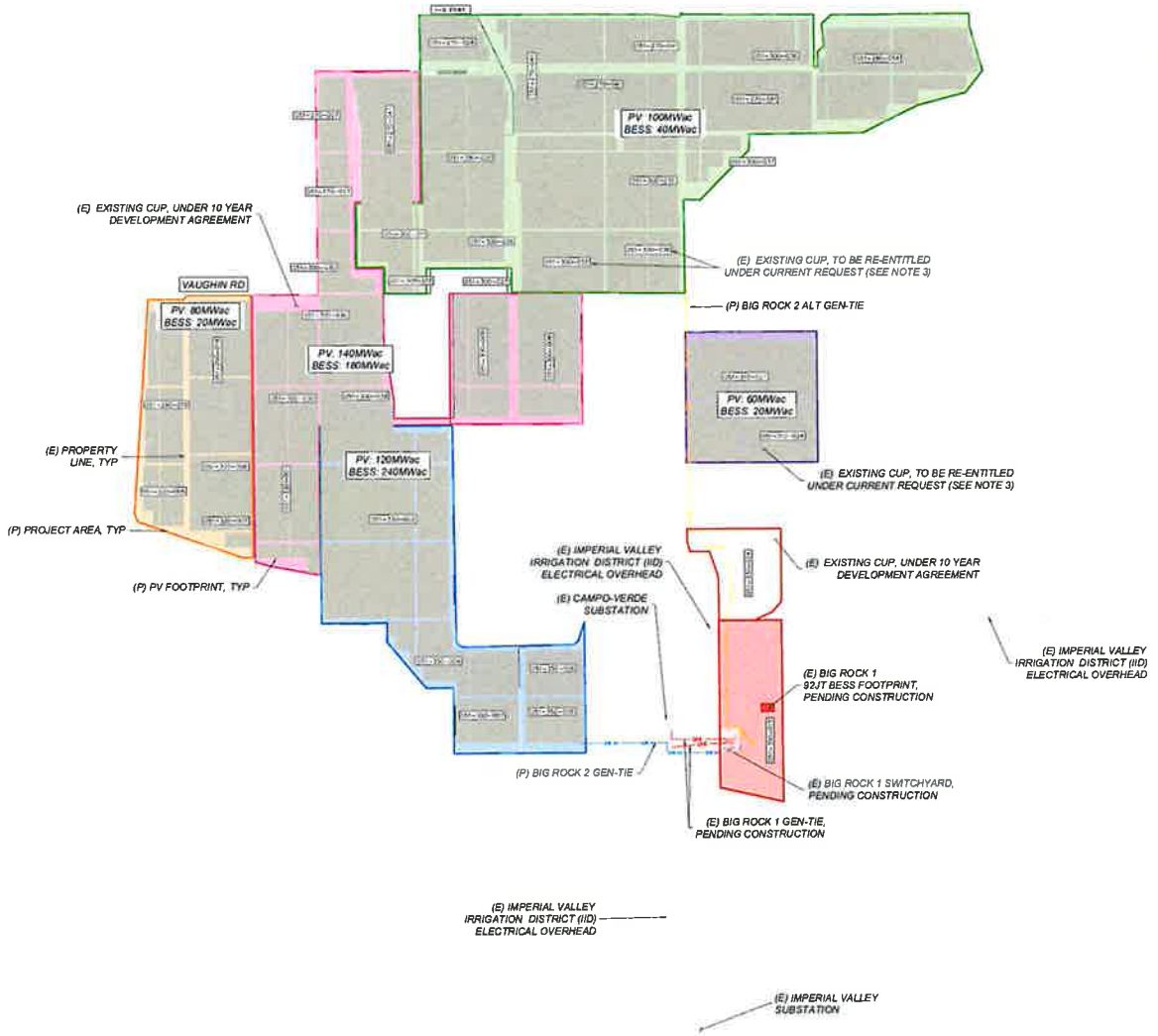
Sincerely,

Jennifer Jackson
DIRECTOR, PERMITTING
(303) 588-3855 **MOBILE**

@ 2022 Avantus LLC | Proprietary and Confidential

PC ORIGINAL PKG

EEC ORIGINAL PKG





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
230 kV 230 kV	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
GEN GEN	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

#	DATE	COMMENT
1	07/13/2023	PRELIMINARY LAYOUT
2	11/17/2023	PRELIMINARY LAYOUT UPDATE
3	12/01/2023	PRELIMINARY LAYOUT UPDATE
4	03/13/2024	PRELIMINARY LAYOUT UPDATE

NOTES:

1 CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE

2 FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS

3 APNS TO BE RE ENTITLED INCLUDE
LAUREL 2 NORTH CUP # 21-0014
#051-300-032 (SOUTH) AND #051-300-036
LAUREL 2 SOUTH CUP #21-0013
#051-310-027 AND #051-310-028

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL SITE PLAN

DATE April 12, 2024

SHEET EX-1

PC ORIGINAL PKG

EEC ORIGINAL PKG

Imperial County Planning & Development Services
Planning / Building / Parks & Recreation

Jim Minnick
DIRECTOR

NOTICE TO APPLICANT

SUBJECT: PAYMENT OF FEES

Dear Applicant:

Pursuant to County Codified Ordinance Division 9, Chapter 1, Section 90901.02, all Land Use Applications must be submitted with their appropriate application fee. Failure to comply will cause application to be rejected.

Please note that once the Department application is received and accepted, a "time track" billing will commence immediately. Therefore, should you decide to cancel or withdraw your project at any time, the amount of time incurred against your project will be billed and deducted from your payment. As a consequence, if you request a refund pursuant to County Ordinance, your refund, if any, will be the actual amount paid minus all costs incurred against the project.

Please note there will be no exceptions to this policy. Thank you for your attention.

Sincerely yours,

Jim Minnick, **Director**
Planning **& Development Services**

RECEIVED BY: _____ **DATE:** 3/27/24

PC ORIGINAL PKG

EEC ORIGINAL PKG

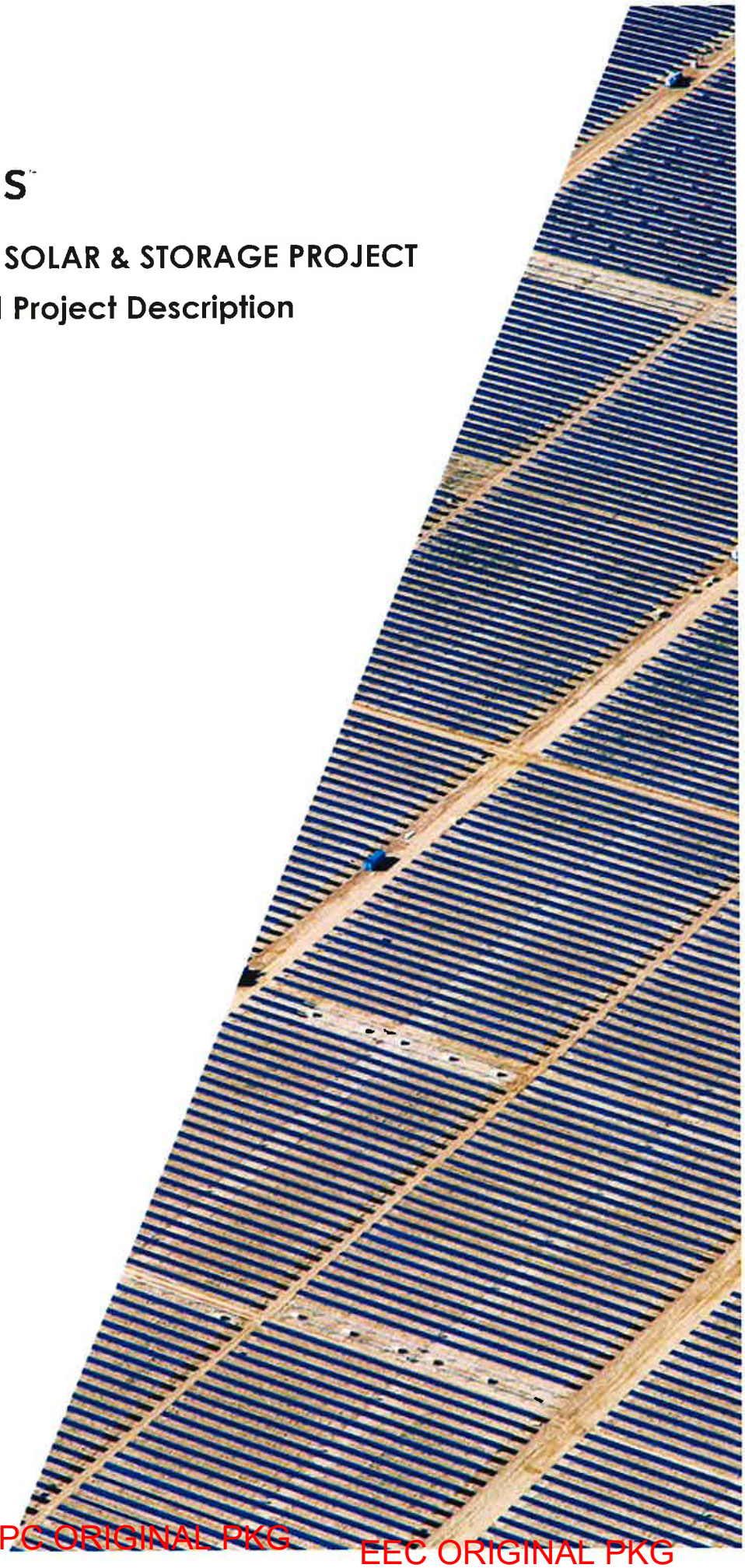
AVANTUS™

BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT

CUP Application and Project Description

19 August 2024

Submitted by:
90FI 8me LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762



PC ORIGINAL PKG
EEC ORIGINAL PKG

This page left blank intentionally.

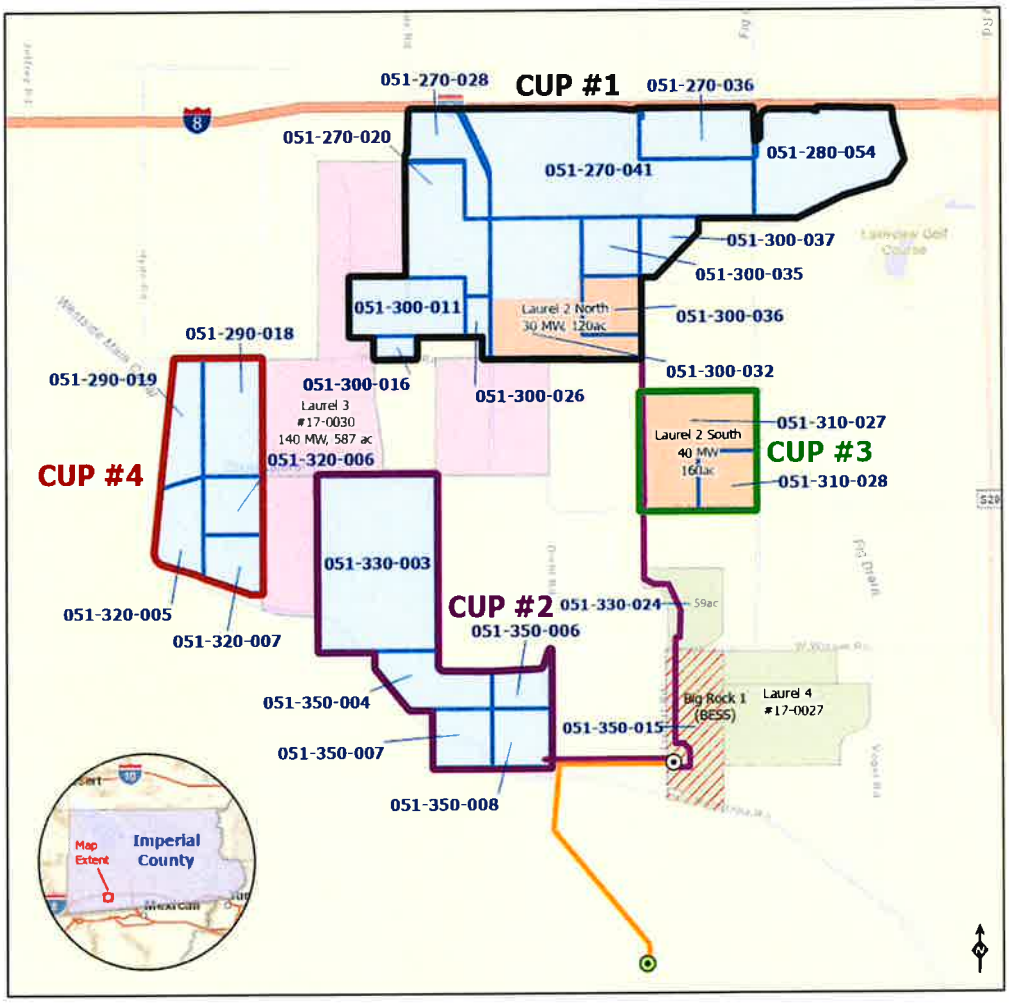
PC ORIGINAL PKG

EEC ORIGINAL PKG

Big Rock 2 Cluster Solar and Storage Project

This document contains Supporting Materials for the following Conditional Use Permit Applications Packages:

1. CUP #1: Big Rock 2 Cluster North (1,030 acres)
    - Big Rock 2 Cluster North (910 acres), including;
        - Laurel Cluster 2 North /CUP # 21-0014 (120 acres) *(to be re-entitled)*
2. CUP #2: Big Rock 2 Cluster South (410 acres)
3. CUP #3: Big Rock 2 Cluster East/Laurel Cluster 2 South CUP # 21-0013) (160 acres) *(to be re-entitled)*
4. CUP #4 Big Rock Cluster West (249 acres)



PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

PC ORIGINAL PKG

EEC ORIGINAL PKG

TABLE OF CONTENTS

INTRODUCTION **1**

Site Information **4**

PROJECT DESCRIPTION **7**

Overview **7**

Project Objectives **7**

Project Components **8**

PV Module Configuration 8

Collection, Inverter and Transformer Systems 11

Battery Energy Storage System 12

Substation(s) 15

Transmission Line and Interconnection 15

Operations and Maintenance (O&M) Building 16

Roadway and IID Crossings 16

Water Usage 16

Water Storage 17

Site Security and Fencing 17

Lighting 17

Annual Production 17

Electric Service 18

Project Construction **18**

Construction Activities and Duration 18

Laydown Areas 19

Workforce 19

Project Operation **19**

Operational Activities 19

Workforce 20

Project Compliance Plans and Best Management Practices **20**

Hazardous Materials and Hazardous Waste Management 20

Spill Prevention and Containment 21

Wastewater/Septic System 21

Solid Waste Management 21

Dust Control 21

Pest and Vegetation Management 22

Fire Management 22

Health and Safety 22

General Plan Consistency 23

Decommissioning and Reclamation **23**

Anticipated Required Project Entitlements **24**

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDICES

Appendix A **Site Plan**

Appendix B **Full Resolution Map Figures**

PC ORIGINAL PKG

EEC ORIGINAL PKG

INTRODUCTION

90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale [up to 500-megawatt (MW) in capacity] photovoltaic ("PV") solar energy generation and Battery Energy Storage System ("BESS") facility (also up to 500-MW in capacity). The proposed Project, collectively called, the Big Rock 2 Cluster Solar and Storage Project ("Big Rock 2" or the "Project") contemplates utilizing approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development (Figure 1).

Energy generated by the Project would be collected using up to 66 kilovolt ("kV") collector lines which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the Project substation to the Liebert Switchyard (pending construction), which will then be connected via an overhead 230-kV gen-tie line to the existing San Diego Gas and Electric (SDG&E) Imperial Valley Substation (Figure 1). It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

The Applicant intends to secure CUPs from Imperial County as the lead agency, along with permits and approvals from other relevant agencies as required by law. Laurel Cluster 3 CUP (#17-0030) is associated with a 10-year Development Agreement (DA) (Document Number 2023012228). However, Laurel Cluster 2 CUPs may expire prior to this approval, therefore, those areas have been integrated into this request, upon approval, Imperial County would void CUPs #21-0014 and #21-0013. Table 1 provides a breakdown of Project areas and acreage availability.

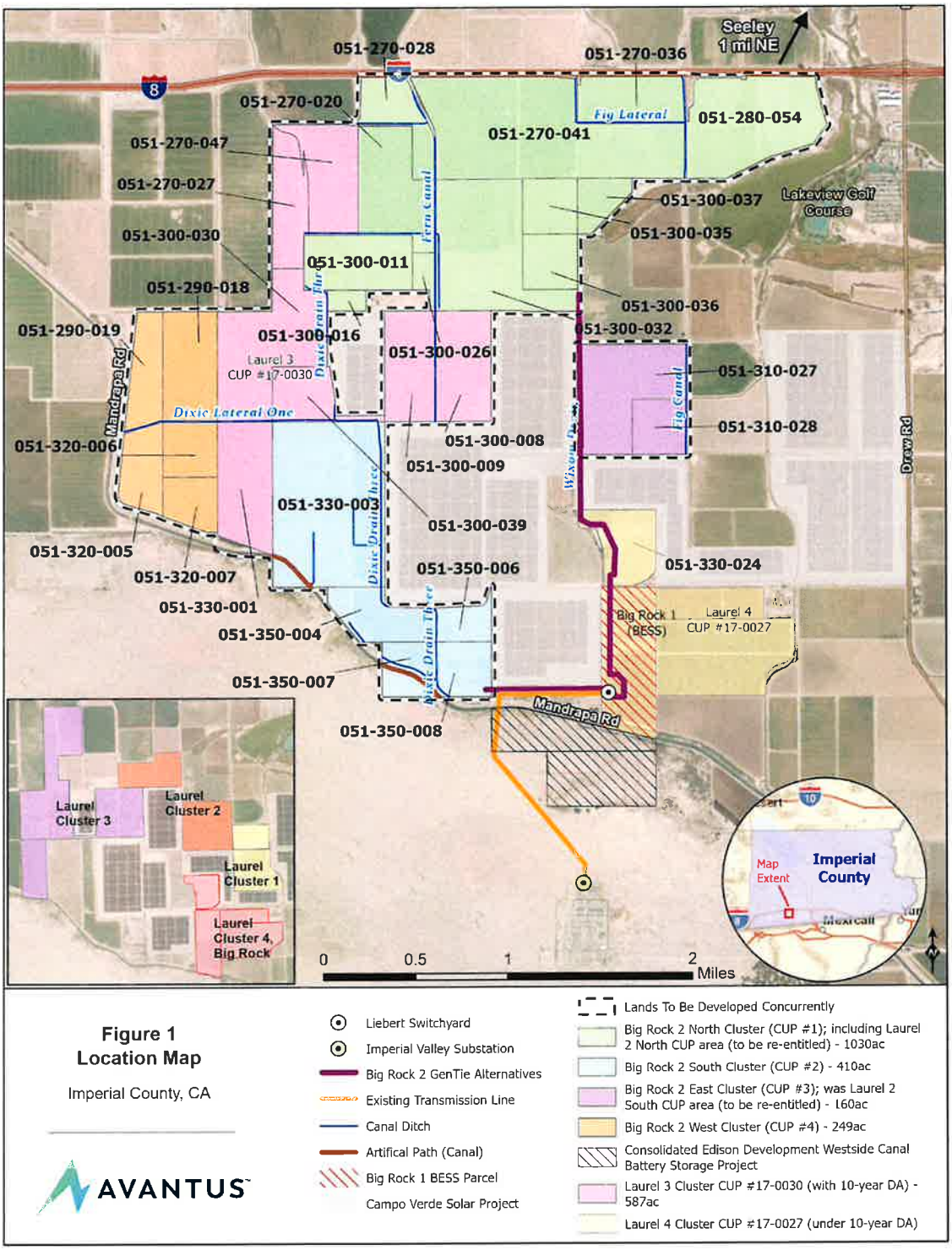
Table 1: Total Project Area and Land Availability

	Acres Available	CUP #
Big Rock 2 Cluster North, including Laurel Cluster 2 North (120 acres) parcels under CUP # 21-0014 (expires Dec. 2024)	1,030	CUP Request #1 (partial re-entitlement)
Big Rock 2 Cluster South	410	CUP Request #2
Big Rock 2 Cluster East/Laurel Cluster 2 South parcels under CUP #21-0013 (expires Dec. 2024)	160	CUP Request #3 (re-entitlement)
Big Rock 2 Cluster West	249	CUP Request #4
Laurel Cluster 3 CUP #17-0030	*587*	*NA (under 10-year DA)*

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 1: Project Location Map



PC ORIGINAL PKG

EEC ORIGINAL PKG

Site Information

Site Characteristics

The proposed Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 1).

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Parcels, Zoning, and Acreage(s)

Table 2: Big Rock 2 Cluster North (New CUP Request #1)

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	**85.5**
	Sub-total		**910**
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
12	051-300-032 (southern portion) *(to be re-entitled)*	A-2-RE	80
13	051-300-036 *(to be re-entitled)*	A-3-RE	40.3
	Sub-total		**120**
	TOTAL ACRES		**1,030**

Table 3: Big Rock 2 Cluster South (New CUP Request #2)

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4

PC ORIGINAL PKG

EEC ORIGINAL PKG

	APN	Zoning	Acres
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410**

Table 4: Big Rock Cluster 2 East (to be re-entitled) (New CUP Request #3)

	Laurel Cluster 2 South CUP #21-0013 (Expires December 2024)		
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	Total		**160**

Table 5: Big Rock 2 Cluster West (New CUP Request #4)

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249**

Site Information

Site Characteristics

The Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 3).

The topography of the Project area is relatively flat, consisting primarily of agricultural fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the IID Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

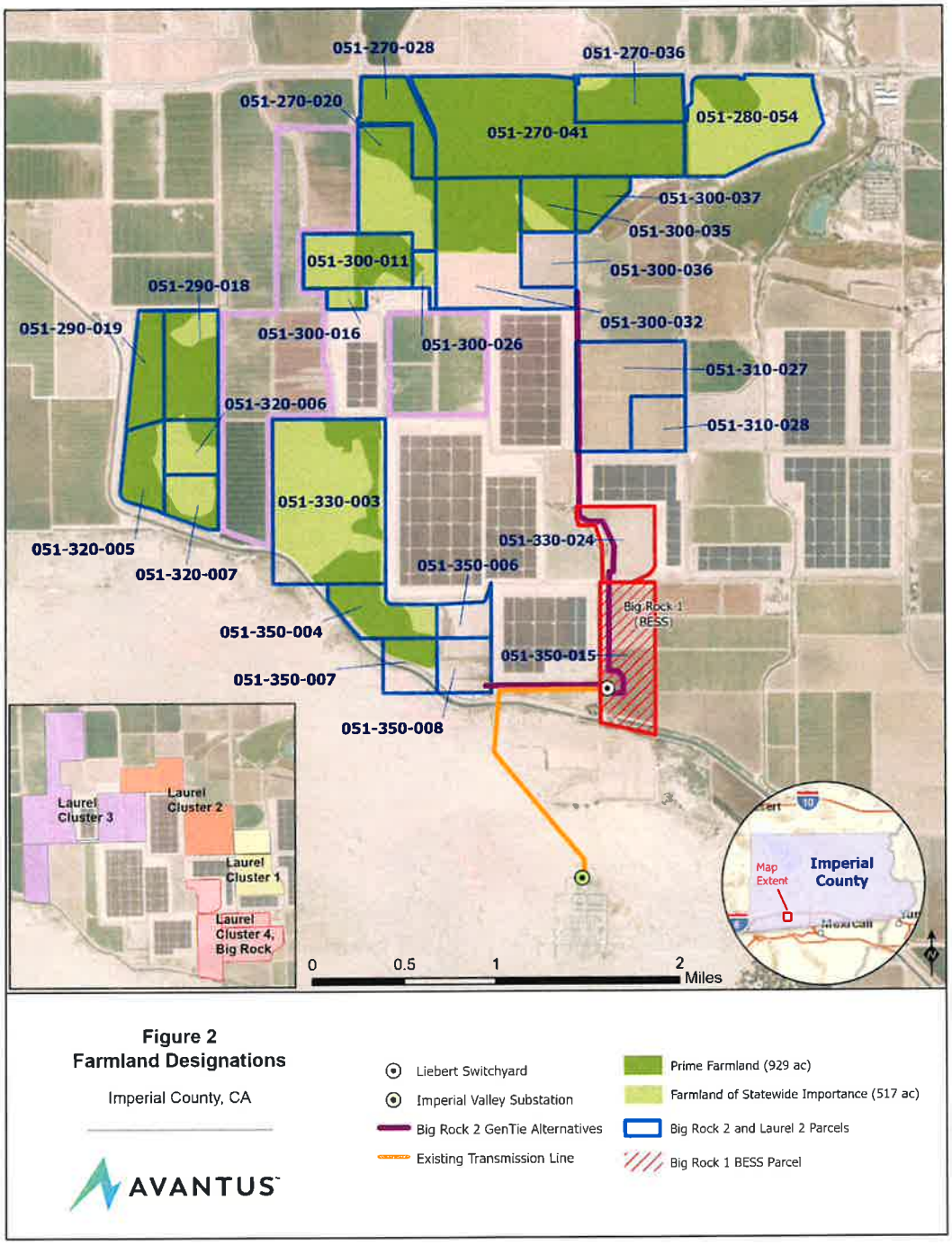
The entire Project area is designated Agricultural in the Imperial County General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 2 also illustrates Prime Farmland and Farmland of Statewide Importance; however, the Project does not include agricultural lands designated under the "Williamson Act".

Figure 2: Farmland Designations



PC ORIGINAL PKG

EEC ORIGINAL PKG

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 1).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 1).

PC ORIGINAL PKG

EEC ORIGINAL PKG

PROJECT DESCRIPTION

Overview

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the IID Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. The Project contemplates two gen-tie line alternatives as depicted in Figure 1.

The Applicant has considered the following in its selection of the Big Rock 2 PV solar and BESS Project for detailed evaluation:

- Private land availability suitable for renewable energy development
- Compatible Land Use Zoning: Agricultural/Rural Zone(s)
- Proximity to the SDG&E Imperial Valley substation
- Proximity to the applicant's previously approved PV solar and BESS projects entitled with Imperial County

Project Objectives

The primary objective of 90FI 8me LLC is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the Project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional Project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed Project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

Project Components

PV Module Configuration

The Project would use PV panels or modules[1] on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height (H), depending on the mounting system used, panels are expected to remain between six (6) and eight (8) feet in height.

[1] Including but not limited to bi-facial or concentrated photovoltaic (CPV) technology.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical fixed-tilt solar panel rows



Typical single axis tracking solar panels

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis tracking solar panels

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the Project area characteristics and the desired energy production profile.



Typical fixed-tilt mounting structure

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis mounting structure

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these Project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the Project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are provided in Figure 1; however, not all routes will ultimately be developed. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the Project by Imperial County.

PC ORIGINAL PKG

EEC ORIGINAL PKG





Typical inverter stations

Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.



BESS Installed in Dedicated Structure

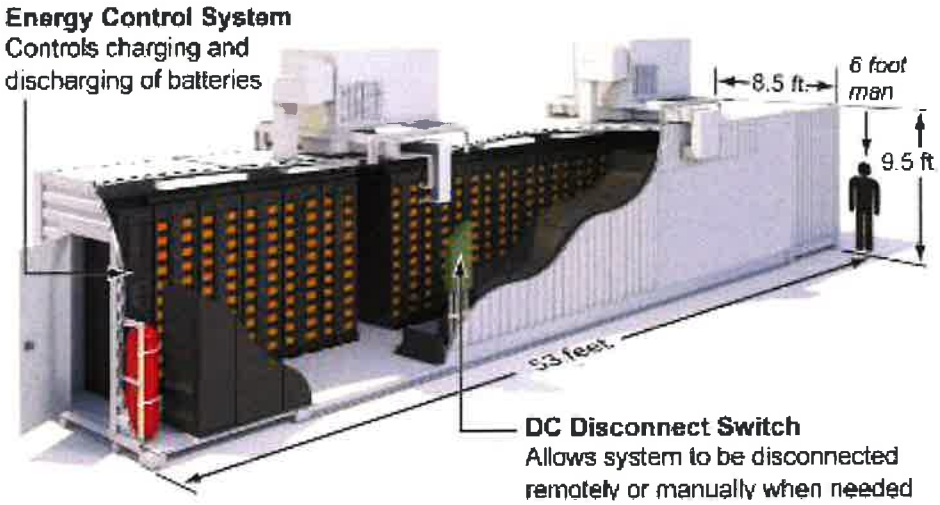


PC ORIGINAL PKG

EEC ORIGINAL PKG



Modular BESS Installed on Multiple Concrete Pads



Typical BESS module configuration



Typical BESS

PC ORIGINAL PKG

EEC ORIGINAL PKG

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Dedicated Project substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building described later in this Project Description.



Typical Substation

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard/Sub-station via one of the proposed gen-tie line alternatives (Figure 1). Big Rock 2 will transmit electricity to IID via the Liebert Switchyard/Sub-station, currently under construction in the Big Rock 1 Project; therefore, a new IID switchyard/sub-station will not be required, and thus obviating the need for any real estate conveyance to IID specific to Big Rock 2. The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-

PC ORIGINAL PKG EEC ORIGINAL PKG

end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) is depicted in Figure 1 and may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40' x 80' in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Roadway and IID Crossings

The Project may require the following crossing types of IID canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner's water supply, local irrigation district, or delivered via truck

PC ORIGINAL PKG EEC ORIGINAL PKG

from off-area source(s). A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic could access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the Project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the Project Area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the Project on weekends and during evening hours.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The Project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

Site preparation would be planned and designed to minimize the amount of earth movement required for the Project, to the extent feasible. The hydrology design would be given priority to protect the Project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

Laydown Areas

At full build-out, most of the Project footprint would be disturbed by construction of the Project. Therefore, temporary construction lay down and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the Project disturbance footprint. Due to the large scale of the Project, the lay down areas may be relocated periodically within the solar field acreage as the project is built out.

Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation
- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Workforce

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

Project Compliance Plans and Best Management Practices

The following sections describe standard Project feature compliance plans and best management practices that would be applied during construction and/or long-term operation of the Project, as applicable, to maintain human health and safety, ensure local, state, and federal regulatory compliance, and to avoid or minimize unplanned environmental impacts resulting from construction and/or operation of the Project.

Hazardous Materials and Hazardous Waste Management

The Project would utilize and store materials onsite that have been defined as hazardous under Title 40 of the Code of Federal regulations (CFR) Part 261, require a Material Safety Data Sheet (MSDS) per the California Labor Code Section 6360, is a listed substance in Section 339 of Title 8 of the California Code of Regulations (CCR), or is defined as hazardous waste per Chapter 6.5 of the California Health and Safety Code.

The following hazardous materials are expected to be used during the construction, operation, and long-term maintenance of the Project:

- Insulating mineral oil for electrical transformers and other electrical equipment
- Lubricating oil for maintenance vehicles
- Various solvents and detergents for cleaning equipment
- Gasoline for maintenance vehicles
- Lithium-ion batteries for storage of electrical energy

Note that additional materials may be used for the project, as required. All hazardous materials would be transported, managed, used, handled, and stored on the Project site during construction and operations. Hazardous waste would be inventoried, stored, transported, and disposed of in accordance with all applicable local, state, and federal regulations at the end of construction or as required during Project operation. Most hazardous materials would be maintained at the Project site in quantities below the threshold requiring a Hazardous Material Business Plan (HMBP) per California Environmental Protection Agency (CalEPA): 55-gallons of a liquid, 200 cubic feet of a gas, and 500 pounds of a solid.

The Project anticipates preparing and implementing a HMBP for the lithium-ion batteries within the BESS, as well as any other hazardous materials that may be stored on the Project site at or above the state-defined thresholds. Chemical storage tanks (if any) would also be designed and installed to meet applicable local and state regulations. Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or

PC ORIGINAL PKG

EEC ORIGINAL PKG

chemical containers would be stored in an approved storage facility/shed/structure onsite and disposed of as required by local, state, and federal regulations, as outlined in the HMBP.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of the Project would adhere to the Environmental Protection Agency's (EPAs) Rule on Spill Prevention Control and Countermeasures (SPCC), which helps facilities prevent oil spills into navigable waters of the U.S. Although aboveground stored quantities of diesel fuel, gasoline, lubricating or hydraulic oils are not expected to exceed EPA storage thresholds during construction, the quantity of insulating mineral oil required for operation of the Project substation transformers may reach EPA thresholds. SPCC plans would be developed for both Project construction and operations to ensure compliance with the EPA SPCC Rule, and ensure that appropriate spill prevention, control and countermeasures are developed to ensure that potential spills would not discharge into the New River or other navigable waters of the U.S. (e.g., IID canals) located in proximity to the Project.

Wastewater/Septic System

A standard onsite septic tank and leach field may be installed and used at the O&M building to dispose of small daily volumes of sanitary wastewater generated by the Projects' operational personnel. The septic system would be designed to meet operation and maintenance guidelines required by Imperial County.

Solid Waste Management

Inert solid wastes resulting from Project construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1 through 4 plastics, wood, and lubricating oils. Non-recyclable items may include insulation, drywall, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. To ensure that these wastes are recycled and disposed of properly, the applicant will prepare a Construction Waste Management Plan for review by the County prior to issuance of building permits. Consistent with Imperial County Public Health Department solid waste regulations and the California Green Building Code, the Plan would provide for diversion of a minimum of 50 percent of construction waste from landfill. Project operations are not anticipated to generate significant amounts of any inert solid wastes, recyclable or otherwise, and therefore are not expected to require a management plan.

Dust Control

Fugitive dust generated during Project construction would be controlled by utilizing Best Available Control Measures for Fugitive Dust (PM10) (e.g., watering, soil binders or tackifiers, wind screens, signage, speed restrictions, etc.) required by Imperial County Air Pollution Control District (ICAPCD) Rule 801, or California Air Resources Board (CARB) Rule 403. The applicant would prepare a Project Dust Control Plan (DCP) for review by Imperial County prior to issuance of building permits. The DCP would specify appropriate control measures to implement during both active construction and while construction on the Project site is inactive and outline appropriate control measures for both disturbed onsite Project areas, as well as any offsite unimproved or unpaved roads utilized for the Project construction access. During long-term

PC ORIGINAL PKG EEC ORIGINAL PKG

project operations, fugitive dust control is not anticipated to be required for the Project to comply with ICAPCD or CARB Fugitive Dust Rules.

Pest and Vegetation Management

Non-native invasive plants and other pests that establish within the Project area would be controlled during Project construction and operations, consistent with the Imperial County office of the Agricultural Commissioner requirements for solar projects. The Applicant would prepare a Pest Management Plan for submission to the Imperial County Agricultural Commission. Long-term implementation of the Plan would include routine pest monitoring of the Project area, use of physical, mechanical, or chemical controls as necessary to manage pests, maintenance of proper records documenting monitoring and pest management controls, and regular reporting to the Agricultural Commission as required.

Fire Management

The Project is located within the jurisdiction of Imperial County Fire Department. The Applicant will prepare a Fire Management Plan in accordance with Fire Department requirements for Project construction activities as well as long-term operations, including establishing appropriate emergency access to the Project site for first responders, and identifying Project-specific onsite fire protection or suppression systems that comply with Imperial County requirements.

The Project will incorporate many fire safety features to be described in detail in the Fire Management Plan, including access gates and service roads along the perimeter of the Project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems. Portable fire extinguishers would be provided at various locations throughout the Project site, while fixed fire suppressions systems would be employed throughout the Project based on equipment manufacturer specifications and coordination with the Fire Department. These may include onsite water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems. The Plan will also describe best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities. Access to nearby properties would not be hindered or restricted by any aspect of the Project Fire Management Plan.

Health and Safety

Health and safety precautions and best practices consistent with local, state, and federal regulations would be identified and implemented to ensure the safety for all personnel during Project construction and long-term operations. These administrative procedures and controls for Project construction and operational personnel will be supplemented with emergency response plans.

Administrative controls would include classroom and hands-on training in safe procedures for personnel operating and maintaining PV solar, BESS, and high-voltage electrical facilities, including general safety and implementation of a planned maintenance program. These controls would enhance overall Project safety and reliability when applied with the other physical Project safety system(s) and monitoring features incorporated as part of the Project design.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The Applicant will also prepare a Project-specific Emergency Response Plan (ERP). The ERP would outline the major components of an ERP specific to the Project, and address potential facility emergencies including chemical releases, fires, or personnel injuries, as well as identify appropriate protocols and actions during larger emergencies like earthquakes or regional emergency responses led by the Imperial County Office of Emergency Services. All Project employees would be provided with communication devices (e.g., cell phones and/or walkie-talkies) to ensure the ability to provide aid in the event of an emergency as described in the Plan.

General Plan Consistency

An amendment to the Imperial County General Plan and a zone change are anticipated to be required to implement the proposed Project. The Project parcels are located outside of the Imperial County Renewable Energy (RE) Overlay Zone, but directly adjacent to areas within the RE Overlay Zone. CUP applications proposed for specific RE projects not located in the RE Overlay Zone are not allowed without an amendment to the RE Overlay Zone. Therefore, the applicant is anticipating a General Plan amendment and zone change to include/classify the Project area in its entirety into the RE Overlay Zone.

Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed Project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The applicant would prepare a Project Reclamation Plan that would be implemented at the end of the Project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.
- Description of the activities necessary to restore the Project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

Utility Grid Upgrades

Certain utility grid upgrades will be performed by the utility to support the interconnection of the Big Rock 2 Project. Upgrades will be limited to areas already within the footprint of the utility but are included in this project description to ensure that they are appropriately described under CEQA.

The utility upgrades, known as Network Upgrades, required for Big Rock 2 include Twenty-four (24) 230 kV circuit breaker upgrades at Imperial Valley Substation, a Remote Terminal Unit (RTU) at Imperial Valley Substation, installation of one or more new 230-kV circuit breakers, two or more 230 kV disconnect switches, and associated foundations, structures, and relaying at Imperial Valley Substation.

Anticipated Required Project Entitlements

Imperial County (Lead Agency)

- Consideration and certification of the Final EIR
- Adoption of the Mitigation Measure Monitoring Program (MMMP)
- Approval of the proposed CUP by the County Board of Supervisors
- Approval by the County Board of Supervisors for applicable items as follows:
    - General Plan Amendment to the Renewable Energy Overlay Element (Zone Change(s),
    - Height Variances, and/or

PC ORIGINAL PKG

EEC ORIGINAL PKG

- Development Agreement and/or Voluntary Public Benefit Agreement
- County Grading Permit
- County Building permit(s)
- County encroachment permits, easements and/or licenses, as applicable.

The following ministerial reviews and permit approvals are anticipated to be required for the Project by the Imperial County Department(s) and/or Division(s) shown below:

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Anticipated Imperial Irrigation District Approvals

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the Proposed Project would cross IID facilities with access points and electrical crossings. The Proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

PC ORIGINAL PKG

EEC ORIGINAL PKG

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

**The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may ultimately be required to implement the proposed Project.*

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX A: SITE PLAN

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX B: FULL RESOLUTION MAP FIGURES

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment 1

CUP North

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment A

Conditional Use Permit Form

PC ORIGINAL PKG

EEC ORIGINAL PKG

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1.	PROPERTY OWNER'S NAME Multiple owners. Please see attachment.	EMAIL ADDRESS: Please see attachment.	
2.	MAILING ADDRESS (Street / P O Box, City, State) Multiple owners. Please see attachment.	ZIP CODE See attached.	PHONE NUMBER See attached.
3.	APPLICANT'S NAME 90FI 8me LLC	CUP Application #1 of 4	
4.	MAILING ADDRESS (Street / P O Box, City, State) 4370 Town Center Blvd., Suite 110 El Dorado Hills, CA 95762	ZIP CODE 95762	jjackson@avantus.com, 303.588.3855
4.	ENGINEER'S NAME CA. LICENSE NO. TBD	EMAIL ADDRESS	
5.	MAILING ADDRESS (Street / P O Box, City, State)	ZIP CODE	PHONE NUMBER

6.	ASSESSOR'S PARCEL NO. Multiple APNs. Please see attachment.	1,030 acres	ZONING (existing) A 2, A 2 R, A 3, A-2-RE, A-3-RE
7.	PROPERTY (site) ADDRESS Multiple APNs. Please see attachment.		
8.	GENERAL LOCATION (i.e. city, town, cross street) Approximately 1 mile southwest of Seely, immediately south of Interstate 8, west of Drew Road and east and north of Mandrapa Road.		
9.	LEGAL DESCRIPTION Multiple APNs. Please see attachment.		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10.	DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail) Please see attachment	
11.	DESCRIBE CURRENT USE OF PROPERTY Farmland	
12.	DESCRIBE PROPOSED SEWER SYSTEM Septic tank with leach field	
13.	DESCRIBE PROPOSED WATER SYSTEM IID distribution system and private water treament facility	
14.	DESCRIBE PROPOSED FIRE PROTECTION SYSTEM Above-ground tanks and dedicated fire protection water, see attached	
15.	IS PROPOSED USE A BUSINESS? ☒ Yes ☐ No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE? Please see attachment

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Stephanie Perry — Chief Operating Officer of Avantus LLC, ultimate parent, duly authorized — 3/6/2024
Print Name — Date

Signature

Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY: — DATE
APPLICATION DEEMED COMPLETE BY: — DATE
APPLICATION REJECTED BY: — DATE
TENTATIVE HEARING BY: — DATE
FINAL ACTION: ☐ APPROVED ☐ DENIED — DATE

REVIEW / APPROVAL BY OTHER DEPT'S required.
☐ P. W.
☐ E. H. S.
☐ A. P. C. D.
☐ O. E. S.
☐
☐

CUP #

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B

B1 Legal Description
B2 Indemnification Forms
B3 Owner Affidavits
B4 Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B1

Legal Description

PC ORIGINAL PKG

EEC ORIGINAL PKG

Legal Descriptions:

Big Rock 2 Cluster North (CUP Request #1)

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	**85.5**
	Sub-total		**910**
	Laurel Cluster 2 North CUP #21-0014 (Expires Dec. 2024)		
12	051-300-032 (southern portion) *(to be re-entitled)*	A-2-RE	80
13	051-300-036 *(to be re-entitled)*	A-3-RE	40.3
	Sub-total		**120**
	TOTAL ACRES		**1,030**

Landowners: Tomlinson, Preece, Kuhn

Tomlinson

PARCEL A:

THE EAST ONE-HALF OF TRACT 83, LYING WEST OF THE FERN CANAL, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, AS PER MAP OF THE RESURVEY APPROVED AND FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

PORTION OF APN: 051-270-028

PARCEL B:

THAT PORTION OF TRACT 79, LYING WEST OF THE FERN CANAL, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, AS PER MAP OF THE RESURVEY APPROVED AND FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

PORTION OF APN: 051-270-028

PARCEL C:

THE SOUTH HALF OF TRACT 81, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN

PC ORIGINAL PKG EEC ORIGINAL PKG

ACCORDING TO THE UNITED STATES GOVERNMENT PLAT OF RE-SURVEY APPROVED MAY 2, 1913, AND ON FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

APN: 051-300-011

PARCEL D:

GOVERNMENT LOT 13 OF SECTION 21, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, AS PER MAP OF THE RESURVEY APPROVED AND FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO RALPH H. YOUNG AND ROSALYNN M. YOUNG BY GRANT DEED

RECORDED AUGUST 22, 1972, IN BOOK 1333, PAGE 278, OF OFFICIAL RECORDS OF IMPERIAL COUNTY, CALIFORNIA.

APN: 051-300-026

PARCEL E:

GOVERNMENT LOT 8 OF SECTION 21, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE UNITED STATES GOVERNMENT OFFICIAL PLAT OF RE-SURVEY APPROVED MARCH 15, 1909, AND ON FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

APN: 051-300-016

PARCEL F:

THE NORTHEAST QUARTER OF TRACT 81, OF SECTION 21, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, AS PER MAP OF THE RESURVEY APPROVED AND FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

PORTION OF APN: 051-270-020

PARCEL G:

TRACT 80, EXCEPT THE NORTH 40 FEET THEREOF, OF SECTION 21, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, AS PER MAP OF THE RESURVEY APPROVED AND FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

PORTION OF APN: 051-270-020

PARCEL H:

GOVERNMENT LOTS 11 AND 12 OF SECTION 21, TOWNSHIP 16 SOUTH, RANGE 12 EAST, SAN BERNARDINO BASE AND MERIDIAN, AS PER MAP OF THE RESURVEY APPROVED AND FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

PORTION OF APN: 051-270-020

PC ORIGINAL PKG EEC ORIGINAL PKG

Preece

That portion of Tract 72, Township 16 South, Range 12 East, S.B.M., in an unincorporated area, County of Imperial, State of California, according to the Official Plat thereof.

Excepting therefrom that portion deeded to the State of California, in deed recorded December 6, 1965 as File No. 2 in Book 1219 page 166 of Official Records.

APN: 051-270-036

Kuhn

Parcel 1A:

Parcel Tract 57-B, and Lot 2, Section 14, Township 16 South, Range 12 East, San Bernardino Base and Meridian, County of Imperial, State of California, according to the Official Plat thereof, excepting from Lot 2, Section 14 that portion conveyed to the State of California by deed recorded September 23, 1965 in Book 1215, Page(s) 358 of Official Records.

Also excepting that portion of Tract 57B, described as follows:

Beginning at the Southeast corner of said tract;

Thence North 0°06' West, 710.96 feet along the East line of said tract;
Thence South 73°38' West, 656.68 feet to a point;
Thence South 66°45' West, 1,297.5 feet to a point in the South line of said tract;
Thence South 89°53' East along said South line to the Point of Beginning.

Parcel 1B:

That portion of Tract 57-A, Township 16 South, Range 12 East, San Bernardino Base and Meridian, County of Imperial, State of California, according to the Official Plat thereof, designated as Parcel 'B' on License Survey Map on file in Book 10, Page(s) 1 of License Surveys.

Parcel 1C:

That portion of the West 40 acres of the South 80 acres of Tract 71, Township 16 South, Range 12 East, San Bernardino Base and Meridian, County of Imperial, State of California, according to the Official Plat thereof, lying southerly of the southerly line of land granted to the State of California for freeway purposes by deed recorded June 8, 1965 in Book 1208, Page(s) 734 of Official Records.

Parcel 1D:

That portion of the East 40 acres of Tract 71, Township 16 South, Range 12 East, San Bernardino Base and Meridian, County of Imperial, State of California, according to the Official Plat thereof, designated as Parcel 'A' on License Survey Maps on file in Book 10, Page(s) 1, of License Survey Map in the Office of the County Recorder of Imperial County.

APN: 051-280-054-0

PC ORIGINAL PKG EEC ORIGINAL PKG

Parcel 2:

That portion of Section 22, Township 16 South, Range 12 East, San Bernardino Base and Meridian, in an unincorporated area of the County of Imperial, State of California, according to the Official Plat thereof, described as follows:

Beginning at the Northwest corner of Section 22;
Thence South 00°01'38" West, a distance of 803.60 feet to the Northwest corner of Lot 4 of Section 22;
Thence North 89°55'19" East a distance of 2082.69 feet to the Northwest corner of Tract 44; Thence North 89°55'19" East a distance of 1317.4 feet to the Southeast corner of Tract 78;

Thence South 89°45'57" East, along the North line of tract 55, a distance of 1.19 feet to the Northeast corner of the Northwest quarter of Tract 4, said corner also being the True Point of Beginning; Thence South 00°00'59" West along the East line of the Northwest quarter of Tract 55, a distance of 1325.89 feet; Thence South 89°54'25" East, along the South line of the Northeast quarter of Tract 55, a distance of 330.00 feet;

Thence North 44°56'49" East, a distance of 1400,20 feet to a point on the East line of Tract 55;
Thence South 00°01'25" West, along the East line of Tract 55, a distance of 198.00 feet: Thence North 53°20'52" East a distance of 658.39 feet;
Thence East a distance of 198.00 feet;
Thence North a distance of 132.00 feet to a point on the North line of Tract 50;
Thence North 89°45'57" West a distance of 726.00 feet to the Northeast corner of Tract 55; Thence North 89°45'57" West along the North line of Tract 55; a distance of 1318.94 feet to the Northeast corner of the Northwest quarter of Tract 55, which corner is also the True Point of Beginning.

Also shown as Parcel 4 of that certain Certificate of Compliance PM 2078, recorded September 18, 1992 as Instrument No. 19893 of Official Records.

APN: 051-300-037-000

Parcel 1E:

Lot 1 of Section 15 and Lot 1 of Section 22 and Tract No. 56, all in Township 16 South, Range 12 East, S.B. & M., County of Imperial, State of California, according to the official plat thereof.

APN: 051-270-041

Parcel B:

That portion of Section 22, Township 16 South, Range 12 East, S.B.M., in an unincorporated area of the County of Imperial, in the State of California, according to the Official Plat thereof, described as follows:

Beginning at the Northwest corner of said Section 22; thence S 00 Degrees 01' 38" W a distance of 803.60 feet to the Northwest corner of Lot 4 of Section 22, said corner also being the True Point of Beginning; thence N 89 Degrees 55' 19" E a distance of 2082.69 feet to the Northwest corner of Tract 55; thence S 00 Degrees 00' 33" W. along the West line of Tract 44, a distance of 2643.86 feet to the Southwest corner of Tract 55; thence S 89 Degrees 53' 32" E, along the South line of Tract 44, a distance of 1318.60 feet to the Northeast corner of the West 120 acres of Tract 54, a distance of 523.82 feet to the centerline of the County Road, as it now exists, and was described in the Deed recorded in Book 1134, Page 297 of Official

PC ORIGINAL PKG EEC ORIGINAL PKG

Records of the Imperial County Recorder; thence N 89 Degrees 43' 0B" W, along the centerline of the County Road, as it now exists, and as described above, a distance of 1319.67 feet to a point on the West line of Tract 54; thence N 00 Degrees 00' 33" E, along the West line of Tract 54, a distance of 2.54 feet to the Southeast corner of Lot 6 of Section 22; thence N 89 Degrees, 59' 56" W. a distance of 2083.68 feet to the Southwest corner of the Northwest ¼ of the Southwest ¼ of said Section 22; thence N 00 Degrees 01' 38" E. along the West line of said Section 22, a distance of 3158.27 feet to the Northwest corner of Lot 4 of Section 22, said corner also being the True Point of Beginning.

Also shown as Parcel 3 of that certain Certificate of Compliance PM 2078, recorded September 18, 1992, as Instr. # 19893 of Official Records.

APN: 051-300-032 (North)

Re-entitlement(s)

Parcel A:

The Southwest ¼ of Tract 55 of Section 22, Township 16 South, Range 12 East, S.B.M., in an unincorporated area of the County of Imperial, in the State of California, according to the Official Plat thereof, described as follows:

Beginning at the Northwest corner of said Section 22, thence S 00 Degrees 01' 38" W., a distance of 803.60 feet to the Northwest corner of Lot 4 of Section 22; thence N 89 Degrees 55' 19" E a distance of 2082.69 feet to the Northwest corner of Tract 55l thence S 00 Degrees 00' 33" W. along the West line of Tract 55, a distance of 1321.93 feet to the Northwest corner of the Southwest ¼ of Tract 44, said corner also being the True Point of Beginning; thence S 89 Degrees 54' 25" E. along the North line of the Southwest ¼ Tract 55, a distance of 1318.77 feet to the Northeast corner of the Southwest ¼ of Tract55; thence S 00 Degrees 00' 59" W. along the East line of the Southwest ¼ of Tract 55; thence N 89 Degrees 53' 32" w/ along the South line of Tract 55, a distance of 1318.60 feet to the Southwest corner of Tract 55; thence N 00 Degrees 00' 33" E. along the West line of Tract 44, a distance of 1321.93 feet to the Northwest corner of the Southwest ¼ of Tract 44, said corner also being the True Point of Beginning. Also shown as Parcel 2 of that certain Certificate of Compliance PM 2078, recorded September 18, 1992, as Instr. # 19893 of Official Records.

APN: 051-300-036

Parcel B:

That portion of Section 22, Township 16 South, Range 12 East, S.B.M., in an unincorporated area of the County of Imperial, in the State of California, according to the Official Plat thereof, described as follows:

Beginning at the Northwest corner of said Section 22; thence S 00 Degrees 01' 38" W a distance of 803.60 feet to the Northwest corner of Lot 4 of Section 22, said corner also being the True Point of Beginning; thence N 89 Degrees 55' 19" E a distance of 2082.69 feet to the Northwest corner of Tract 55; thence S 00 Degrees 00' 33" W. along the West line of Tract 44, a distance of 2643.86 feet to the Southwest corner of Tract 55; thence S 89 Degrees 53' 32" E, along the South line of Tract 44, a distance of 1318.60 feet to the Northeast corner of the West 120 acres of Tract 54, a distance of 523.82 feet to the centerline of the County Road, as it now exists, and was described in the Deed recorded in Book 1134, Page 297 of Official Records of the Imperial County Recorder; thence N 89 Degrees 43' 0B" W,

PC ORIGINAL PKG EEC ORIGINAL PKG

along the centerline of the County Road, as it now exists, and as described above, a distance of 1319.67 feet to a point on the West line of Tract 54; thence N 00 Degrees 00' 33" E, along the West line of Tract 54, a distance of 2.54 feet to the Southeast corner of Lot 6 of Section 22; thence N 89 Degrees, 59' 56" W. a distance of 2083.68 feet to the Southwest corner of the Northwest ¼ of the Southwest ¼ of said Section 22; thence N 00 Degrees 01' 38" E. along the West line of said Section 22, a distance of 3158.27 feet to the Northwest corner of Lot 4 of Section 22, said corner also being the True Point of Beginning.

Also shown as Parcel 3 of that certain Certificate of Compliance PM 2078, recorded September 18, 1992, as Instr. # 19893 of Official Records.

APN: 051-300-032 (South)

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B2

Indemnification Forms

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name 90Fl 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, Ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name John Kuhn

By

Sole Trustee of the Madeline Kuhn

Title Legacy Trust

Mailing Address:

APNs 051-270-041, 051-300-035, 051-300-037
and 051-280-054

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on March 13, , 2024

APPLICANT

Name: 90Fl 8me LLC

By

Title Michael Healy, Chief Commercial Officer of Avantus LLC, Ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name John Kuhn

By

Title Sole Trustee of the Madeline Kuhn Legacy Trust

Mailing Address: 473 Savannah Hwy Charleston, SC 29407

APNs 051-300-032, 051-300-036, 051-310-027, 051-310-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90Fl 8me LLC, Michael Healy

By _____

Title CEO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Melvin Jerry Preece, Jr.

By _____
President of J.R. Preece, Inc. and

Title Trustee of the Melvin Jerry Preece, Jr. Trust on December 11, 1995

Mailing Address:

APN 051-270-036

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By [signature]

Title CEO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Kenneth Francis Tomlinson

By [signature]

Title Trustee of the Kenneth F. Tomlinson Irrevocable Trust Dated December 27, 2012

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041515.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CFO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Kenneth Francis Tomlinson

By

Title an individual

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FCRMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By [signature]

Title CCO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name John A. Tomlinson

By [signature]

Title Co-Trustee of the Frank N Tomlinson Separate Property Trust, U/D/T Dated October 6, 2005

Mailing Address

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___ ___ ___-___ ___ ___-___ ___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

MAIN OFFICE 801 Main Street El Centro, CA 92243 (442) 265-1736 FAX (442) 265-1735 E-MAIL: planning@co.imperial.ca.us

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CEO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Carma J. Tomlinson

By

Title Co-Trustee of the Frank N Tomlinson Separate Property Trust U/D/T Dated October 6, 2005

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90Fl 8me LLC, Michael Healy

By [signature]

Title CCO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Thomas Grant Tomlinson

By [signature]

Title Trustee of the Thomas G. Tomlinson Irrevocable Trust Dated December 27, 2012

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

MAIN OFFICE: 801 Main Street El Centro, CA 92243 (442) 265-1736 FAX: (442) 265-1735 E-MAIL: planning@[illegible]

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90Fl 8me LLC Michael Healy

By

Title CCO of Avantus LLC, Ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name William Morton Tomlinson, II

By

Trustee of the William M. Tomlinson, II

Title Irrevocable Trust Dated December 27, 2012

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Thomas Grant Tomlinson

By

Title an individual

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name William Morton Tomlinson, II

By

Title an individual

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, Ultimate Parent duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name John A. Tomlinson

By

Title Member of F.C. and M.K. Tomlinson, LLC

Mailing Address:

APNs 051-300-016, 051-300-011, 051-300-026
051-270-020 and 051-270-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B3

Owner Affidavits

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address _____ Further identified by Assessor's Parcel Number (APN) 051-270-041, 051-300-035, 051-300-037 and 051-280-054 is hereby granted.

_____
OWNER (SIGNATURE)

John Kuhn
OWNER (TYPED OR PRINT)

473 Savannah Hwy
OWNER'S ADDRESS

Charleston SC 29401

DATE 9/20/23

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF ~~CALIFORNIA~~ SOUTH CAROLINA
COUNTY OF Charleston } S.S.

On SEPTEMBER 20 2023 before me, MICHELLE L CAVANAUGH personally appeared JOHN KUHN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of ~~California~~ South Carolina that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

MICHELLE L. CAVANAUGH NOTARY PUBLIC SOUTH CAROLINA

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-300-032, 051-300-036, 051-310-027, 051-310-028 is hereby granted.

OWNER (SIGNATURE)

John Kuhn

OWNER (TYPED OR PRINT)

473 Savannah Hwy

OWNER'S ADDRESS

Charleston, SC 29407

DATE 3/4/24

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF ~~CALIFORNIA~~ South Carolina
COUNTY OF ~~Imperial~~ Charleston } S.S.

On MARCH 4 2024 before me, MICHELLE L. CAVANAUGH personally appeared JOHN KUHN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

MICHELLE L. CAVANAUGH NOTARY PUBLIC MY COMM. EXP. 07/31/2032 SOUTH CAROLINA

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-270-036 is hereby granted.

Melvin Jerry Preece Jr
OWNER (SIGNATURE)

Melvin Jerry Jr. Preece
OWNER (TYPED OR PRINT)

3396 W. Vaughn Rd, El Centro CA 92243
OWNER'S ADDRESS

October 2, 2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On October 2, 2023 before me, Gabriela B Pacheco, Notary Public personally appeared Melvin Jerry Jr Preece, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(~~ies~~), and that by his/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

GABRIELA B. PACHECO
COMM. #2329401
Notary Public - California
Imperial County
My Comm. Expires June 1, 2024

WITNESS my hand and official seal.

Signature _____ (Seal)

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document Owner's Affidavit
Number of Pages 1 Date of Document October 2, 2023
Signer(s) Other Than Named Above Melvin Jerry Jr. Preece

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

_____ Further identified by Assessor's Parcel Number

(APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

OWNER (SIGNATURE)

Thomas Grant Tomlinson, Trustee of the Thomas G. Tomlinson Irrevocable Trust Dated December 27, 2012

OWNER (TYPED OR PRINT)

250 W. Marquita #A, San Clemente, CA 92672

OWNER'S ADDRESS

10/18/2023

DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Orange } S.S.

On 10/28/2023 before me, Maxfield Samuel Conklin, notary Public, personally appeared Thomas Grant Tomlinson, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

MAXFIELD SAMUEL CONKLIN
Notary Public - California
Orange County
Commission # 2400010
My Comm. Expires May 1, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address _____ Further identified by Assessor's Parcel Number (APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

OWNER (SIGNATURE)

Thomas Grant Tomlinson
OWNER (TYPED OR PRINT)

250 W. Marquita #A, San Clemente, CA 92672
OWNER'S ADDRESS

10/18/2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Orange } S.S.

On 10/18/2023 before me, Maxfield Samuel Conklin, notary Public, personally appeared Thomas Grant Tomlinson, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

MAXFIELD SAMUEL CONKLIN
Notary Public - California
Orange County
Commission # 2402219
My Comm. Expires May 1, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

_____ Further identified by Assessor's Parcel Number

(APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

Kenneth Francis Tomlinson
OWNER (SIGNATURE)

Kenneth Francis Tomlinson
OWNER (TYPED OR PRINT)

156 Wilshire Ct., San Carlos, CA 94070
OWNER'S ADDRESS

10/03/2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF San Mateo } S.S.

On October 3, 2023 before me, Helen Sutherland, Notary Public, personally appeared Kenneth Francis Tomlinson, who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) ~~is~~/are subscribed to the within instrument and acknowledged to me that ~~he~~/~~she~~/~~they~~ executed the same in ~~his~~/~~her~~/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/~~her~~/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Helen Sutherland (Seal)

HELEN SUTHERLAND
COMM # 2363802
NOTARY PUBLIC • CALIFORNIA
SAN MATEO COUNTY
Comm Exp JULY 27, 2025

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

MPvS/FORMS LISTS\OWNERSAFFDVT1.doc REVISED 06/22/2017 dtb

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

_____ Further identified by Assessor's Parcel Number

(APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

Kenneth Francis Tomlinson
OWNER (SIGNATURE)

Kenneth Francis Tomlinson, Trustee of the Kenneth F. Tomlinson Irrevocable Trust Dated
OWNER (TYPED OR PRINT)

December 27, 2012
156 Wilshire Ct., San Carlos, CA 94070
OWNER'S ADDRESS

10/03/2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF San Mateo } S.S.

On October 3rd, 2023 before me, Helen Sutherland, Notary Public personally appeared Kenneth Francis Tomlinson who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Helen Sutherland (Seal)

HELEN SUTHERLAND
COMM. # 2362902
NOTARY PUBLIC • CALIFORNIA
SAN MATEO COUNTY
Comm. Exp. JULY 27, 2025

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

John A Tom Member / Co-Trustee
OWNER (SIGNATURE)

F.C. and M.K. Tomlinson, LLC
OWNER (TYPED OR PRINT)

P.O. Box 759, Brea, CA 92822
OWNER'S ADDRESS

October 4, 2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Orange } S.S.

On OCTOBER 4TH 2023 before me, KOOSHA RASHIDIAN NOTARY PUBLIC, personally appeared JOHN A TOMLINSON, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

KOOSHA RASHIDIAN
COMM. #2345634
NOTARY PUBLIC - CALIFORNIA
ORANGE COUNTY
My Commission Expires 02/07/2025

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

_____ Further identified by Assessor's Parcel Number

(APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

Trustees

OWNER (SIGNATURE)

Carma J. Tomlinson and John A. Tomlinson, Co-Trustees of the Frank N. Tomlinson Separate Property Trust, U/D/T dated October 6, 2005

OWNER (TYPED OR PRINT)

P.O. Box 759, Brea, CA 92822

OWNER'S ADDRESS

October 4, 2023

DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Orange) S.S.

On OCTOBER 4TH 2023 before me, KOOSHA RASHIDIAN NOTARY PUBLIC, personally appeared CARMA J TOMLINSON and JOHN A TOMLINSON, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

KOOSHA RASHIDIAN
COMM. #2345634
NOTARY PUBLIC - CALIFORNIA
ORANGE COUNTY
My Commission Expires 02/07/2025

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address _____ Further identified by Assessor's Parcel Number (APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

William Morton Tomlinson, II
OWNER (SIGNATURE)

William Morton Tomlinson, II
OWNER (TYPED OR PRINT)

P.O. Box 759, Brea, CA 92822
OWNER'S ADDRESS

9-29-23
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ELIZABETH MATTHEWS
Notary Public - California
Orange County
Commission # 2395669
My Comm. Expires Mar 3, 2026

STATE OF CALIFORNIA
COUNTY OF ORANGE } S.S.

On SEPTEMBER 29, 2023 before me, ELIZABETH MATTHEWS, NOTARY PUBLIC, personally appeared WILLIAM TOMLINSON, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-300-016, 051-300-011, 051-300-026, 051-270-020 and 051-270-020 is hereby granted.

William Morton Tomlinson II
OWNER (SIGNATURE)

William Morton Tomlinson, II, Trustee of the William M. Tomlinson, II Irrevocable Trust dated December 27, 2012
OWNER (TYPED OR PRINT)

P.O. Box 759, Brea, CA 92822
OWNER'S ADDRESS

9-29-23
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ELIZABETH MATTHEWS
Notary Public - California
Orange County
Commission # 2395669
My Comm. Expires Mar 3, 2026

STATE OF CALIFORNIA
COUNTY OF ORANGE } S.S.

On SEPTEMBER 29, 2023 before me, ELIZABETH MATTHEWS, NOTARY PUBLIC, personally appeared WILLIAM TOMLINSON, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B4

Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

BIG ROCK SOUTH CUP #1, LANDOWNER INFORMATION

CUP Request #	CUP Area	APN	Owner	Contact Information
CUP #1	BR 2 Cluster North	051-270-020	Tomlinson	Tomlinson Management, Inc. PO Box 759 Brea, CA 92822 Attn: William M. Tomlinson (714) 529-1335 bill@tomlinsonmgt.com toment1@aol.com
CUP #1	BR 2 Cluster North	051-270-028	Tomlinson	Tomlinson Management, Inc. PO Box 759 Brea, CA 92822 Attn: William M. Tomlinson (714) 529-1335 bill@tomlinsonmgt.com toment1@aol.com
CUP #1	BR 2 Cluster North	051-270-036	Preece	Jerry Preece 2396 W Vaughn Road El Centro, CA 92243 (760) 339-4856 jerrypreecejr@jrpreece.com
CUP #1	BR 2 Cluster North	051-270-041	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com
CUP #1	BR 2 Cluster North	051-280-054	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com

PC ORIGINAL PKG
EEC ORIGINAL PKG

BIG ROCK SOUTH CUP #1, LANDOWNER INFORMATION

CUP #1	BR 2 Cluster North	051-300-011	Tomlinson	Tomlinson Management, Inc. PO Box 759 Brea, CA 92822 Attn: William M. Tomlinson (714) 529-1335 bill@tomlinsonmgt.com toment1@aol.com
CUP #1	BR 2 Cluster North	051-300-016	Tomlinson	Tomlinson Management, Inc. PO Box 759 Brea, CA 92822 Attn: William M. Tomlinson (714) 529-1335 bill@tomlinsonmgt.com toment1@aol.com
CUP #1	BR 2 Cluster North	051-300-026	Tomlinson	Tomlinson Management, Inc. PO Box 759 Brea, CA 92822 Attn: William M. Tomlinson (714) 529-1335 bill@tomlinsonmgt.com toment1@aol.com
CUP #1	BR 2 Cluster North	051-300-035	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com
CUP #1	BR 2 Cluster North	051-300-037	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com

PC ORIGINAL PKG
EEC ORIGINAL PKG

BIG ROCK SOUTH CUP #1 LANDOWNER INFORMATION

CUP #1	BR 2 Cluster North / Laurel 2 Cluster North	051-300-036	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com
CUP #1	BR 2 Cluster North /Laurel Cluster 2Noth	051-300-032	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment C

Project Description

PC ORIGINAL PKG

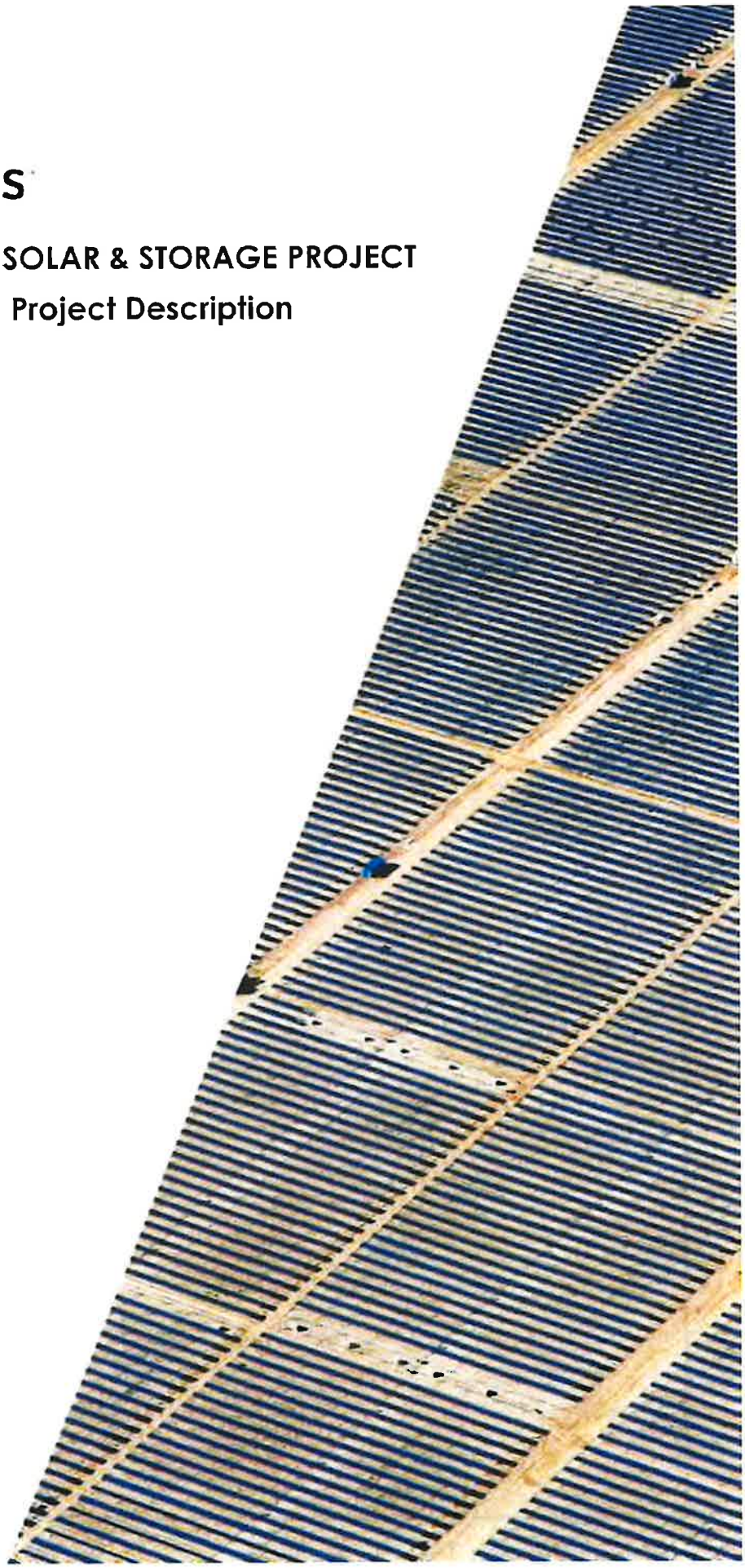
EEC ORIGINAL PKG

AVANTUS

BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT

CUP Application and Project Description

18 March 2024



Submitted by:
90FI 8me LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

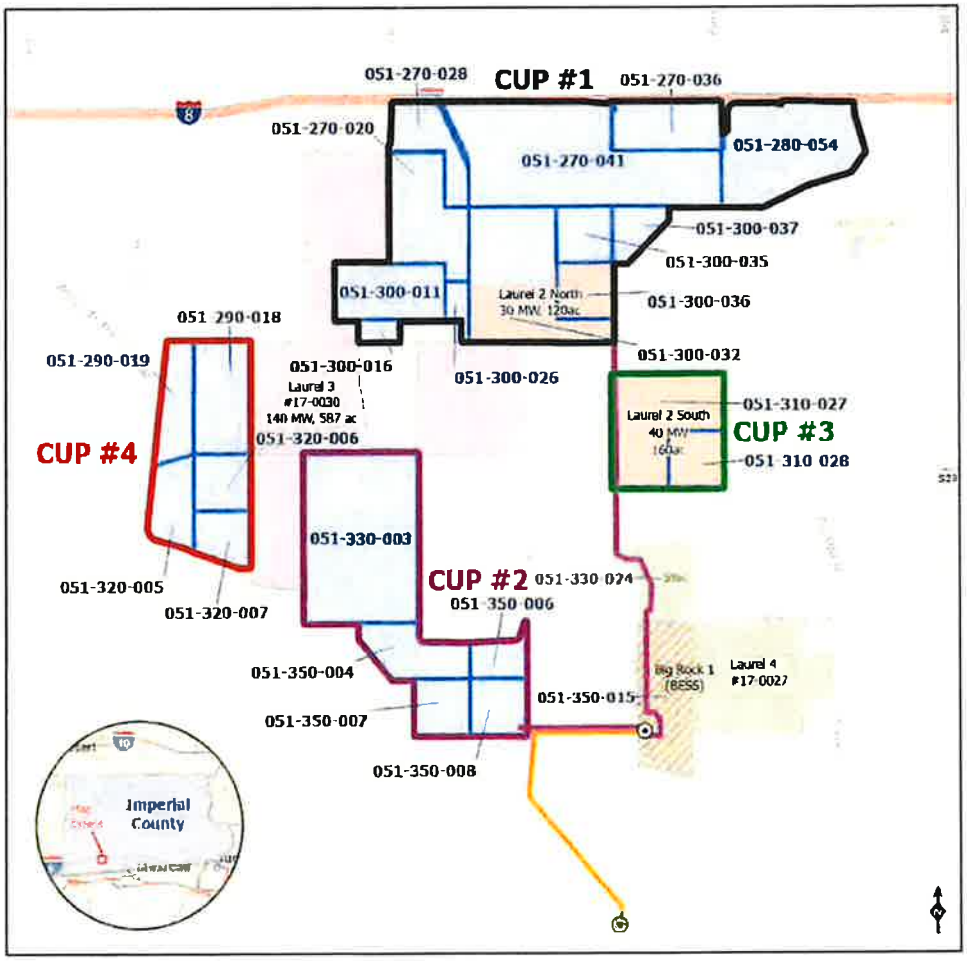
PC ORIGINAL PKG

EEC ORIGINAL PKG

Big Rock 2 Cluster Solar and Storage Project

This document contains Supporting Materials for the following Conditional Use Permit Applications Packages:

1. CUP #1: Big Rock 2 Cluster North (1,030 acres)
    - Big Rock 2 Cluster North (910 acres), including;
        - Laurel Cluster 2 North /CUP # 21-0014 (120 acres) *(to be re-entitled)*
2. CUP #2: Big Rock 2 Cluster South (410 acres)
3. CUP #3: Big Rock 2 Cluster East/Laurel Cluster 2 South CUP # 21-0013) (160 acres) *(to be re-entitled)*
4. CUP #4 Big Rock Cluster West (249 acres)



PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

PC ORIGINAL PKG

EEC ORIGINAL PKG

TABLE OF CONTENTS

INTRODUCTION **1**

Site Information **4**

PROJECT DESCRIPTION **7**

Overview **7**

Project Objectives **7**

Project Components **8**

PV Module Configuration 8

Collection, Inverter and Transformer Systems 11

Battery Energy Storage System 12

Substation(s) 15

Transmission Line and Interconnection 15

Operations and Maintenance (O&M) Building 16

Roadway and IID Crossings 16

Water Usage 16

Water Storage 17

Site Security and Fencing 17

Lighting 17

Annual Production 17

Electric Service 17

Project Construction **18**

Construction Activities and Duration 18

Laydown Areas 19

Workforce 19

Project Operation **19**

Operational Activities 19

Workforce 19

Project Compliance Plans and Best Management Practices **20**

Hazardous Materials and Hazardous Waste Management 20

Spill Prevention and Containment 20

Wastewater/Septic System 21

Solid Waste Management 21

Dust Control 21

Pest and Vegetation Management 21

Fire Management 22

Health and Safety 22

General Plan Consistency 23

Decommissioning and Reclamation **23**

Anticipated Required Project Entitlements **24**

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDICES

Appendix A	**Site Plan**
Appendix B	**Full Resolution Map Figures**

PC ORIGINAL PKG

EEC ORIGINAL PKG

INTRODUCTION

90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale [up to 500-megawatt (MW) in capacity] photovoltaic ("PV") solar energy generation and Battery Energy Storage System ("BESS") facility (also up to 500-MW in capacity). The proposed Project, collectively called, the Big Rock 2 Cluster Solar and Storage Project ("Big Rock 2" or the "Project") contemplates utilizing approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development (Figure 1).

Energy generated by the Project would be collected using up to 66 kilovolt ("kV") collector lines which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the Project substation to the Liebert Switchyard (pending construction), which will then be connected via an overhead 230-kV gen-tie line to the existing San Diego Gas and Electric (SDG&E) Imperial Valley Substation (Figure 1). It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

The Applicant intends to secure CUPs from Imperial County as the lead agency, along with permits and approvals from other relevant agencies as required by law. Laurel Cluster 3 CUP (#17-0030) is associated with a 10-year Development Agreement (DA) (Document Number 2023012228). However, Laurel Cluster 2 CUPs may expire prior to this approval, therefore, those areas have been integrated into this request, upon approval, Imperial County would void CUPs #21-0014 and #21-0013. Table 1 provides a breakdown of Project areas and acreage availability.

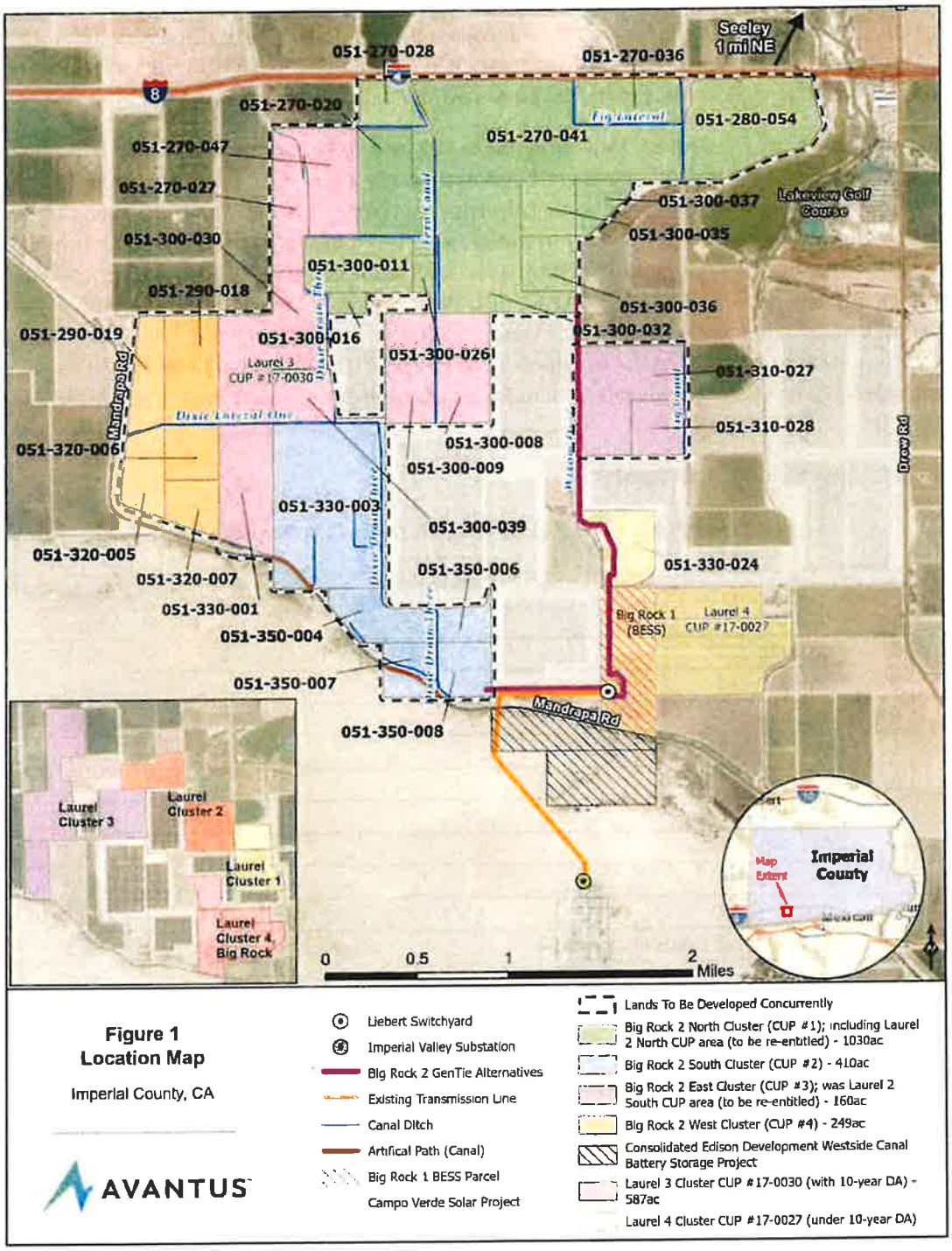
Table 1: Total Project Area and Land Availability

	Acres Available	CUP #
Big Rock 2 Cluster North, including Laurel Cluster 2 North (120 acres) parcels under CUP # 21-0014 (expires Dec. 2024)	1,030	CUP Request #1 (partial re-entitlement)
Big Rock 2 Cluster South	410	CUP Request #2
Big Rock 2 Cluster East/Laurel Cluster 2 South parcels under CUP #21-0013 (expires Dec. 2024)	160	CUP Request #3 (re-entitlement)
Big Rock 2 Cluster West	249	CUP Request #4
Laurel Cluster 3 CUP #17-0030	*587*	*NA (under 10-year DA)*

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 1: Project Location Map



PC ORIGINAL PKG

EEC ORIGINAL PKG

Site Information

Site Characteristics

The proposed Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 1).

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Parcels, Zoning, and Acreage(s)

Table 2: Big Rock 2 Cluster North (New CUP Request #1)

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	**85.5**
	Sub-total		**910**
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
12	051-300-032 (southern portion) *(to be re-entitled)*	A-2-RE	80
13	051-300-036 *(to be re-entitled)*	A-3-RE	40.3
	Sub-total		**120**
	TOTAL ACRES		**1,030**

Table 3: Big Rock 2 Cluster South (New CUP Request #2)

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4

PC ORIGINAL PKG EEC ORIGINAL PKG

	APN	Zoning	Acres
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410**

Table 4: Big Rock Cluster 2 East (to be re-entitled) (New CUP Request #3)

	Laurel Cluster 2 South CUP #21-0013 (Expires December 2024)		
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	Total		**160**

Table 5: Big Rock 2 Cluster West (New CUP Request #4)

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249**

Site Information

Site Characteristics

The Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 3).

The topography of the Project area is relatively flat, consisting primarily of agricultural fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

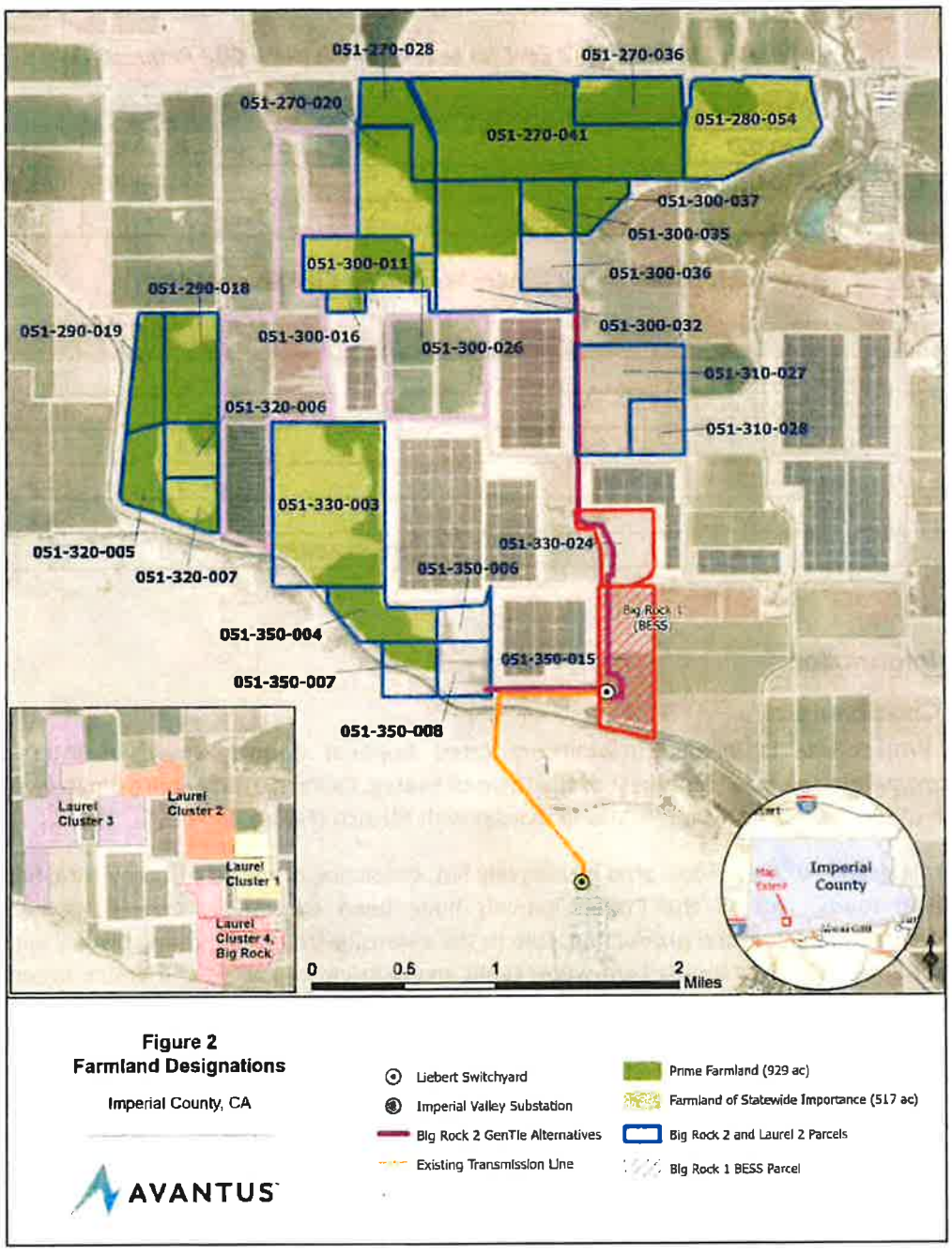
The entire Project area is designated Agricultural in the Imperial County General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 2 also illustrates Prime Farmland and Farmland of Statewide Importance; however, the Project does not include agricultural lands designated under the "Williamson Act".

Figure 2: Farmland Designations



PC ORIGINAL PKG

EEC ORIGINAL PKG

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 1).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 1).

PC ORIGINAL PKG

EEC ORIGINAL PKG

PROJECT DESCRIPTION

Overview

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. The Project contemplates two gen-tie line alternatives as depicted in Figure 1.

The Applicant has considered the following in its selection of the Big Rock 2 PV solar and BESS Project for detailed evaluation:

- Private land availability suitable for renewable energy development
- Compatible Land Use Zoning: Agricultural/Rural Zone(s)
- Proximity to the SDG&E Imperial Valley substation
- Proximity to the applicant's previously approved PV solar and BESS projects entitled with Imperial County

Project Objectives

The primary objective of 90FI 8me LLC is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the Project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional Project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed Project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.

PC ORIGINAL PKG EEC ORIGINAL PKG

- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

Project Components

PV Module Configuration

The Project would use PV panels or modules[1] on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height (H), depending on the mounting system used, panels are expected to remain between six (6) and eight (8) feet in height.

[1] Including but not limited to bi-facial or concentrated photovoltaic (CPV) technology.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical fixed-tilt solar panel rows



Typical single axis tracking solar panels

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis tracking solar panels

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the Project area characteristics and the desired energy production profile.



Typical fixed-tilt mounting structure

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis mounting structure

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these Project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the Project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are provided in Figure 1; however, not all routes will ultimately be developed. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the Project by Imperial County.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical inverter stations

Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.



BESS Installed in Dedicated Structure

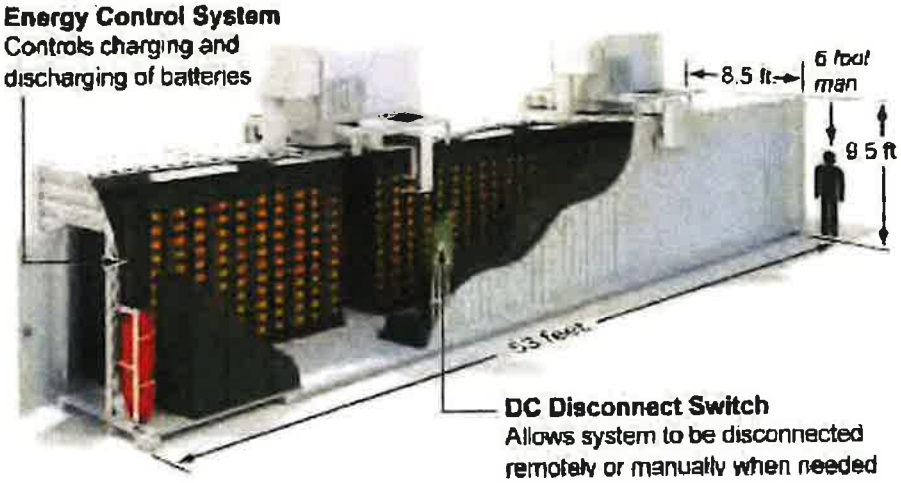


PC ORIGINAL PKG

EEC ORIGINAL PKG



Modular BESS Installed on Multiple Concrete Pads



Typical BESS module configuration



PC ORIGINAL PKG

EEC ORIGINAL PKG

Typical BESS

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building described later in this Project Description.



Typical Substation

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard, via one of the proposed gen-tie line alternatives (Figure 1). The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be

PC ORIGINAL PKG EEC ORIGINAL PKG

undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) is depicted in Figure 1 and may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40' x 80' in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Roadway and IID Crossings

The Project may require the following crossing types of Imperial Irrigation District (IID) canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner's water supply, local irrigation district, or delivered via truck from off-area source(s). A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

PC ORIGINAL PKG EEC ORIGINAL PKG

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic would access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). Large trucks would likely utilize Interstate 8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the Project Area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the Project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The Project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Site preparation would be planned and designed to minimize the amount of earth movement required for the Project, to the extent feasible. The hydrology design would be given priority to protect the Project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

Laydown Areas

At full build-out, most of the Project footprint would be disturbed by construction of the Project. Therefore, temporary construction lay down and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the Project disturbance footprint. Due to the large scale of the Project, the lay down areas may be relocated periodically within the solar field acreage as the project is built out.

Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation
- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

Workforce

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

PC ORIGINAL PKG EEC ORIGINAL PKG

Project Compliance Plans and Best Management Practices

The following sections describe standard Project feature compliance plans and best management practices that would be applied during construction and/or long-term operation of the Project, as applicable, to maintain human health and safety, ensure local, state, and federal regulatory compliance, and to avoid or minimize unplanned environmental impacts resulting from construction and/or operation of the Project.

Hazardous Materials and Hazardous Waste Management

The Project would utilize and store materials onsite that have been defined as hazardous under Title 40 of the Code of Federal regulations (CFR) Part 261, require a Material Safety Data Sheet (MSDS) per the California Labor Code Section 6360, is a listed substance in Section 339 of Title 8 of the California Code of Regulations (CCR), or is defined as hazardous waste per Chapter 6.5 of the California Health and Safety Code.

The following hazardous materials are expected to be used during the construction, operation, and long-term maintenance of the Project:

- Insulating mineral oil for electrical transformers and other electrical equipment
- Lubricating oil for maintenance vehicles
- Various solvents and detergents for cleaning equipment
- Gasoline for maintenance vehicles
- Lithium-ion batteries for storage of electrical energy

Note that additional materials may be used for the project, as required. All hazardous materials would be transported, managed, used, handled, and stored on the Project site during construction and operations. Hazardous waste would be inventoried, stored, transported, and disposed of in accordance with all applicable local, state, and federal regulations at the end of construction or as required during Project operation. Most hazardous materials would be maintained at the Project site in quantities below the threshold requiring a Hazardous Material Business Plan (HMBP) per California Environmental Protection Agency (CalEPA): 55-gallons of a liquid, 200 cubic feet of a gas, and 500 pounds of a solid.

The Project anticipates preparing and implementing a HMBP for the lithium-ion batteries within the BESS, as well as any other hazardous materials that may be stored on the Project site at or above the state-defined thresholds. Chemical storage tanks (if any) would also be designed and installed to meet applicable local and state regulations. Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers would be stored in an approved storage facility/shed/structure onsite and disposed of as required by local, state, and federal regulations, as outlined in the HMBP.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of the Project would adhere to the Environmental Protection Agency's (EPAs) Rule on Spill Prevention Control and Countermeasures (SPCC), which helps facilities prevent oil spills into navigable waters of the U.S. Although aboveground stored quantities of diesel fuel, gasoline, lubricating or hydraulic oils are not expected to exceed EPA storage thresholds during construction, the quantity of insulating

PC ORIGINAL PKG

EEC ORIGINAL PKG

mineral oil required for operation of the Project substation transformers may reach EPA thresholds. SPCC plans would be developed for both Project construction and operations to ensure compliance with the EPA SPCC Rule, and ensure that appropriate spill prevention, control and countermeasures are developed to ensure that potential spills would not discharge into the New River or other navigable waters of the U.S. (e.g., IID canals) located in proximity to the Project.

Wastewater/Septic System

A standard onsite septic tank and leach field may be installed and used at the O&M building to dispose of small daily volumes of sanitary wastewater generated by the Projects' operational personnel. The septic system would be designed to meet operation and maintenance guidelines required by Imperial County.

Solid Waste Management

Inert solid wastes resulting from Project construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1 through 4 plastics, wood, and lubricating oils. Non-recyclable items may include insulation, drywall, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. To ensure that these wastes are recycled and disposed of properly, the applicant will prepare a Construction Waste Management Plan for review by the County prior to issuance of building permits. Consistent with Imperial County Public Health Department solid waste regulations and the California Green Building Code, the Plan would provide for diversion of a minimum of 50 percent of construction waste from landfill. Project operations are not anticipated to generate significant amounts of any inert solid wastes, recyclable or otherwise, and therefore are not expected to require a management plan.

Dust Control

Fugitive dust generated during Project construction would be controlled by utilizing Best Available Control Measures for Fugitive Dust (PM10) (e.g., watering, soil binders or tackifiers, wind screens, signage, speed restrictions, etc.) required by Imperial County Air Pollution Control District (ICAPCD) Rule 801, or California Air Resources Board (CARB) Rule 403. The applicant would prepare a Project Dust Control Plan (DCP) for review by Imperial County prior to issuance of building permits. The DCP would specify appropriate control measures to implement during both active construction and while construction on the Project site is inactive and outline appropriate control measures for both disturbed onsite Project areas, as well as any offsite unimproved or unpaved roads utilized for the Project construction access. During long-term project operations, fugitive dust control is not anticipated to be required for the Project to comply with ICAPCD or CARB Fugitive Dust Rules.

Pest and Vegetation Management

Non-native invasive plants and other pests that establish within the Project area would be controlled during Project construction and operations, consistent with the Imperial County office of the Agricultural Commissioner requirements for solar projects. The Applicant would prepare a Pest Management Plan for submission to the Imperial County Agricultural Commission. Long-term implementation of the Plan would include routine pest monitoring of the Project area, use of physical, mechanical, or chemical controls as necessary to manage pests, maintenance of

PC ORIGINAL PKG EEC ORIGINAL PKG

proper records documenting monitoring and pest management controls, and regular reporting to the Agricultural Commission as required.

Fire Management

The Project is located within the jurisdiction of Imperial County Fire Department. The Applicant will prepare a Fire Management Plan in accordance with Fire Department requirements for Project construction activities as well as long-term operations, including establishing appropriate emergency access to the Project site for first responders, and identifying Project-specific onsite fire protection or suppression systems that comply with Imperial County requirements.

The Project will incorporate many fire safety features to be described in detail in the Fire Management Plan, including access gates and service roads along the perimeter of the Project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems. Portable fire extinguishers would be provided at various locations throughout the Project site, while fixed fire suppressions systems would be employed throughout the Project based on equipment manufacturer specifications and coordination with the Fire Department. These may include onsite water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems. The Plan will also describe best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities. Access to nearby properties would not be hindered or restricted by any aspect of the Project Fire Management Plan.

Health and Safety

Health and safety precautions and best practices consistent with local, state, and federal regulations would be identified and implemented to ensure the safety for all personnel during Project construction and long-term operations. These administrative procedures and controls for Project construction and operational personnel will be supplemented with emergency response plans.

Administrative controls would include classroom and hands-on training in safe procedures for personnel operating and maintaining PV solar, BESS, and high-voltage electrical facilities, including general safety and implementation of a planned maintenance program. These controls would enhance overall Project safety and reliability when applied with the other physical Project safety system(s) and monitoring features incorporated as part of the Project design.

The Applicant will also prepare a Project-specific Emergency Response Plan (ERP). The ERP would outline the major components of an ERP specific to the Project, and address potential facility emergencies including chemical releases, fires, or personnel injuries, as well as identify appropriate protocols and actions during larger emergencies like earthquakes or regional emergency responses led by the Imperial County Office of Emergency Services. All Project employees would be provided with communication devices (e.g., cell phones and/or walkie-talkies) to ensure the ability to provide aid in the event of an emergency as described in the Plan.

PC ORIGINAL PKG

EEC ORIGINAL PKG

General Plan Consistency

An amendment to the Imperial County General Plan and a zone change are anticipated to be required to implement the proposed Project. The Project parcels are located outside of the Imperial County Renewable Energy (RE) Overlay Zone, but directly adjacent to areas within the RE Overlay Zone. CUP applications proposed for specific RE projects not located in the RE Overlay Zone are not allowed without an amendment to the RE Overlay Zone. Therefore, the applicant is anticipating a General Plan amendment and zone change to include/classify the Project area in its entirety into the RE Overlay Zone.

Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed Project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

The applicant would prepare a Project Reclamation Plan that would be implemented at the end of the Project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.

PC ORIGINAL PKG EEC ORIGINAL PKG

- Description of the activities necessary to restore the Project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

Anticipated Required Project Entitlements

Imperial County (Lead Agency)

- Consideration and certification of the Final EIR
- Adoption of the Mitigation Measure Monitoring Program (MMMP)
- Approval of the proposed CUP by the County Board of Supervisors
- Approval by the County Board of Supervisors for applicable items as follows:
    - General Plan Amendment to the Renewable Energy Overlay Element (Zone Change(s),
    - Height Variances, and/or
    - Development Agreement and/or Voluntary Public Benefit Agreement
    - County Grading Permit
    - County Building permit(s)
    - County encroachment permits, easements and/or licenses, as applicable.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The following ministerial reviews and permit approvals are anticipated to be required for the Project by the Imperial County Department(s) and/or Division(s) shown below:

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Anticipated Imperial Irrigation District Approvals

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the Proposed Project would cross IID facilities with access points and electrical crossings. The Proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge

PC ORIGINAL PKG EEC ORIGINAL PKG

Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)

- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

**The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may ultimately be required to implement the proposed Project.*

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX A: SITE PLAN
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX B: FULL RESOLUTION MAP FIGURES
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D

D1 – Site Plan
D2 – Full Resolution Figures

PC ORIGINAL PKG

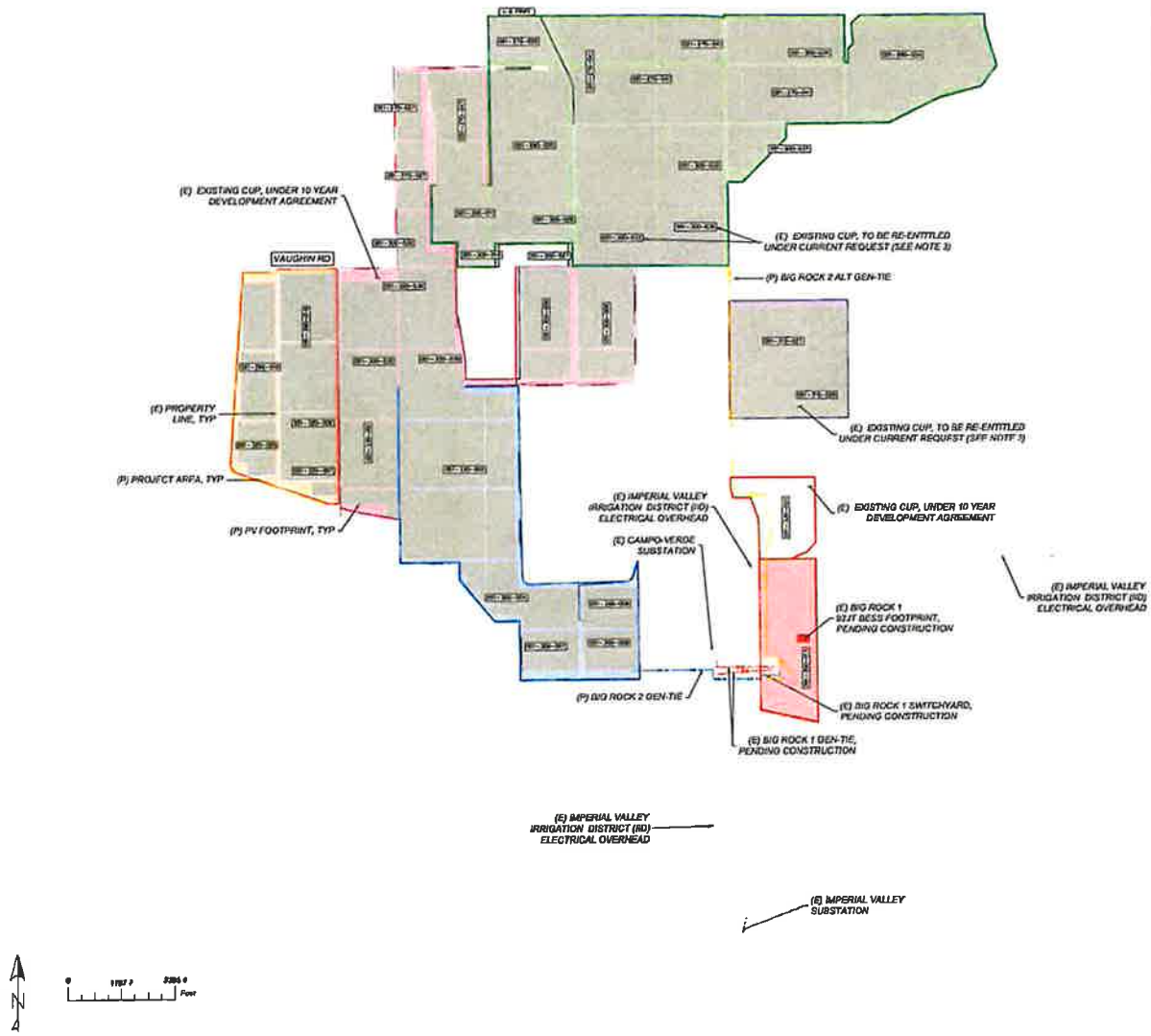
EEC ORIGINAL PKG

Attachment D1

Site Plan

PC ORIGINAL PKG

EEC ORIGINAL PKG





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1601 Century Park East, Suite 700
Los Angeles, CA 90067

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.
3. APNS TO BE RE-ENTITLED INCLUDE: LAUREL 2 NORTH CUP # 21-0014: 8051-300-037 (SOUTH) AND 8051-300-036 LAUREL 2 SOUTH CUP #21-0013: 8051-310-037 AND 8051-310-038

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

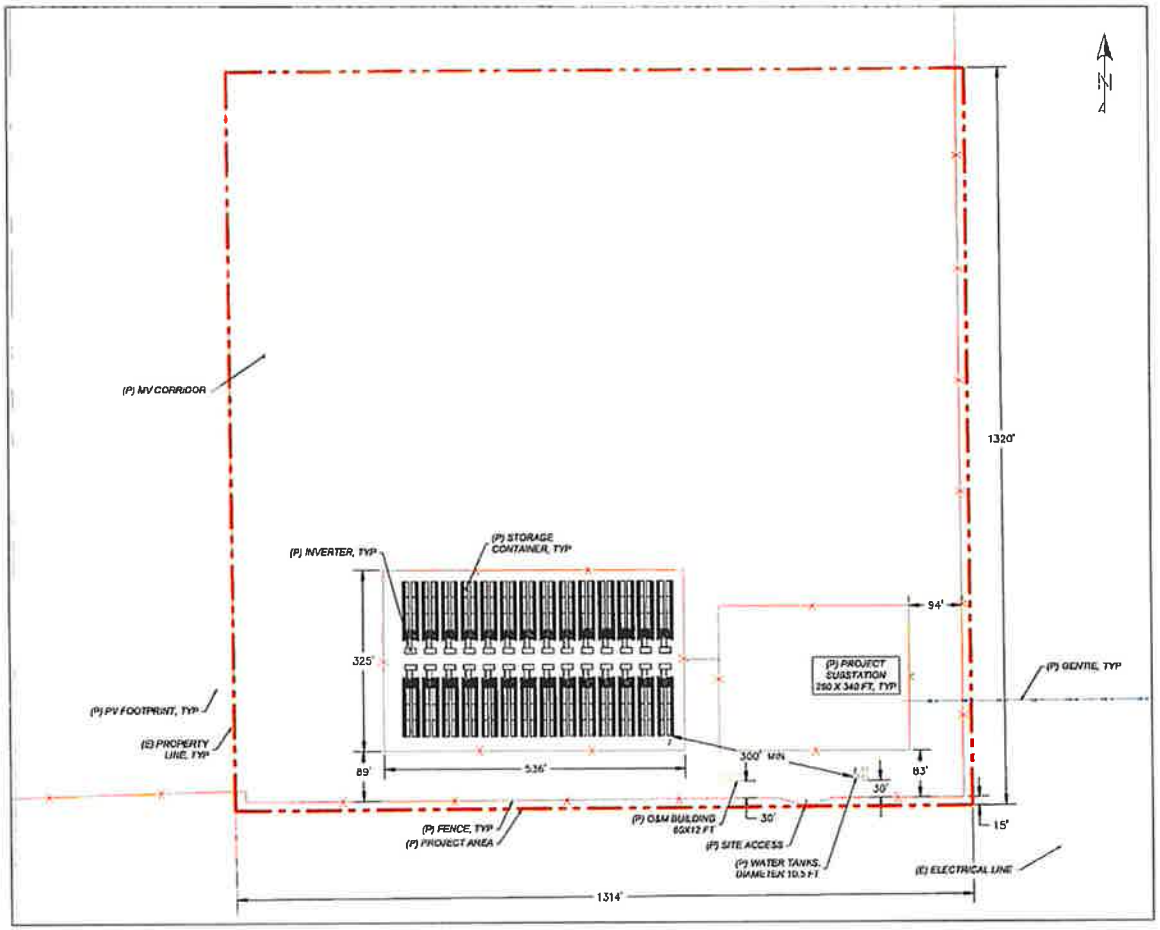
CONCEPTUAL SITE PLAN

DATE: March 18, 2024

SHEET: EX-1

PC ORIGINAL PKG

EEC ORIGINAL PKG



AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

#	DATE	COMMENT
1	09/11/2023	PRELIMINARY LAYOUT
2	11/17/2023	PRELIMINARY LAYOUT UPDATE
3	12/01/2023	PRELIMINARY LAYOUT UPDATE
4	03/13/2024	PRELIMINARY LAYOUT UPDATE

NOTES:

1. *CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.*
2. *FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.*

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL BESS LAYOUT

DATE: March 13, 2024

SHEET: EX-2

PC ORIGINAL PKG

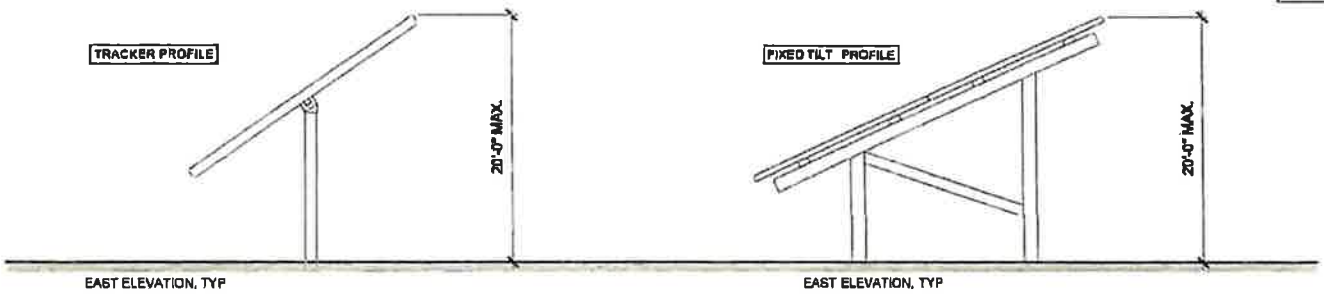
EEC ORIGINAL PKG

PC ORIGINAL PKG

EEC ORIGINAL PKG

1 TYPICAL PANEL & MOUNTING STRUCTURE

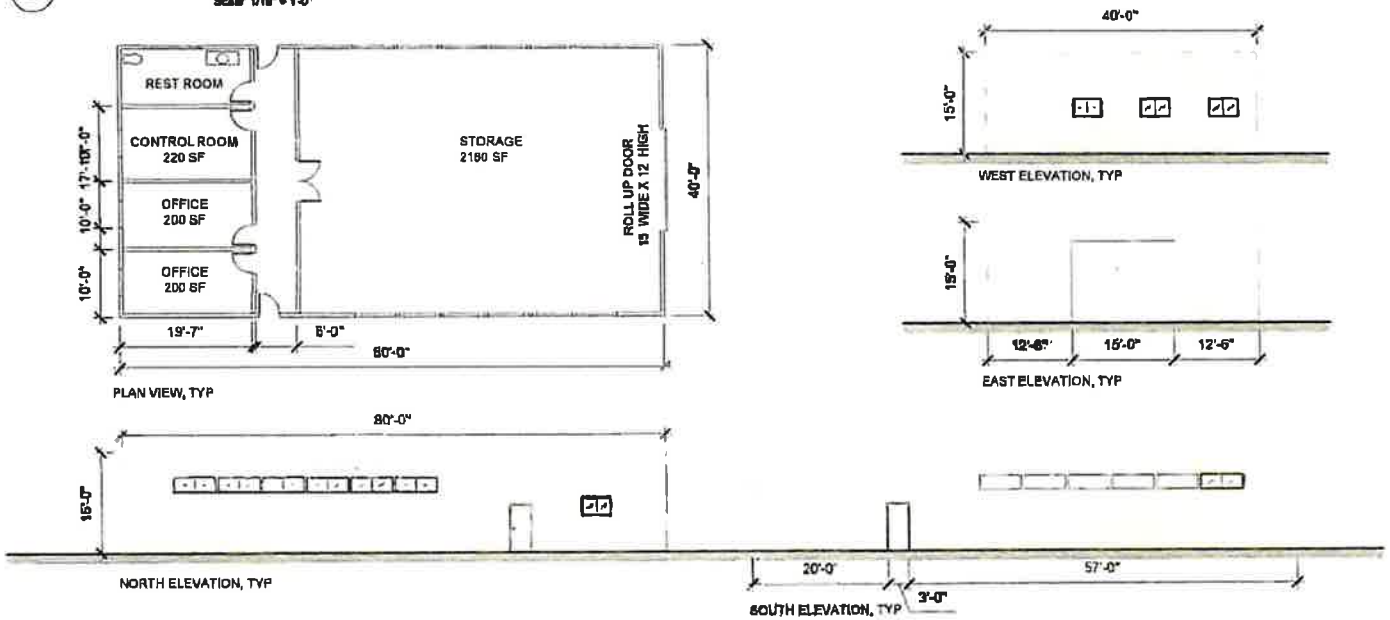
Scale: N.T.S



PRELIMINARY NOT FOR CONSTRUCTION

2 O&M BUILDING, TYP.

Scale: 1/16" = 1'-0"



AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

TRACKER AND O&M BUILDING DETAILS, TYP.

DATE

EX-3

AS NOTED

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project INVERTER AND STANDARD BLOCK DETAILS, TYP.	EX-4 AS NOTED

PRELIMINARY NOT FOR CONSTRUCTION

2 STANDARD SOLAR BLOCK

Scale: NTS.

1 INVERTER, TYP.

Scale: 1/8" = 1'-0"

PC ORIGINAL PKG

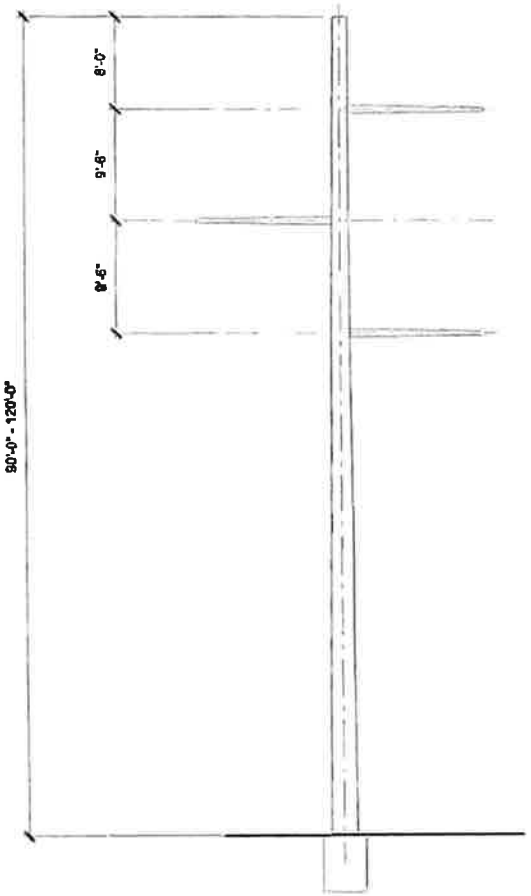
EEC ORIGINAL PKG

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project SUBSTATION DETAILS, TYP.	EX-5 AS NOTED

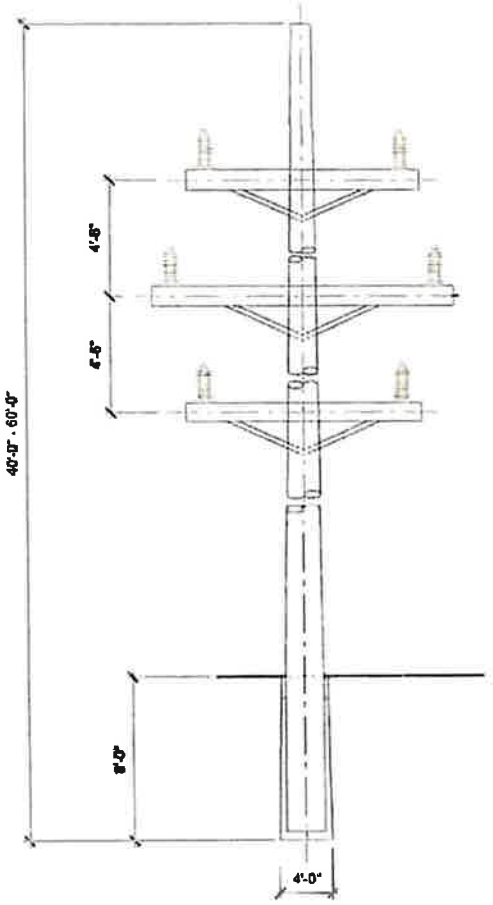
PRELIMINARY
NOT FOR
CONSTRUCTION

PC ORIGINAL PKG

EEC ORIGINAL PKG



1 230 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S



2 66 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

MONOPOL DETAILS, TYP.

EX-6

AS NOTED

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D2

Figures 1 and 2 (Full Resolution)

PC ORIGINAL PKG

EEC ORIGINAL PKG

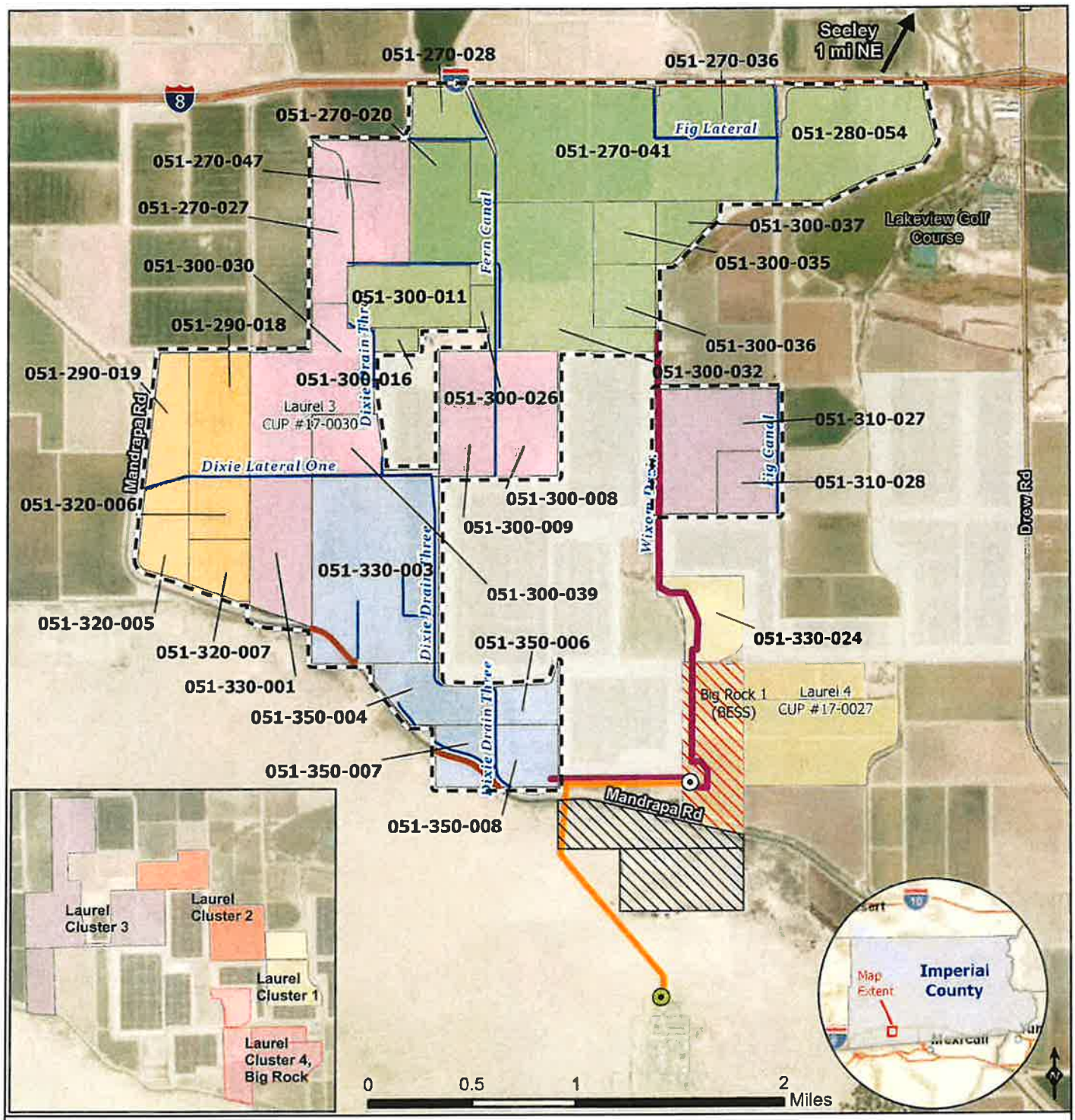


Figure 1
Location Map

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Canal Ditch
- Artifical Path (Canal)
- Big Rock 1 BESS Parcel
- Campo Verde Solar Project

- Lands To Be Developed Concurrently
- Big Rock 2 North Cluster (CUP #1); including Laurel 2 North CUP area (to be re-entitled) - 1030ac
- Big Rock 2 South Cluster (CUP #2) - 410ac
- Big Rock 2 East Cluster (CUP #3); was Laurel 2 South CUP area (to be re-entitled) - 160ac
- Big Rock 2 West Cluster (CUP #4) - 249ac
- Consolidated Edison Development Westside Canal Battery Storage Project
- Laurel 3 Cluster CUP #17-0030 (with 10-year DA) - 587ac
- Laurel 4 Cluster CUP #17-0027 (under 10-year DA)

PC ORIGINAL PKG

EEC ORIGINAL PKG

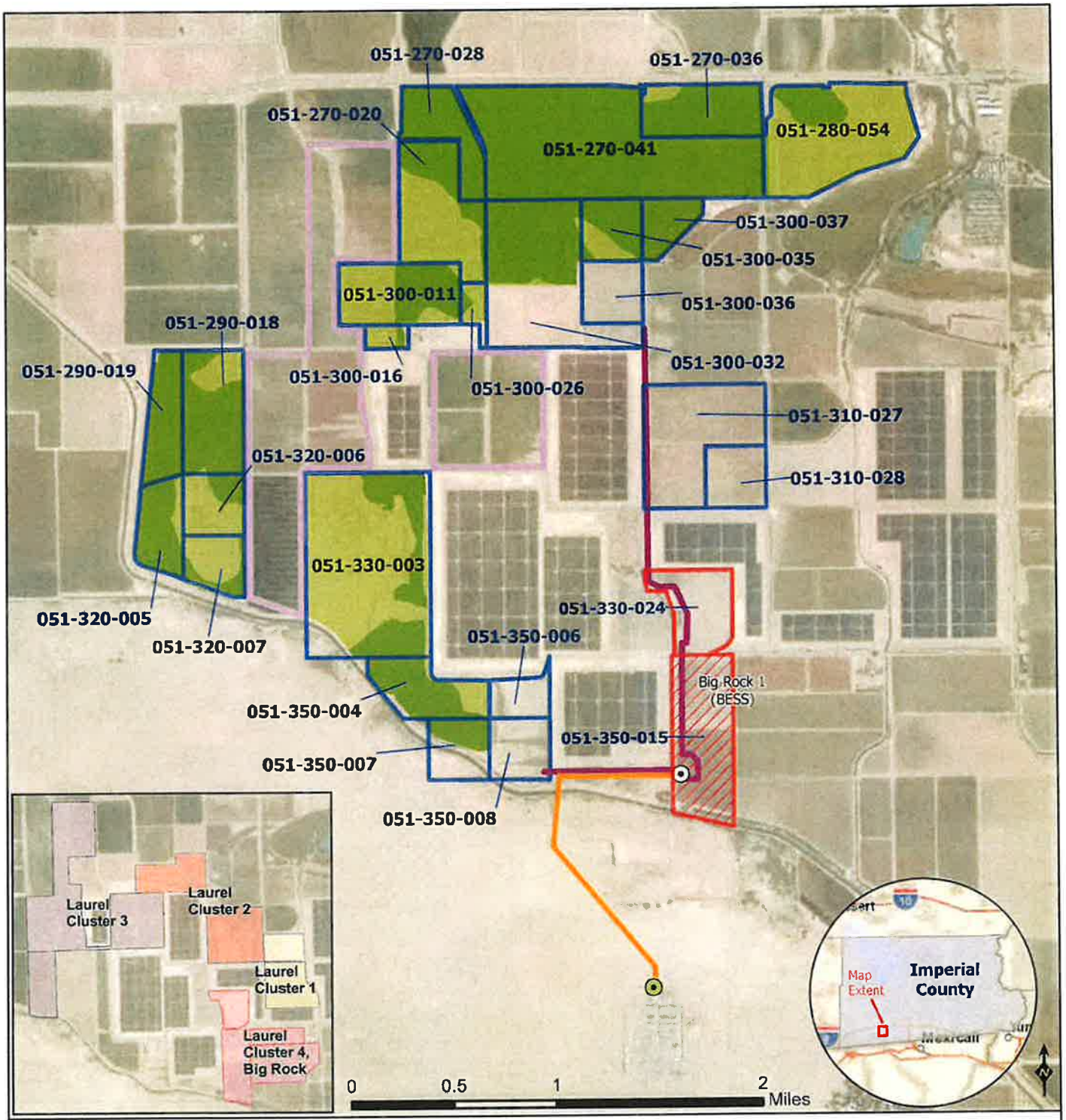


Figure 2
Farmland Designations

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Prime Farmland (929 ac)
- Farmland of Statewide Importance (517 ac)
- Big Rock 2 and Laurel 2 Parcels
- Big Rock 1 BESS Parcel

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment 2

CUP South

PC ORIGINAL PKG

EEC ORIGINAL PKG

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1.	PROPERTY OWNER'S NAME Multiple owners. Please see attachment.	EMAIL ADDRESS Multiple owners. Please see attachment.	
2.	MAILING ADDRESS (Street / P O Box, City, State) Multiple owners. Please see attachment.	ZIP CODE See attachment.	PHONE NUMBER See attachment.
3.	APPLICANT'S NAME 90FI 8me LLC	CUP Request #2 of 4	
4.	MAILING ADDRESS (Street / P O Box, City, State) 4370 Town Center Blvd., Suite 110 El Dorado Hills, CA 95762	ZIP CODE 95762	jjackson@avantus.com 303.588.3855
4.	ENGINEER'S NAME CA. LICENSE NO. TBD	EMAIL ADDRESS	
5.	MAILING ADDRESS (Street / P O Box, City, State)	ZIP CODE	PHONE NUMBER

6.	ASSESSOR'S PARCEL NO. Multiple APNs. Please see attachment.	410 acres	ZONING (existing) A 3
7.	PROPERTY (site) ADDRESS Multiple APNs. Please see attachment.		
8.	GENERAL LOCATION (i.e. city, town, cross street) Approximately 1 mile southwest of Seely, immediately south of Interstate 8, west of Drew Road and east and north of Mandrapa Road.		
9.	LEGAL DESCRIPTION Multiple APNs. Please see attachment.		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10.	DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail) Please see attachment.	
11.	DESCRIBE CURRENT USE OF PROPERTY	Farmland
12.	DESCRIBE PROPOSED SEWER SYSTEM	Septic tank with leach field
13.	DESCRIBE PROPOSED WATER SYSTEM	IID distribution system and private water treament facility
14.	DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	Above-ground tanks with gallons dedicated fire protection water
15.	IS PROPOSED USE A BUSINESS? ☒ Yes ☐ No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE? Please see attachment.

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Stephanie Perry — Chief Operating Officer of Avantus LLC, ultimate parent, duly authorized — 3/6/2024
Print Name — Date

Signature

Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY: _____ DATE _____
APPLICATION DEEMED COMPLETE BY: _____ DATE _____
APPLICATION REJECTED BY: _____ DATE _____
TENTATIVE HEARING BY: _____ DATE _____
FINAL ACTION ☐ APPROVED ☐ DENIED DATE _____

REVIEW / APPROVAL BY OTHER DEPT'S required.
☐ P. W.
☐ E. H. S.
☐ A. P. C. D.
☐ O. E. S.
☐ _____
☐ _____

CUP # _____

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B

B1 Legal Description
B2 Indemnification Forms
B3 Owner Affidavits
B4 Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B1

Legal Description

PC ORIGINAL PKG

EEC ORIGINAL PKG

Legal Descriptions:

Big Rock 2 Cluster South (CUP Request #2)

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410**

Landowners: Whitmer, La Valle Sabbia

Whitmer

THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER 4 OF SECTION 34, TOWNSHIP 16 SOUTH, RANGE 12 EAST, S.B.M., IN THE COUNTY OF IMPERIAL, STATE OF CALIFORNIA, AS PER PLAT OF THE U.S. GOVERNMENT RE-SURVEY APPROVED MARCH 15, 1909 AND ON FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA, LYING SOUTH OF THE CENTER LINE OF THE DIXIE DRAIN NO. 3-A AS SAID DRAIN WAS LOCATED ON FEBRUARY 20, 1951.

APN: 051-350-006-000

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 33, AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 34, ALL IN TOWNSHIP 16 SOUTH, RANGE 12 EAST, S.B.M., ACCORDING TO THE UNITED STATES GOVERNMENT PLAT OF RE-SURVEY APPROVED MARCH 15, 1909, AND ON FILE IN THE UNITED STATES LAND OFFICE AT LOS ANGELES, CALIFORNIA.

APN: 051-350-008-000

La Valle Sabbia

PARCEL 1:

THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 16 SOUTH, RANGE 12 EAST, S.B.M., IN AN UNINCORPORATED AREA OF THE COUNTY OF IMPERIAL, STATE OF CALIFORNIA, AS PER OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% OF ALL RIGHTS IN OIL, GAS, STEAM, GEOTHERMAL RESOURCES AND MINERALS LOCATED ON OR UNDER THE PROPERTY, AS RESERVED BY SAM ETCHEGARAY, MARRIED MAN, IN DEED RECORDED OCTOBER 14, 1981 AS FILE NO. 10, IN BOOK 1475, PAGE 1660 OF OFFICIAL RECORDS.

APN: 051-330-003

PC ORIGINAL PKG EEC ORIGINAL PKG

PARCEL 2:

THOSE PORTIONS OF THE NORTH HALF OF NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 16 SOUTH, RANGE 12 EAST, S.B.M., LYING NORTH AND EAST OF THE CENTER LINE OF THE WEST SIDE MAIN CANAL, AND SOUTH OF THE WEST OF THE CENTER LINE OF THE DIXIE DRAIN NO. 3, AS SAID CANAL AND DRAIN WERE LOCATED ON DECEMBER 14, 1954, TOWNSHIP 16 SOUTH, RANGE 12 EAST, S.B.M., COUNTY OF IMPERIAL, STATE OF CALIFORNIA, ACCORIDNG TO OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% OF ALL RIGHTS IN OIL, GAS, STEAM, GEOTHERMAL RESOURCES AND MINERALS LOCATED ON OR UNDER THE PROPERTY, AS RESERVED BY SAM ETCHEGARY, A MARRIED MAN, IN DEED RECORDED OCTOBER 14, 1981 AS FILE NO. 10, IN BOOK 1475, PAGE 1660 OF OFFICIAL RECORDS.

APN: 051-350-004

PARCEL 3:

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 16 SOUTH, RANGE 12 EAST, S.B.M., IN AN UNINCORPORATED AREA OF THE COUNTY OF IMPERIAL, STATE OF CALIFORNIA, AS PER OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM AN UNDIVIDED ONE HALF INTEREST IN ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER OR THAT MAY BE PRODUCED FROM SAID LAND, AS RESERVED BY HARVEY P. JONES, PAUL M. JONES AND CONSTANCE L. JONES, IN DEED RECORDED OCTOBER 25, 1955 IN BOOK 922, PAGE 303 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM 50% OF ALL RIGHTS IN OIL, GAS, STEAM, GEOTHERMAL RESOURCES AND MINERALS LOCATED ON OR UNDER THE PROPERTY, AS RESERVED BY SAM ETCHEGARY, A MARRIED MAN, IN DEED RECORDED OCTOBER 14, 1981 AS FILE NO. 10, IN BOOK 1475, PAGE 1660 OF OFFICIAL RECORDS.

APN: 051-350-007

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B2

Indemnification Forms

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at El Centro California on February 6th, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, Ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Alex Abatti, Jr.

By

Title President of La Valle Sabbia, Inc.

Mailing Address:

APNs 051-350-007, 051-350-004
and 051-330-003

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title COO of Avantus LLC, Ultimate Parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Randall R. Whitmer

By Randall R. Whitmer

Title Trustee of the Randall R. Whitmer Trust Created January 15, 2007

Mailing Address:

APNs 051-350-006 and 051-350-008

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on February 21, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Ted L. Whitmer

By

Title Sole Surviving Trustee of the Whitmer Family Trust Created on December 15, 2006

Mailing Address:

APNs 051-350-006 and 051-350-008

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B3

Owner Affidavits

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-350-007, 051-350-004 and 051-330-003 is hereby granted.

OWNER (SIGNATURE)

Alex Abatti Jr.

OWNER (TYPED OR PRINT)

2015 Silsbee Rd. El Centro Ca. 92243

OWNER'S ADDRESS

09/19/2023

DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 19th, 2023 before me, Notary Public - Edgar A. Canchola, personally appeared Cinto Alexander Abatti Jr., who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EDGAR A. CANCHOLA
Notary Public - California
Imperial County
Commission # 2396110
My Comm. Expires Mar 7, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document Owner's Affidavit
Number of Pages 1 Date of Document 9/19/2023
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

Further identified by Assessor's Parcel Number

(APN) 051-350-008 and 051-350-006 is hereby granted.

Ted L Loh
OWNER (SIGNATURE)

Ted Loyal Whitmer
OWNER (TYPED OR PRINT)

1095 S. 18th St. El Centro, CA 92243
OWNER'S ADDRESS

Sept 18, 2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 18, 2023 before me, Gabriela B. Pacheco, Notary Public, personally appeared Ted Loyal Whitmer, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(~~ies~~), and that by his/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature G Pacheco (Seal)

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document Owner's Affidavit
Number of Pages 1 Date of Document Sept 18, 2023
Signer(s) Other Than Named Above NA

MPVS:\FORMS _ LISTS\OWNERSAFFDVT1.doc REVISED 08/22/2017 db

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-350-008 and 051-350-006 is hereby granted.

Randall R Whitmer
OWNER (SIGNATURE)

Randall Richard Whitmer
OWNER (TYPED OR PRINT)

1803 Farmer Dr, El Centro, CA 92243
OWNER'S ADDRESS

Sept 18, 2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 18, 2023 before me, Gabriela B Pacheco, Notary Public personally appeared Randall Richard Whitmer, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/~~they~~ executed the same in his/~~her~~/~~their~~ authorized capacity(~~ies~~), and that by his/~~her~~/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

GABRIELA B. PACHECO
COMM. #2329401
Notary Public - California
Imperial County
My Comm. Expires June 1, 2024

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document Owner's Affidavit
Number of Pages 1 Date of Document Sept 18, 2023
Signer(s) Other Than Named Above N/A

MPVS:\FORMS _ LISTS\OWNERSAFFDVT1.doc REVISED 06/23/2017 db

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B4

Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

BIG ROCK SOUTH CUP #2, LANDOWNER INFORMATION

CUP Request #	CUP Area	APN	Owner	Contact Information
CUP #2	Bigi Rock 2 Cluster South	051-330-003	La Valle Sabbia	La Valle Sabbia, Inc. Attn: Alex Abatti Jr. and Antonette Abatti 2015 Silsbee Road El Centro, CA 92243 (760) 353-3336 aabatti@abatti.com aabatti1@abatti.com
CUP #2	Bigi Rock 2 Cluster South	051-350-004	La Valle Sabbia	La Valle Sabbia, Inc. Attn: Alex Abatti Jr. and Antonette Abatti 2015 Silsbee Road El Centro, CA 92243 (760) 353-3336 aabatti@abatti.com aabatti1@abatti.com
CUP #2	Bigi Rock 2 Cluster South	051-350-006	Whitmer	Randall Whitmer 1803 Farmer Dr. El Centro, CA 92243 (760) 482-0745 sikninwhitmer@gmail.com Ted Whitmer 1095 S. 18th Steet El Centro, CA 92243 (760) 353-1683
CUP #2	Bigi Rock 2 Cluster South	051-350-007	La Valle Sabbia	La Valle Sabbia, Inc. Attn: Alex Abatti Jr. and Antonette Abatti 2015 Silsbee Road El Centro, CA 92243 (760) 353-3336 aabatti@abatti.com aabatti1@abatti.com

PC ORIGINAL PKG

EEC ORIGINAL PKG

BIG ROCK SOUTH CUP #2, LANDOWNER INFORMATION

CUP Request #	CUP Area	APN	Owner	Contact Information
CUP #2	Bigi Rock 2 Cluster South	051-350-008	Whitmer	Randall Whitmer 1803 Farmer Dr. El Centro, CA 92243 (760) 482-0745 sikninwhitmer@gmail.com Ted Whitmer 1095 S. 18th Steet El Centro, CA 92243 (760) 353-1683

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment C

Project Description

PC ORIGINAL PKG

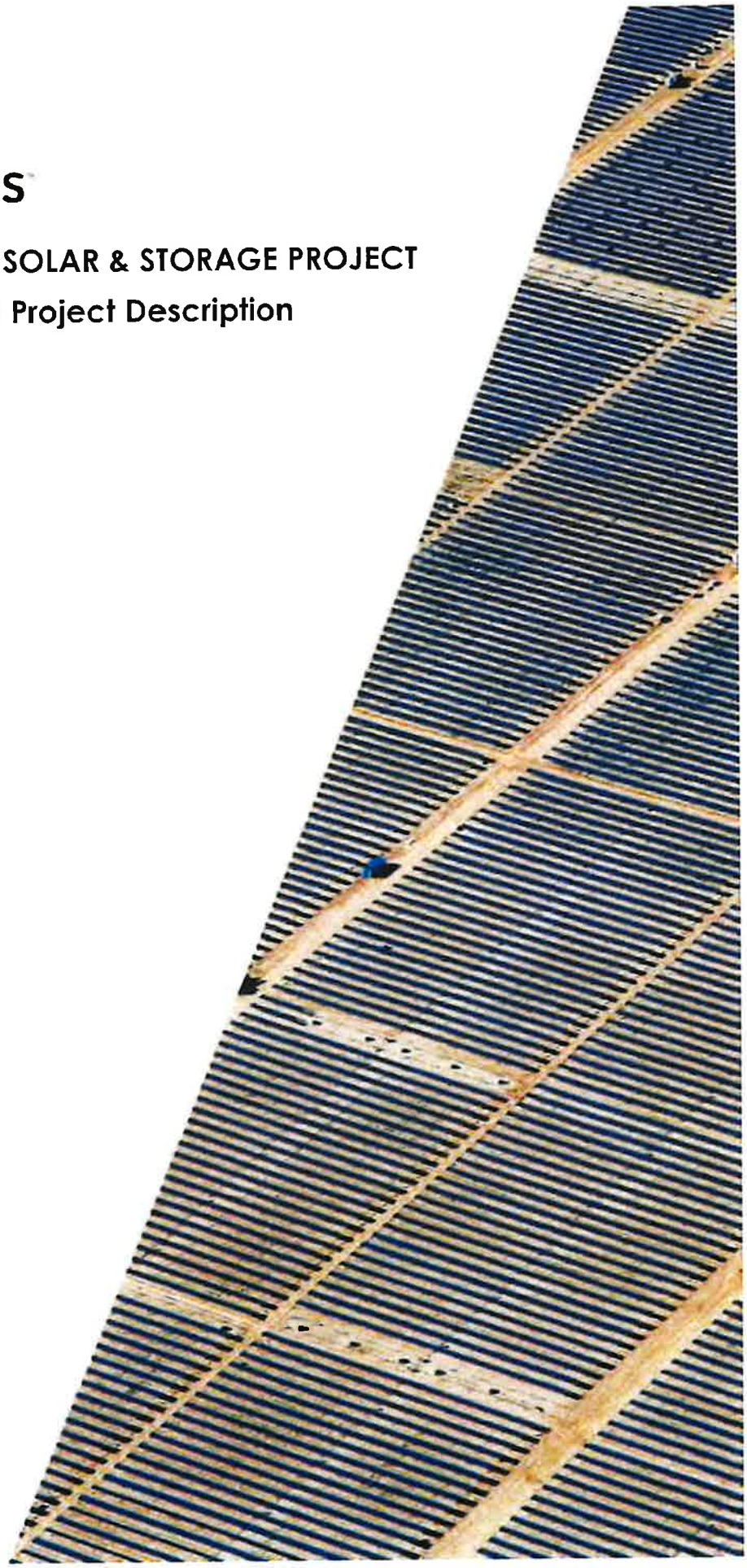
EEC ORIGINAL PKG

AVANTUS

BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT

CUP Application and Project Description

18 March 2024



Submitted by:
90FI 8me LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

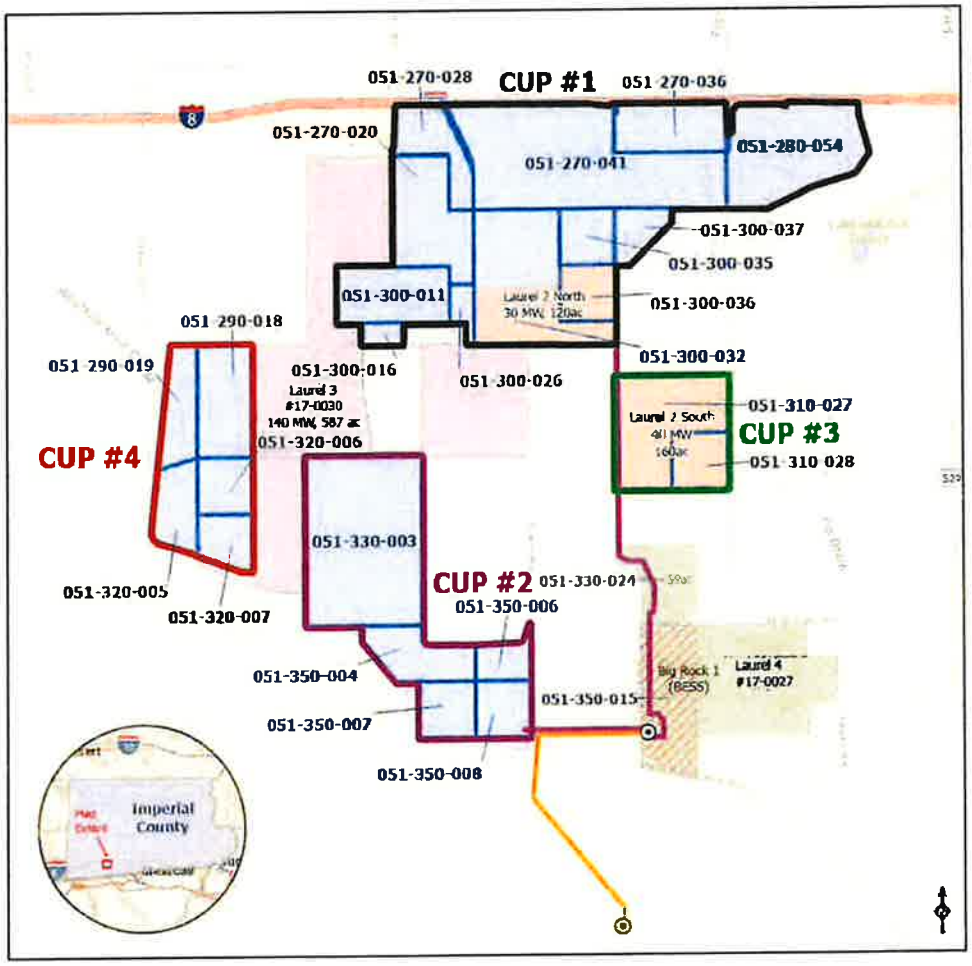
PC ORIGINAL PKG

EEC ORIGINAL PKG

Big Rock 2 Cluster Solar and Storage Project

This document contains Supporting Materials for the following Conditional Use Permit Applications Packages:

1. CUP #1: Big Rock 2 Cluster North (1,030 acres)
    - Big Rock 2 Cluster North (910 acres), including;
        - Laurel Cluster 2 North /CUP # 21-0014 (120 acres) *(to be re-entitled)*
2. CUP #2: Big Rock 2 Cluster South (410 acres)
3. CUP #3: Big Rock 2 Cluster East/Laurel Cluster 2 South CUP # 21-0013) (160 acres) *(to be re-entitled)*
4. CUP #4 Big Rock Cluster West (249 acres)



PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

PC ORIGINAL PKG

EEC ORIGINAL PKG

TABLE OF CONTENTS

INTRODUCTION 1

Site Information 4

PROJECT DESCRIPTION 7

Overview 7

Project Objectives 7

Project Components 8

PV Module Configuration 8

Collection, Inverter and Transformer Systems 11

Battery Energy Storage System 12

Substation(s) 15

Transmission Line and Interconnection 15

Operations and Maintenance (O&M) Building 16

Roadway and IID Crossings 16

Water Usage 16

Water Storage 17

Site Security and Fencing 17

Lighting 17

Annual Production 17

Electric Service 17

Project Construction 18

Construction Activities and Duration 18

Laydown Areas 19

Workforce 19

Project Operation 19

Operational Activities 19

Workforce 19

Project Compliance Plans and Best Management Practices 20

Hazardous Materials and Hazardous Waste Management 20

Spill Prevention and Containment 20

Wastewater/Septic System 21

Solid Waste Management 21

Dust Control 21

Pest and Vegetation Management 21

Fire Management 22

Health and Safety 22

General Plan Consistency 23

Decommissioning and Reclamation 23

Anticipated Required Project Entitlements 24

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDICES

Appendix A **Site Plan**

Appendix B **Full Resolution Map Figures**

PC ORIGINAL PKG EEC ORIGINAL PKG

INTRODUCTION

90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale [up to 500-megawatt (MW) in capacity] photovoltaic ("PV") solar energy generation and Battery Energy Storage System ("BESS") facility (also up to 500-MW in capacity). The proposed Project, collectively called, the Big Rock 2 Cluster Solar and Storage Project ("Big Rock 2" or the "Project") contemplates utilizing approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development (Figure 1).

Energy generated by the Project would be collected using up to 66 kilovolt ("kV") collector lines which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the Project substation to the Liebert Switchyard (pending construction), which will then be connected via an overhead 230-kV gen-tie line to the existing San Diego Gas and Electric (SDG&E) Imperial Valley Substation (Figure 1). It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

The Applicant intends to secure CUPs from Imperial County as the lead agency, along with permits and approvals from other relevant agencies as required by law. Laurel Cluster 3 CUP (#17-0030) is associated with a 10-year Development Agreement (DA) (Document Number 2023012228). However, Laurel Cluster 2 CUPs may expire prior to this approval, therefore, those areas have been integrated into this request, upon approval, Imperial County would void CUPs #21-0014 and #21-0013. Table 1 provides a breakdown of Project areas and acreage availability.

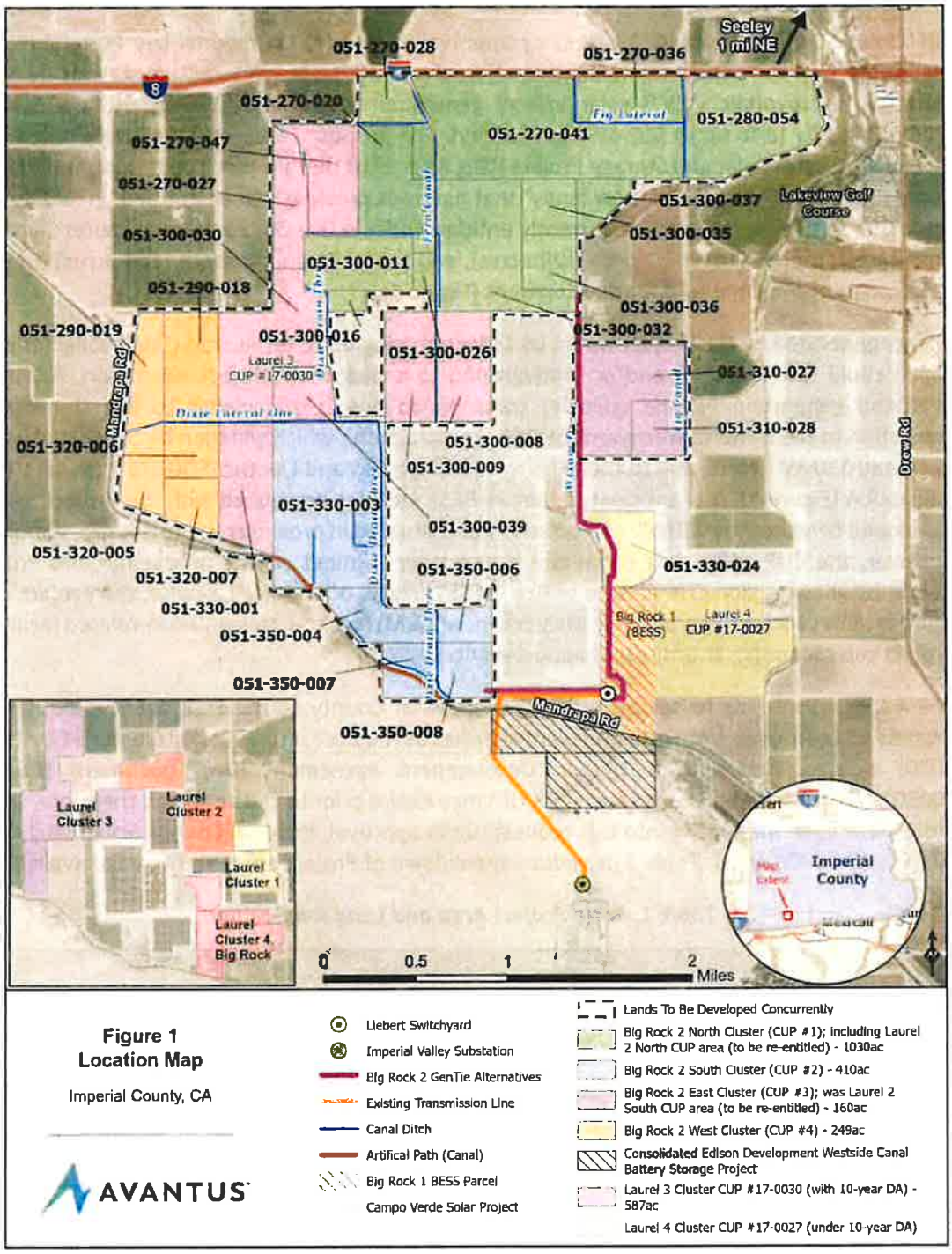
Table 1: Total Project Area and Land Availability

	Acres Available	CUP #
Big Rock 2 Cluster North, including Laurel Cluster 2 North (120 acres) parcels under CUP # 21-0014 (expires Dec. 2024)	1,030	CUP Request #1 (partial re-entitlement)
Big Rock 2 Cluster South	410	CUP Request #2
Big Rock 2 Cluster East/Laurel Cluster 2 South parcels under CUP #21-0013 (expires Dec. 2024)	160	CUP Request #3 (re-entitlement)
Big Rock 2 Cluster West	249	CUP Request #4
Laurel Cluster 3 CUP #17-0030	*587*	*NA (under 10-year DA)*

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 1: Project Location Map



PC ORIGINAL PKG

EEC ORIGINAL PKG

Site Information

Site Characteristics

The proposed Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 1).

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Parcels, Zoning, and Acreage(s)

Table 2: Big Rock 2 Cluster North (New CUP Request #1)

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	**85.5**
	Sub-total		**910**
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
12	051-300-032 (southern portion) *(to be re-entitled)*	A-2-RE	80
13	051-300-036 *(to be re-entitled)*	A-3-RE	40.3
	Sub-total		**120**
	TOTAL ACRES		**1,030**

Table 3: Big Rock 2 Cluster South (New CUP Request #2)

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4

PC ORIGINAL PKG

EEC ORIGINAL PKG

	APN	Zoning	Acres
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410**

Table 4: Big Rock Cluster 2 East (to be re-entitled) (New CUP Request #3)

	Laurel Cluster 2 South CUP #21-0013 (Expires December 2024)		
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	Total		**160**

Table 5: Big Rock 2 Cluster West (New CUP Request #4)

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249**

Site Information

Site Characteristics

The Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 3).

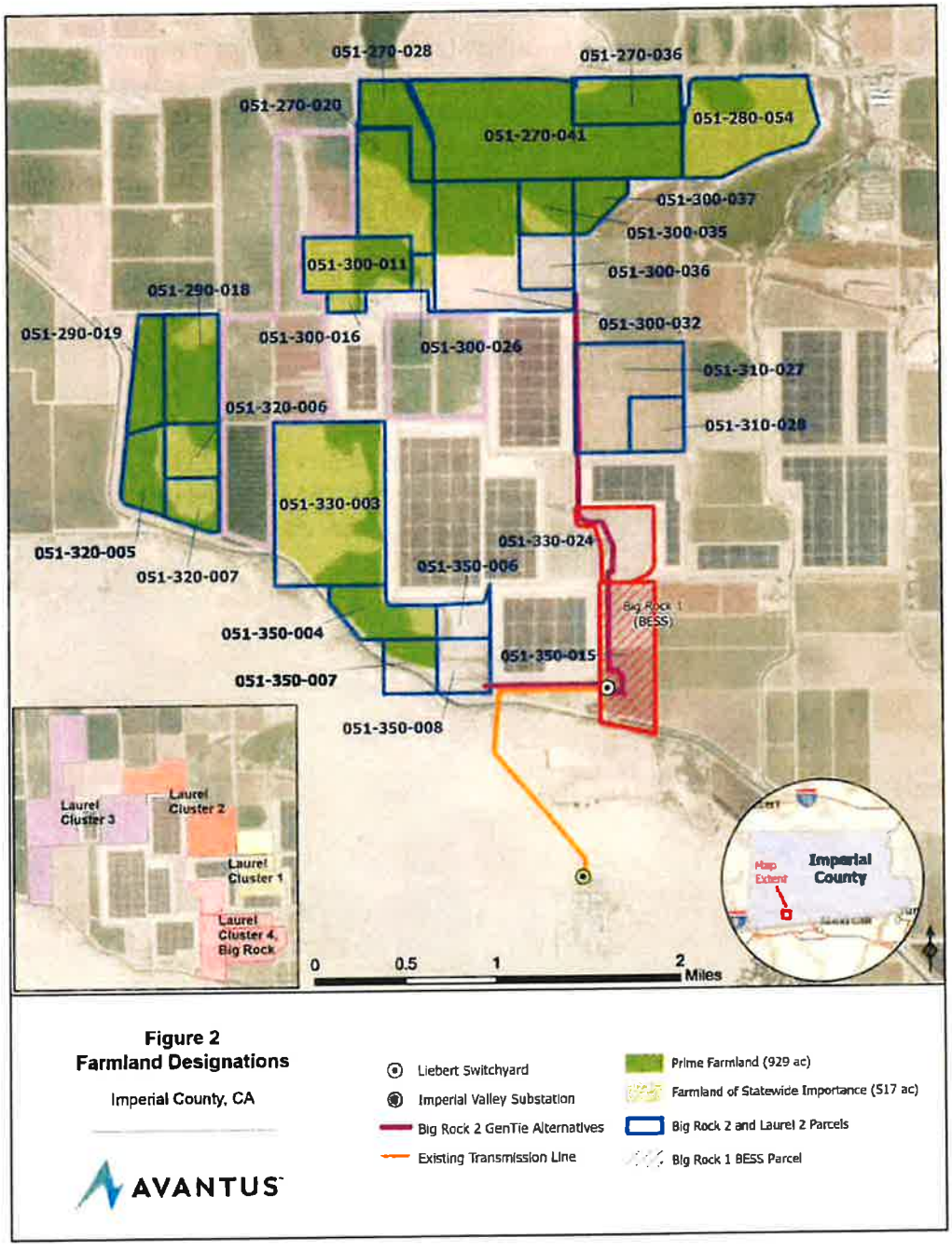
The topography of the Project area is relatively flat, consisting primarily of agricultural fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

The entire Project area is designated Agricultural in the Imperial County General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

PC ORIGINAL PKG EEC ORIGINAL PKG

Figure 2 also illustrates Prime Farmland and Farmland of Statewide Importance; however, the Project does not include agricultural lands designated under the "Williamson Act".

Figure 2: Farmland Designations



PC ORIGINAL PKG

EEC ORIGINAL PKG

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 1).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 1).

PC ORIGINAL PKG

EEC ORIGINAL PKG

PROJECT DESCRIPTION

Overview

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. The Project contemplates two gen-tie line alternatives as depicted in Figure 1.

The Applicant has considered the following in its selection of the Big Rock 2 PV solar and BESS Project for detailed evaluation:

- Private land availability suitable for renewable energy development
- Compatible Land Use Zoning: Agricultural/Rural Zone(s)
- Proximity to the SDG&E Imperial Valley substation
- Proximity to the applicant's previously approved PV solar and BESS projects entitled with Imperial County

Project Objectives

The primary objective of 90FI 8me LLC is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the Project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional Project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed Project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.

- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.

- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

Project Components

PV Module Configuration

The Project would use PV panels or modules[1] on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height (H), depending on the mounting system used, panels are expected to remain between six (6) and eight (8) feet in height.

[1] Including but not limited to bi-facial or concentrated photovoltaic (CPV) technology.

PC ORIGINAL PKG EEC ORIGINAL PKG



Typical fixed-tilt solar panel rows



Typical single axis tracking solar panels

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis tracking solar panels

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

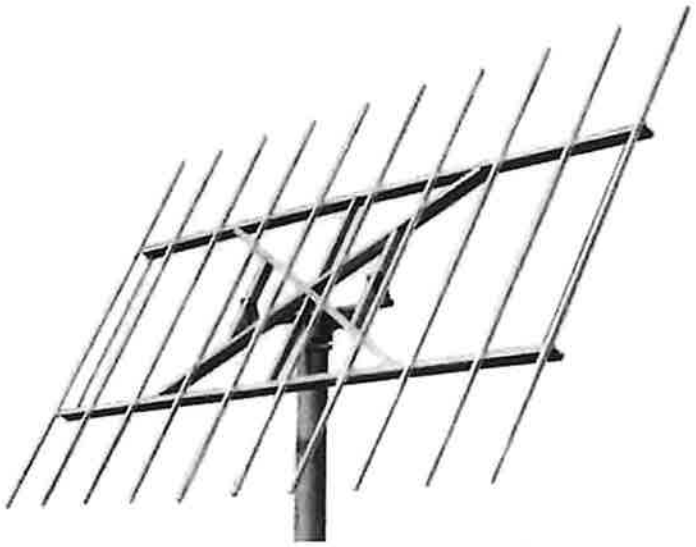
Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the Project area characteristics and the desired energy production profile.



Typical fixed-tilt mounting structure

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis mounting structure

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these Project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the Project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are provided in Figure 1; however, not all routes will ultimately be developed. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the Project by Imperial County.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical inverter stations

Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.



BESS Installed in Dedicated Structure

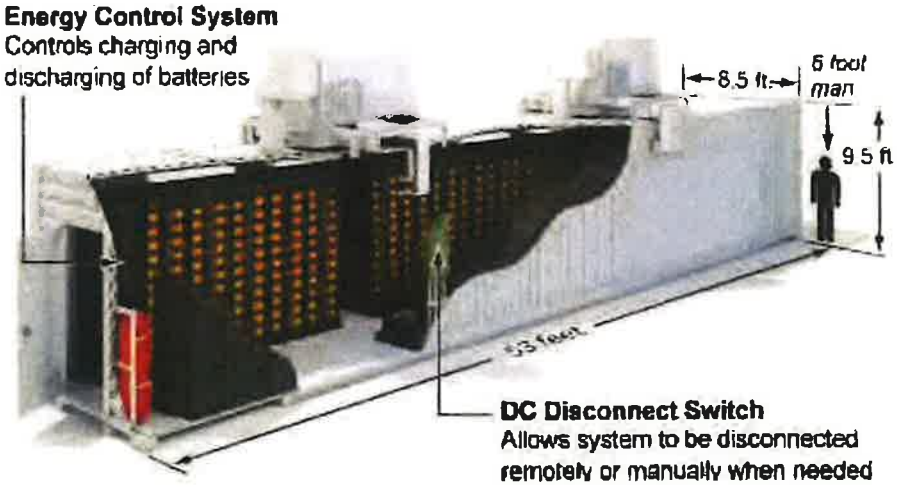


PC ORIGINAL PKG

EEC ORIGINAL PKG



Modular BESS Installed on Multiple Concrete Pads



Typical BESS module configuration



PC ORIGINAL PKG

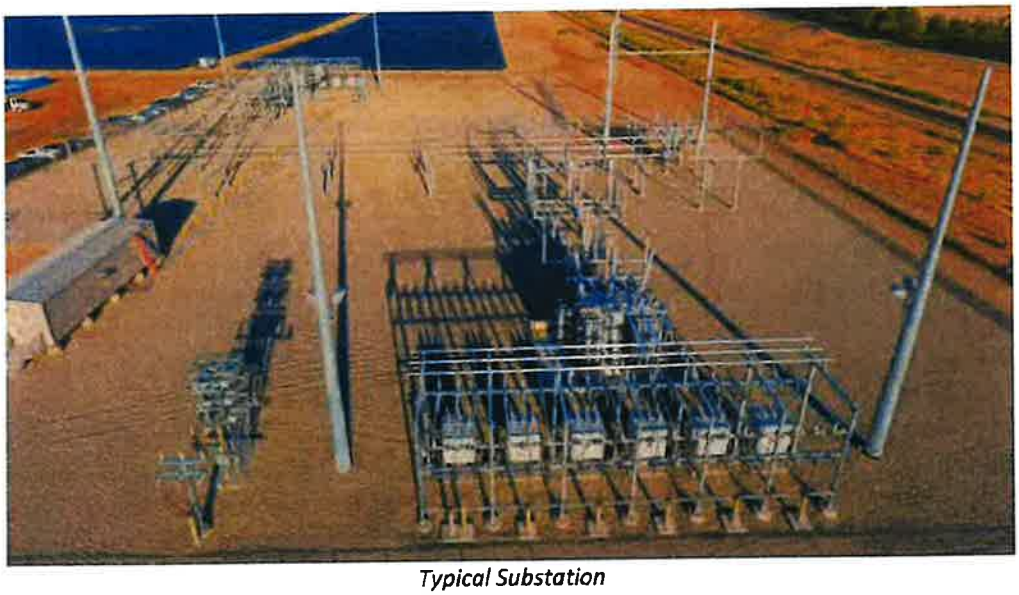
EEC ORIGINAL PKG

Typical BESS

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building described later in this Project Description.



Typical Substation

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard, via one of the proposed gen-tie line alternatives (Figure 1). The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be

PC ORIGINAL PKG

EEC ORIGINAL PKG

undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) is depicted in Figure 1 and may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40' x 80' in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Roadway and IID Crossings

The Project may require the following crossing types of Imperial Irrigation District (IID) canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner's water supply, local irrigation district, or delivered via truck from off-area source(s). A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

PC ORIGINAL PKG EEC ORIGINAL PKG

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic would access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). Large trucks would likely utilize Interstate 8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the Project Area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the Project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The Project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

PC ORIGINAL PKG EEC ORIGINAL PKG

Site preparation would be planned and designed to minimize the amount of earth movement required for the Project, to the extent feasible. The hydrology design would be given priority to protect the Project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

Laydown Areas

At full build-out, most of the Project footprint would be disturbed by construction of the Project. Therefore, temporary construction lay down and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the Project disturbance footprint. Due to the large scale of the Project, the lay down areas may be relocated periodically within the solar field acreage as the project is built out.

Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation
- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

Workforce

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Project Compliance Plans and Best Management Practices

The following sections describe standard Project feature compliance plans and best management practices that would be applied during construction and/or long-term operation of the Project, as applicable, to maintain human health and safety, ensure local, state, and federal regulatory compliance, and to avoid or minimize unplanned environmental impacts resulting from construction and/or operation of the Project.

Hazardous Materials and Hazardous Waste Management

The Project would utilize and store materials onsite that have been defined as hazardous under Title 40 of the Code of Federal regulations (CFR) Part 261, require a Material Safety Data Sheet (MSDS) per the California Labor Code Section 6360, is a listed substance in Section 339 of Title 8 of the California Code of Regulations (CCR), or is defined as hazardous waste per Chapter 6.5 of the California Health and Safety Code.

The following hazardous materials are expected to be used during the construction, operation, and long-term maintenance of the Project:

- Insulating mineral oil for electrical transformers and other electrical equipment
- Lubricating oil for maintenance vehicles
- Various solvents and detergents for cleaning equipment
- Gasoline for maintenance vehicles
- Lithium-ion batteries for storage of electrical energy

Note that additional materials may be used for the project, as required. All hazardous materials would be transported, managed, used, handled, and stored on the Project site during construction and operations. Hazardous waste would be inventoried, stored, transported, and disposed of in accordance with all applicable local, state, and federal regulations at the end of construction or as required during Project operation. Most hazardous materials would be maintained at the Project site in quantities below the threshold requiring a Hazardous Material Business Plan (HMBP) per California Environmental Protection Agency (CalEPA): 55-gallons of a liquid, 200 cubic feet of a gas, and 500 pounds of a solid.

The Project anticipates preparing and implementing a HMBP for the lithium-ion batteries within the BESS, as well as any other hazardous materials that may be stored on the Project site at or above the state-defined thresholds. Chemical storage tanks (if any) would also be designed and installed to meet applicable local and state regulations. Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers would be stored in an approved storage facility/shed/structure onsite and disposed of as required by local, state, and federal regulations, as outlined in the HMBP.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of the Project would adhere to the Environmental Protection Agency's (EPAs) Rule on Spill Prevention Control and Countermeasures (SPCC), which helps facilities prevent oil spills into navigable waters of the U.S. Although aboveground stored quantities of diesel fuel, gasoline, lubricating or hydraulic oils are not expected to exceed EPA storage thresholds during construction, the quantity of insulating

PC ORIGINAL PKG EEC ORIGINAL PKG

mineral oil required for operation of the Project substation transformers may reach EPA thresholds. SPCC plans would be developed for both Project construction and operations to ensure compliance with the EPA SPCC Rule, and ensure that appropriate spill prevention, control and countermeasures are developed to ensure that potential spills would not discharge into the New River or other navigable waters of the U.S. (e.g., IID canals) located in proximity to the Project.

Wastewater/Septic System

A standard onsite septic tank and leach field may be installed and used at the O&M building to dispose of small daily volumes of sanitary wastewater generated by the Projects' operational personnel. The septic system would be designed to meet operation and maintenance guidelines required by Imperial County.

Solid Waste Management

Inert solid wastes resulting from Project construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1 through 4 plastics, wood, and lubricating oils. Non-recyclable items may include insulation, drywall, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. To ensure that these wastes are recycled and disposed of properly, the applicant will prepare a Construction Waste Management Plan for review by the County prior to issuance of building permits. Consistent with Imperial County Public Health Department solid waste regulations and the California Green Building Code, the Plan would provide for diversion of a minimum of 50 percent of construction waste from landfill. Project operations are not anticipated to generate significant amounts of any inert solid wastes, recyclable or otherwise, and therefore are not expected to require a management plan.

Dust Control

Fugitive dust generated during Project construction would be controlled by utilizing Best Available Control Measures for Fugitive Dust (PM10) (e.g., watering, soil binders or tackifiers, wind screens, signage, speed restrictions, etc.) required by Imperial County Air Pollution Control District (ICAPCD) Rule 801, or California Air Resources Board (CARB) Rule 403. The applicant would prepare a Project Dust Control Plan (DCP) for review by Imperial County prior to issuance of building permits. The DCP would specify appropriate control measures to implement during both active construction and while construction on the Project site is inactive and outline appropriate control measures for both disturbed onsite Project areas, as well as any offsite unimproved or unpaved roads utilized for the Project construction access. During long-term project operations, fugitive dust control is not anticipated to be required for the Project to comply with ICAPCD or CARB Fugitive Dust Rules.

Pest and Vegetation Management

Non-native invasive plants and other pests that establish within the Project area would be controlled during Project construction and operations, consistent with the Imperial County office of the Agricultural Commissioner requirements for solar projects. The Applicant would prepare a Pest Management Plan for submission to the Imperial County Agricultural Commission. Long-term implementation of the Plan would include routine pest monitoring of the Project area, use of physical, mechanical, or chemical controls as necessary to manage pests, maintenance of

PC ORIGINAL PKG

EEC ORIGINAL PKG

proper records documenting monitoring and pest management controls, and regular reporting to the Agricultural Commission as required.

Fire Management

The Project is located within the jurisdiction of Imperial County Fire Department. The Applicant will prepare a Fire Management Plan in accordance with Fire Department requirements for Project construction activities as well as long-term operations, including establishing appropriate emergency access to the Project site for first responders, and identifying Project-specific onsite fire protection or suppression systems that comply with Imperial County requirements.

The Project will incorporate many fire safety features to be described in detail in the Fire Management Plan, including access gates and service roads along the perimeter of the Project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems. Portable fire extinguishers would be provided at various locations throughout the Project site, while fixed fire suppressions systems would be employed throughout the Project based on equipment manufacturer specifications and coordination with the Fire Department. These may include onsite water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems. The Plan will also describe best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities. Access to nearby properties would not be hindered or restricted by any aspect of the Project Fire Management Plan.

Health and Safety

Health and safety precautions and best practices consistent with local, state, and federal regulations would be identified and implemented to ensure the safety for all personnel during Project construction and long-term operations. These administrative procedures and controls for Project construction and operational personnel will be supplemented with emergency response plans.

Administrative controls would include classroom and hands-on training in safe procedures for personnel operating and maintaining PV solar, BESS, and high-voltage electrical facilities, including general safety and implementation of a planned maintenance program. These controls would enhance overall Project safety and reliability when applied with the other physical Project safety system(s) and monitoring features incorporated as part of the Project design.

The Applicant will also prepare a Project-specific Emergency Response Plan (ERP). The ERP would outline the major components of an ERP specific to the Project, and address potential facility emergencies including chemical releases, fires, or personnel injuries, as well as identify appropriate protocols and actions during larger emergencies like earthquakes or regional emergency responses led by the Imperial County Office of Emergency Services. All Project employees would be provided with communication devices (e.g., cell phones and/or walkie-talkies) to ensure the ability to provide aid in the event of an emergency as described in the Plan.

PC ORIGINAL PKG

EEC ORIGINAL PKG

General Plan Consistency

An amendment to the Imperial County General Plan and a zone change are anticipated to be required to implement the proposed Project. The Project parcels are located outside of the Imperial County Renewable Energy (RE) Overlay Zone, but directly adjacent to areas within the RE Overlay Zone. CUP applications proposed for specific RE projects not located in the RE Overlay Zone are not allowed without an amendment to the RE Overlay Zone. Therefore, the applicant is anticipating a General Plan amendment and zone change to include/classify the Project area in its entirety into the RE Overlay Zone.

Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed Project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

The applicant would prepare a Project Reclamation Plan that would be implemented at the end of the Project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.

PC ORIGINAL PKG

EEC ORIGINAL PKG

- Description of the activities necessary to restore the Project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

Anticipated Required Project Entitlements

Imperial County (Lead Agency)

- Consideration and certification of the Final EIR
- Adoption of the Mitigation Measure Monitoring Program (MMMP)
- Approval of the proposed CUP by the County Board of Supervisors
- Approval by the County Board of Supervisors for applicable items as follows:
    - General Plan Amendment to the Renewable Energy Overlay Element (Zone Change(s),
    - Height Variances, and/or
    - Development Agreement and/or Voluntary Public Benefit Agreement
    - County Grading Permit
    - County Building permit(s)
    - County encroachment permits, easements and/or licenses, as applicable.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The following ministerial reviews and permit approvals are anticipated to be required for the Project by the Imperial County Department(s) and/or Division(s) shown below:

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Anticipated Imperial Irrigation District Approvals

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the Proposed Project would cross IID facilities with access points and electrical crossings. The Proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge

PC ORIGINAL PKG

EEC ORIGINAL PKG

Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)

- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

**The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may ultimately be required to implement the proposed Project.*

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX A: SITE PLAN
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX B: FULL RESOLUTION MAP FIGURES
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D

D1 – Site Plan
D2 – Full Resolution Figures

PC ORIGINAL PKG

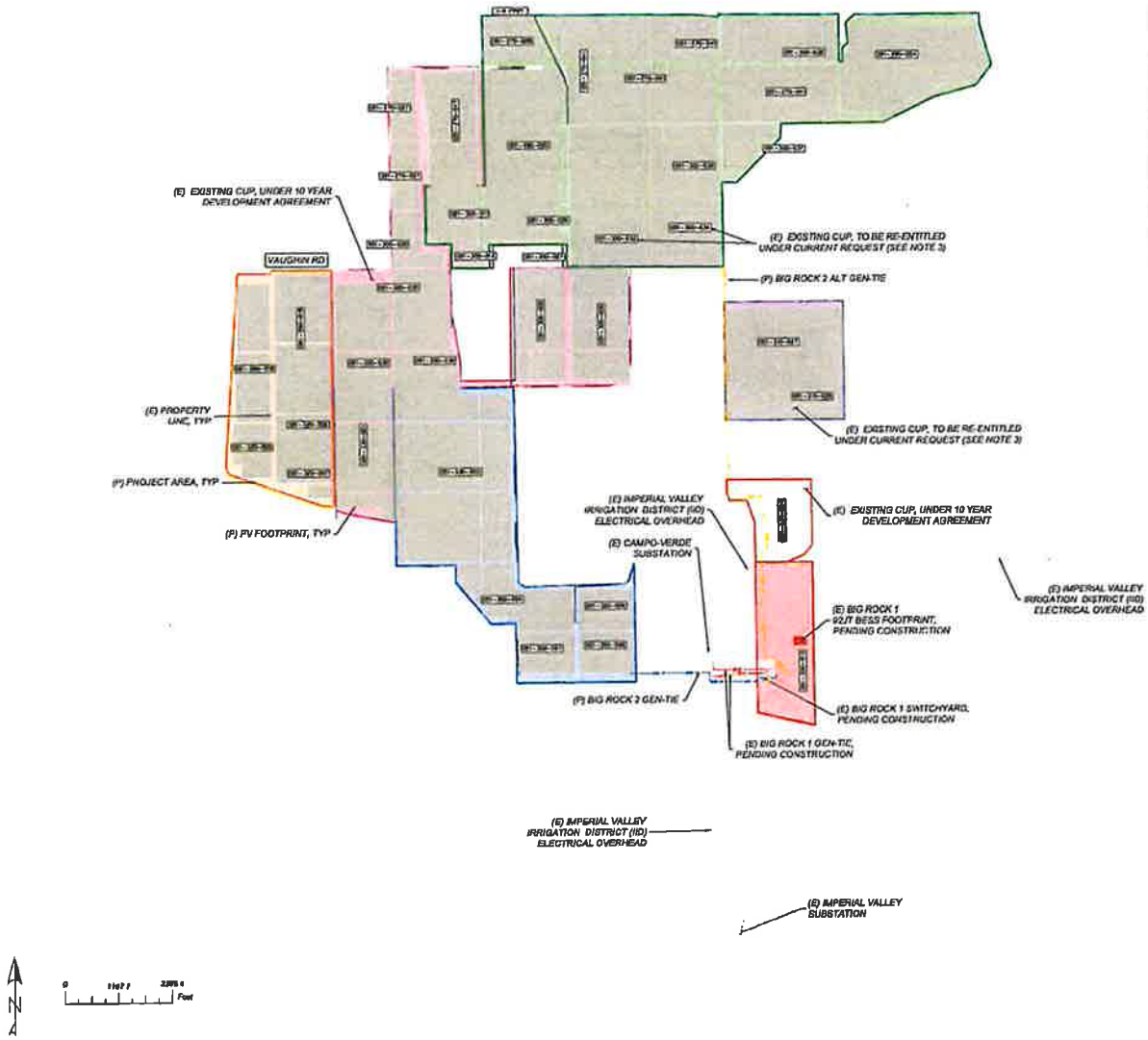
EEC ORIGINAL PKG

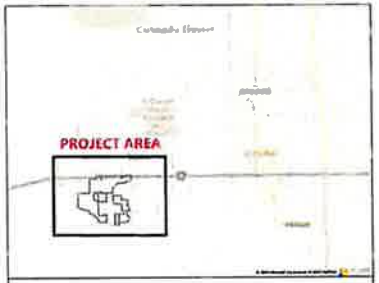
Attachment D1

Site Plan

PC ORIGINAL PKG

EEC ORIGINAL PKG





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.
3. APNS TO BE RE-ENTITLED INCLUDE: LAUREL 2 NORTH CUP # 21-0014: 8051-300-032 (SOUTH) AND 8051-300-036 LAUREL 2 SOUTH CUP #21-0013: 8051-310-027 AND 8051-310-028

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

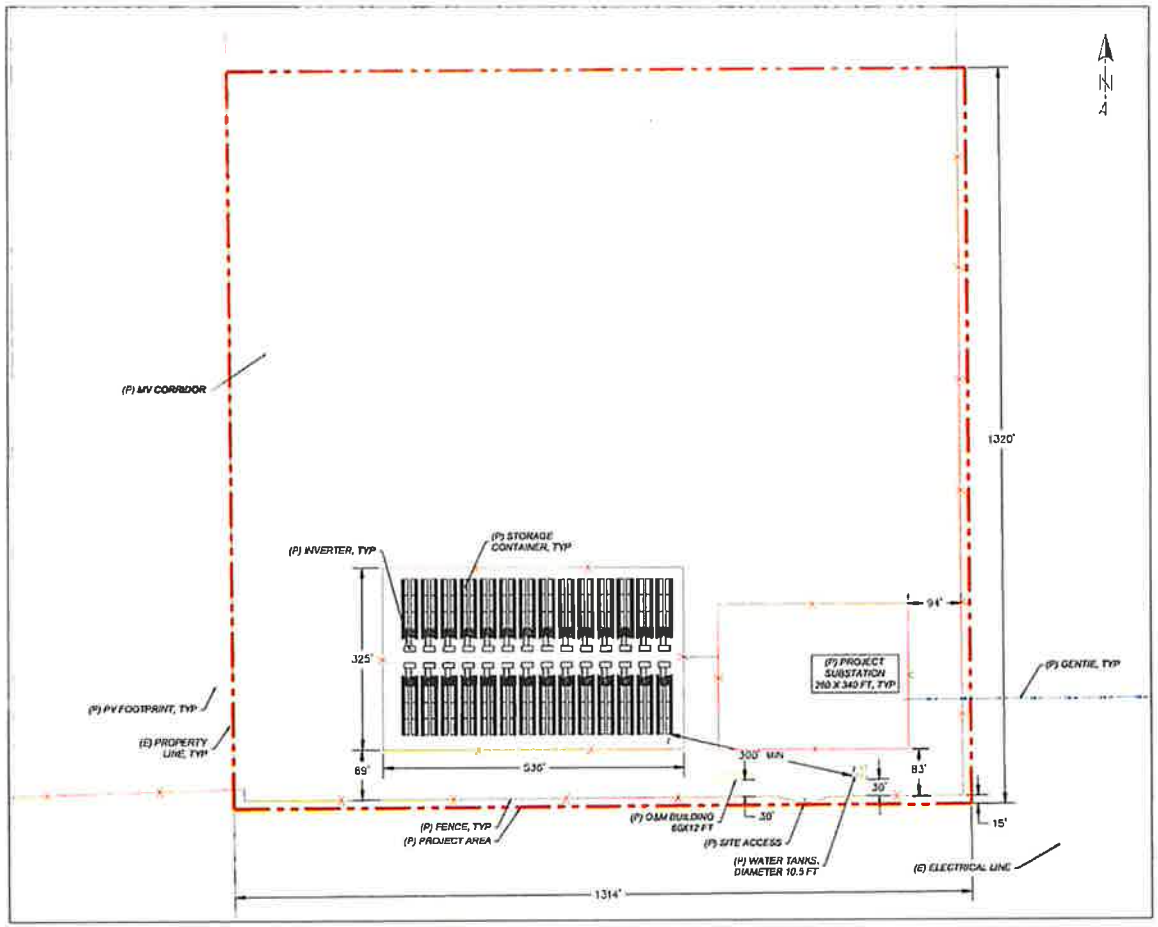
CONCEPTUAL SITE PLAN

DATE: March 18, 2024

SHEET: EX-1

PC ORIGINAL PKG

EEC ORIGINAL PKG



AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

REVISIONS		
0	[illegible]	[illegible]
1	[illegible]	[illegible]
2	[illegible]	PRELIMINARY LAYOUT UPDATE
3	[illegible]	PRELIMINARY LAYOUT UPDATE
4	[illegible]	PRELIMINARY LAYOUT UPDATE

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL BESS LAYOUT

DATE: March 13, 2024
SHEET: EX-2

PC ORIGINAL PKG

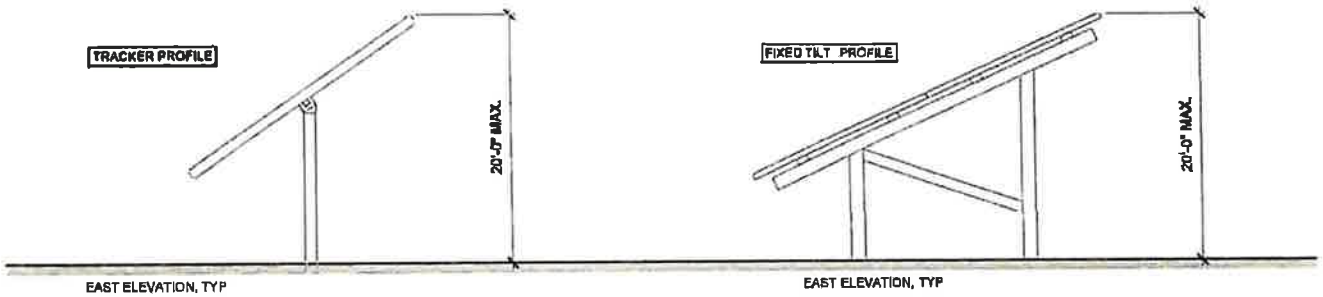
EEC ORIGINAL PKG

PC ORIGINAL PKG

EEC ORIGINAL PKG

1 TYPICAL PANEL & MOUNTING STRUCTURE

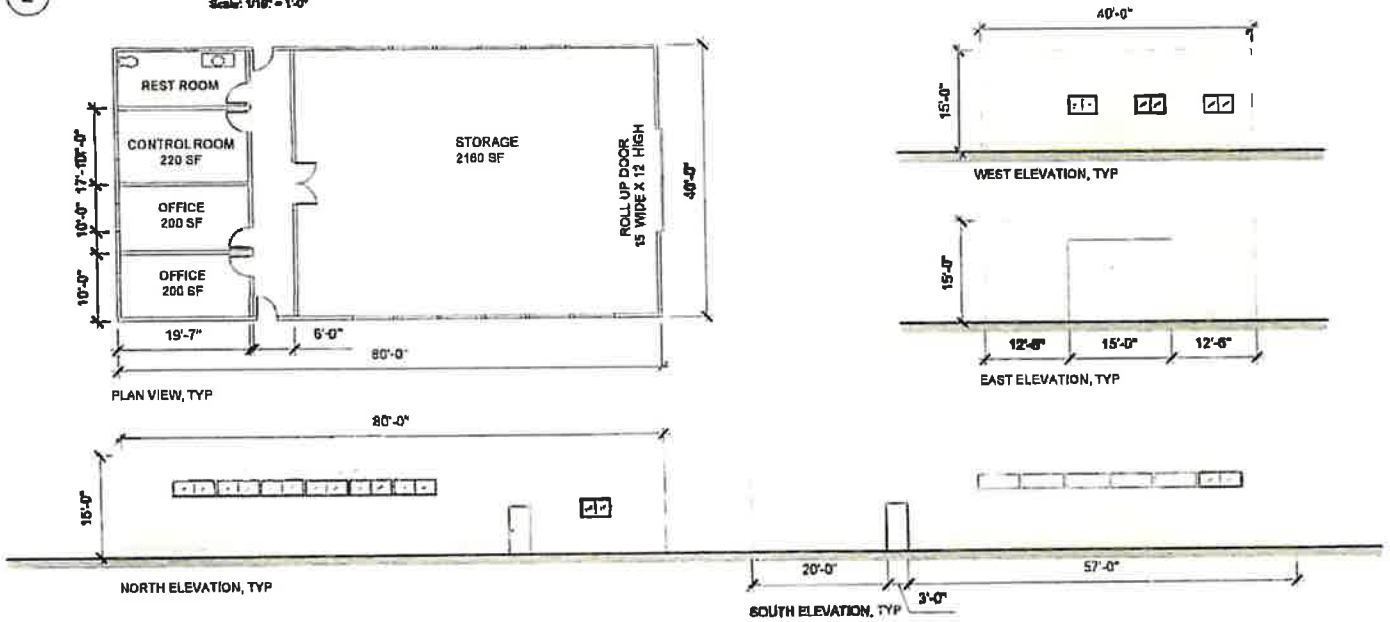
Scale: N T S



PRELIMINARY NOT FOR CONSTRUCTION

2 O&M BUILDING, TYP.

Scale: 1/16" = 1'-0"



AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

TRACKER AND O&M BUILDING DETAILS, TYP.

EX-3

AS NOTED

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project INVERTER AND STANDARD BLOCK DETAILS, TYP.	EX-4 AS NOTED

PRELIMINARY
NOT FOR
CONSTRUCTION

2 STANDARD SOLAR BLOCK

Scale: N.T.S.

1 INVERTER, TYP.

Scale: 1/8" = 1'-0"

PC ORIGINAL PKG
EEC ORIGINAL PKG

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project SUBSTATION DETAILS, TYP.	EX-5 AS NOTED

PRELIMINARY
NOT FOR
CONSTRUCTION

PC ORIGINAL PKG
EEC ORIGINAL PKG

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC. Big Rock 2 Solar and Storage Project	EX-6 AS NOTED
	MONOPOL DETAILS, TYP.	

PRELIMINARY NOT FOR CONSTRUCTION

2 66 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

1 230 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D2

Figures 1 and 2 (Full Resolution)

PC ORIGINAL PKG

EEC ORIGINAL PKG

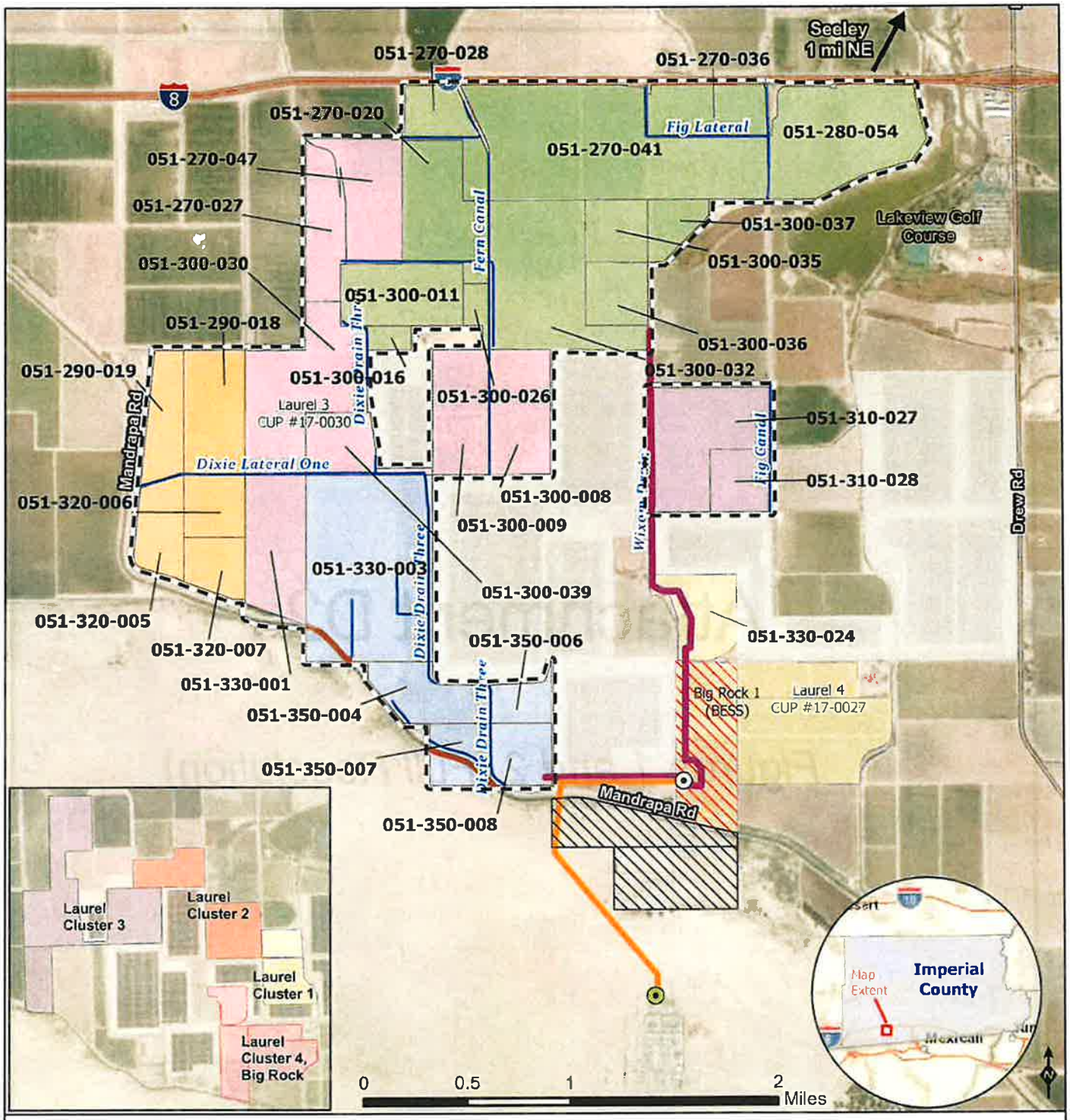


Figure 1
Location Map

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Canal Ditch
- Artifical Path (Canal)
- Big Rock 1 BESS Parcel
- Campo Verde Solar Project
- Lands To Be Developed Concurrently
- Big Rock 2 North Cluster (CUP #1); including Laurel 2 North CUP area (to be re-entitled) - 1030ac
- Big Rock 2 South Cluster (CUP #2) - 410ac
- Big Rock 2 East Cluster (CUP #3); was Laurel 2 South CUP area (to be re-entitled) - 160ac
- Big Rock 2 West Cluster (CUP #4) - 249ac
- Consolidated Edison Development Westside Canal Battery Storage Project
- Laurel 3 Cluster CUP #17-0030 (with 10-year DA) - 587ac
- Laurel 4 Cluster CUP #17-0027 (under 10-year DA)

PC ORIGINAL PKG

EEC ORIGINAL PKG

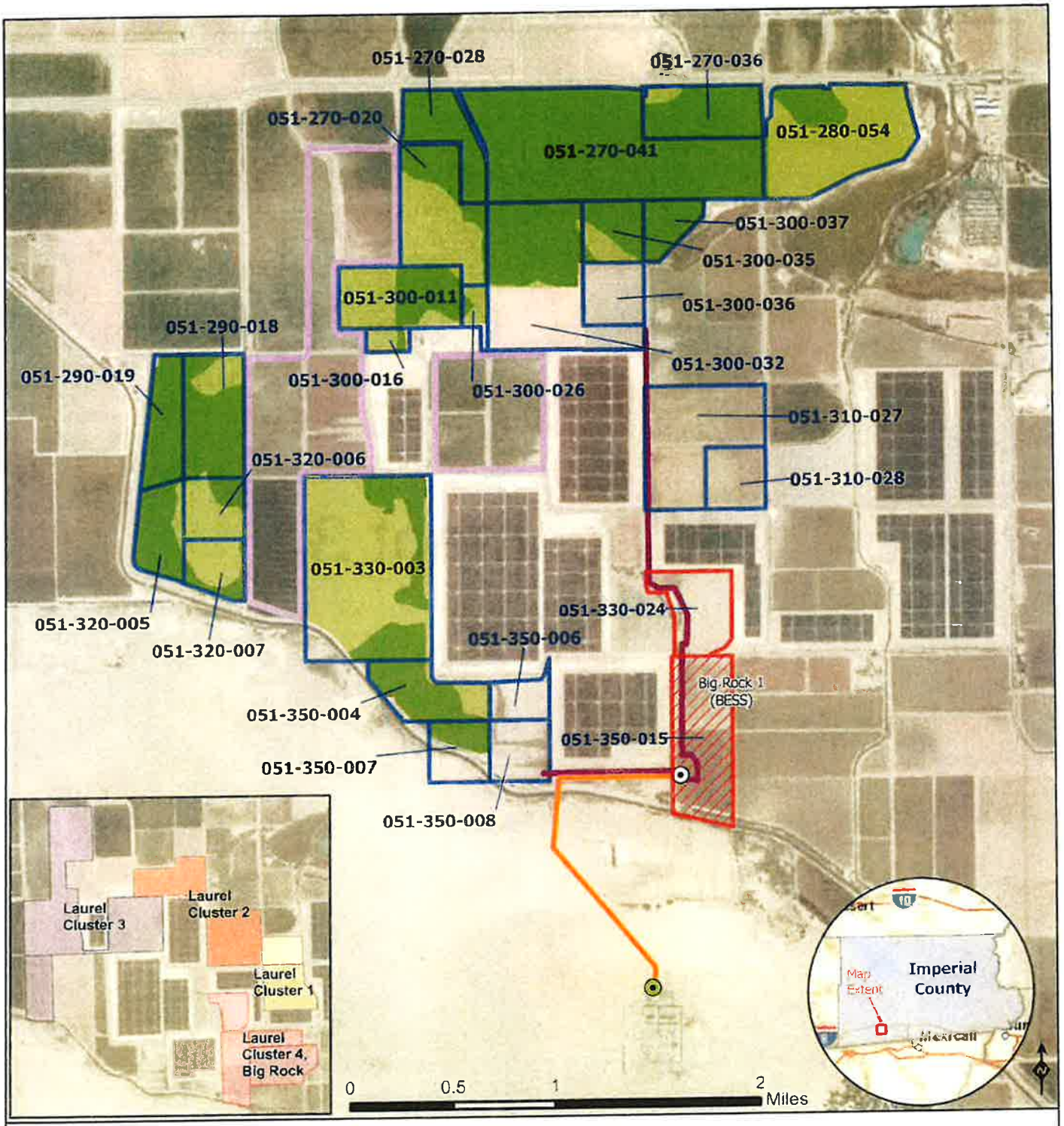


Figure 2
Farmland Designations

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Prime Farmland (929 ac)
- Farmland of Statewide Importance (517 ac)
- Big Rock 2 and Laurel 2 Parcels
- Big Rock 1 BESS Parcel

PC ORIGINAL PKG

EEC ORIGINAL PKG

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment 3

CUP East

PC ORIGINAL PKG

EEC ORIGINAL PKG

PC ORIGINAL PKG

EEC ORIGINAL PKG

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1.	PROPERTY OWNER'S NAME Multiple owners. Please see attachment.	EMAIL ADDRESS Multiple owners. Please see attachment.	
2.	MAILING ADDRESS (Street / P O Box, City, State) Multiple owners. Please see attachment.	ZIP CODE See attachment.	PHONE NUMBER See attachment.
3.	APPLICANT'S NAME 90FI 8me LLC	CUP Request #3 of 4	
4.	MAILING ADDRESS (Street / P O Box, City, State) 4370 Town Center Blvd., Suite 110 El Dorado Hills, CA 95762	ZIP CODE 95762	jjackson@avantus.com 303.588.3855
4.	ENGINEER'S NAME CA. LICENSE NO. TBD	EMAIL ADDRESS	
5.	MAILING ADDRESS (Street / P O Box, City, State)	ZIP CODE	PHONE NUMBER

6.	ASSESSOR'S PARCEL NO. Multiple APNs. Please see attachment.	160 acres	ZONING (existing) A 2-RE
7.	PROPERTY (site) ADDRESS Multiple APNs. Please see attachment.		
8.	GENERAL LOCATION (i.e. city, town, cross street) Approximately 1 mile southwest of Seely, immediately south of Interstate 8, west of Drew Road and east and north of Mandrapa Road.		
9.	LEGAL DESCRIPTION Multiple APNs. Please see attachment.		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10.	DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail) Re-entitlement of Laurel Cluster 2 South CUP #21-0013 Please see attachment.	
11.	DESCRIBE CURRENT USE OF PROPERTY	Farmland
12.	DESCRIBE PROPOSED SEWER SYSTEM	Septic tank with leach field
13.	DESCRIBE PROPOSED WATER SYSTEM	IID distribution system and private water treament facility
14.	DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	Above-ground tanks with gallons dedicated fire protection water
15.	IS PROPOSED USE A BUSINESS? ☒ Yes ☐ No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE? Please see attachment.

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Stephanie Perry — Chief Operating Officer of Avantus LLC, ultimate parent, duly authorized — 3/6/2024
Print Name — Date

Signature

Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY:		DATE		REVIEW / APPROVAL BY OTHER DEPT'S required.
APPLICATION DEEMED COMPLETE BY:		DATE		☐ P. W.
APPLICATION REJECTED BY:		DATE		☐ E. H. S.
TENTATIVE HEARING BY:		DATE		☐ A. P. C. D
FINAL ACTION: ☐ APPROVED ☐ DENIED		DATE		☐ O. E. S.
				☐
				☐

CUP #

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B

B1 Legal Description
B2 Indemnification Forms
B3 Owner Affidavits
B4 Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B1

Legal Description

PC ORIGINAL PKG

EEC ORIGINAL PKG

Legal Descriptions:

Big Rock 2 Cluster East/ Laurel 2 South CUP (to be re-entitled) (CUP Request #3)

	APN	Zoning	Acres
	Laurel Cluster 2 South CUP #21-0013 (Expires Dec. 2024)		
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	Total		**160**

Landowners: Kuhn

Kuhn

Kuhn A

Parcel C:
Tract 53, Township 16 South, Range 12 East, San Bernardino Meridian, County of Imperial, State of California, according to the Official Plat thereof.

Excepting therefrom the North 40 acres thereof.

APN: 051-310-027

Parcel D:

The West half of Tract 45-B, Township 16 South, Range 12 East, San Bernardino Meridian, County of Imperial, State of California, according to the Official Plat thereof.

APN: 051-310-028

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B2

Indemnification Forms

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Los Angeles California on March 13, 2024

APPLICANT

Name: 90FI 8me LLC

By [signature]

Title Michael Healy, Chief Commercial Officer of Avantus LLC, Ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name John Kuhn

By [signature]

Title Sole Trustee of the Madeline Kuhn Legacy Trust

Mailing Address: 477 Savannah Hwy Charleston, SC 29407

APNs 051-300-032, 051-300-036, 051-310-027, 051-310-028

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B3

Owner Affidavits

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-300-032, 051-300-036, 051-310-027, 051-310-028 is hereby granted.

OWNER (SIGNATURE)

John Kuhn

OWNER (TYPED OR PRINT)

473 Savannah Hwy

OWNER'S ADDRESS

Charleston, SC 29407

DATE 3/4/24

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF ~~CALIFORNIA~~ South Carolina
COUNTY OF ~~Imperial~~ Charleston } S.S.

On MARCH 4, 2024 before me, MICHELLE L. CAVANAUGH personally appeared JOHN KUHN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

MICHELLE L. CAVANAUGH NOTARY PUBLIC SOUTH CAROLINA MY COMM. EXP. 6/25/2029

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B4

Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

BIG ROCK SOUTH CUP #3, LANDOWNER INFORMATION

CUP Request #	CUP Area	APN	Owner	Contact Information
CUP #3	Big Rock 2 Cluster East/Laurel 2 Cluster South	051-310-027	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com
CUP #3	Big Rock 2 Cluster East/Laurel 2 Cluster South	051-310-028	Kuhn	John Kuhn 1904 Savannah Highway, Suite 202 Charleston, SC 29407 (843) 708-2188 jr@kuhnandkuhn.com

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment C

Project Description

PC ORIGINAL PKG

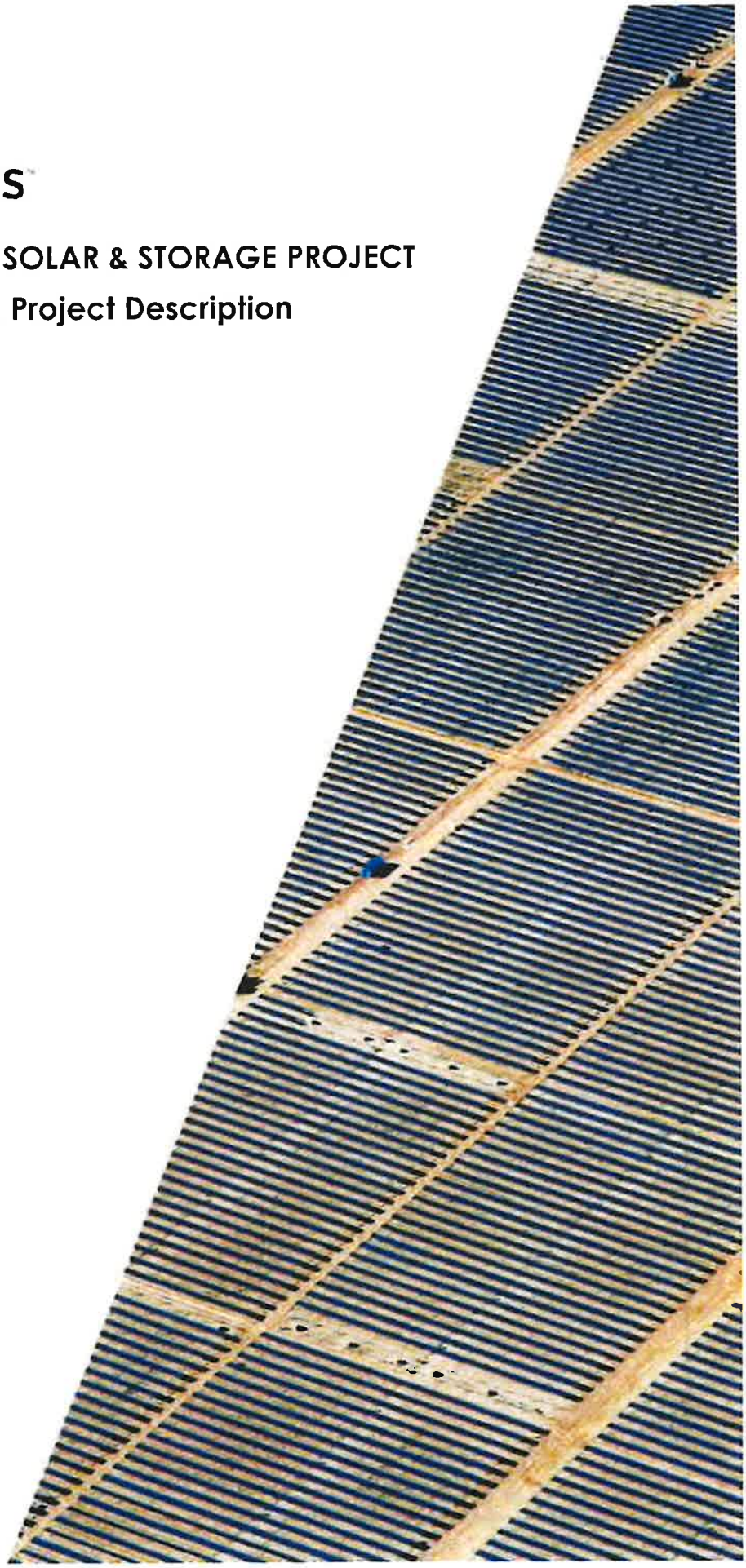
EEC ORIGINAL PKG

AVANTUS

BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT

CUP Application and Project Description

18 March 2024



Submitted by:
90FI 8me LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

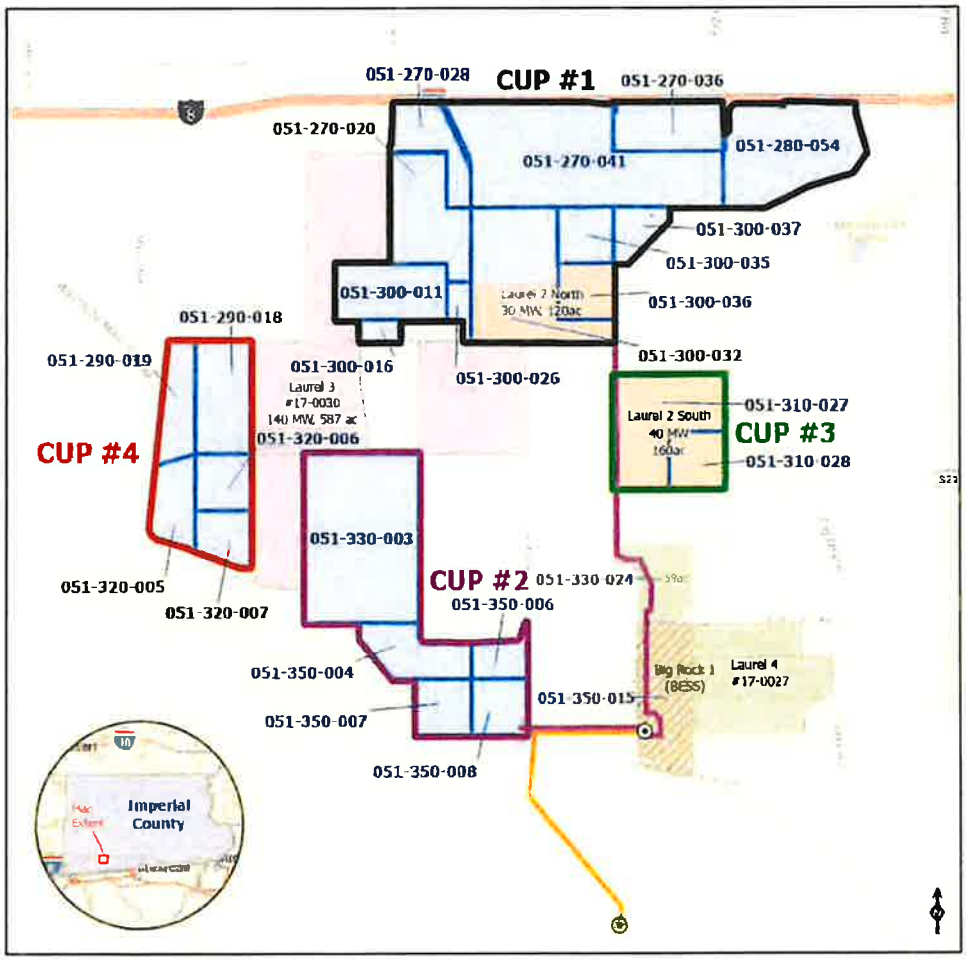
PC ORIGINAL PKG

EEC ORIGINAL PKG

Big Rock 2 Cluster Solar and Storage Project

This document contains Supporting Materials for the following Conditional Use Permit Applications Packages:

1. CUP #1: Big Rock 2 Cluster North (1,030 acres)
    - Big Rock 2 Cluster North (910 acres), including;
        - Laurel Cluster 2 North /CUP # 21-0014 (120 acres) *(to be re-entitled)*
2. CUP #2: Big Rock 2 Cluster South (410 acres)
3. CUP #3: Big Rock 2 Cluster East/Laurel Cluster 2 South CUP # 21-0013) (160 acres) *(to be re-entitled)*
4. CUP #4 Big Rock Cluster West (249 acres)



PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

PC ORIGINAL PKG

EEC ORIGINAL PKG

TABLE OF CONTENTS

INTRODUCTION **1**

Site Information **4**

PROJECT DESCRIPTION **7**

Overview **7**

Project Objectives **7**

Project Components **8**

PV Module Configuration 8

Collection, Inverter and Transformer Systems 11

Battery Energy Storage System 12

Substation(s) 15

Transmission Line and Interconnection 15

Operations and Maintenance (O&M) Building 16

Roadway and IID Crossings 16

Water Usage 16

Water Storage 17

Site Security and Fencing 17

Lighting 17

Annual Production 17

Electric Service 17

Project Construction **18**

Construction Activities and Duration 18

Laydown Areas 19

Workforce 19

Project Operation **19**

Operational Activities 19

Workforce 19

Project Compliance Plans and Best Management Practices **20**

Hazardous Materials and Hazardous Waste Management 20

Spill Prevention and Containment 20

Wastewater/Septic System 21

Solid Waste Management 21

Dust Control 21

Pest and Vegetation Management 21

Fire Management 22

Health and Safety 22

General Plan Consistency 23

Decommissioning and Reclamation **23**

Anticipated Required Project Entitlements **24**

PC ORIGINAL PKG EEC ORIGINAL PKG

APPENDICES

Appendix A **Site Plan**

Appendix B **Full Resolution Map Figures**

PC ORIGINAL PKG

EEC ORIGINAL PKG

INTRODUCTION

90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale [up to 500-megawatt (MW) in capacity] photovoltaic ("PV") solar energy generation and Battery Energy Storage System ("BESS") facility (also up to 500-MW in capacity). The proposed Project, collectively called, the Big Rock 2 Cluster Solar and Storage Project ("Big Rock 2" or the "Project") contemplates utilizing approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development (Figure 1).

Energy generated by the Project would be collected using up to 66 kilovolt ("kV") collector lines which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the Project substation to the Liebert Switchyard (pending construction), which will then be connected via an overhead 230-kV gen-tie line to the existing San Diego Gas and Electric (SDG&E) Imperial Valley Substation (Figure 1). It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

The Applicant intends to secure CUPs from Imperial County as the lead agency, along with permits and approvals from other relevant agencies as required by law. Laurel Cluster 3 CUP (#17-0030) is associated with a 10-year Development Agreement (DA) (Document Number 2023012228). However, Laurel Cluster 2 CUPs may expire prior to this approval, therefore, those areas have been integrated into this request, upon approval, Imperial County would void CUPs #21-0014 and #21-0013. Table 1 provides a breakdown of Project areas and acreage availability.

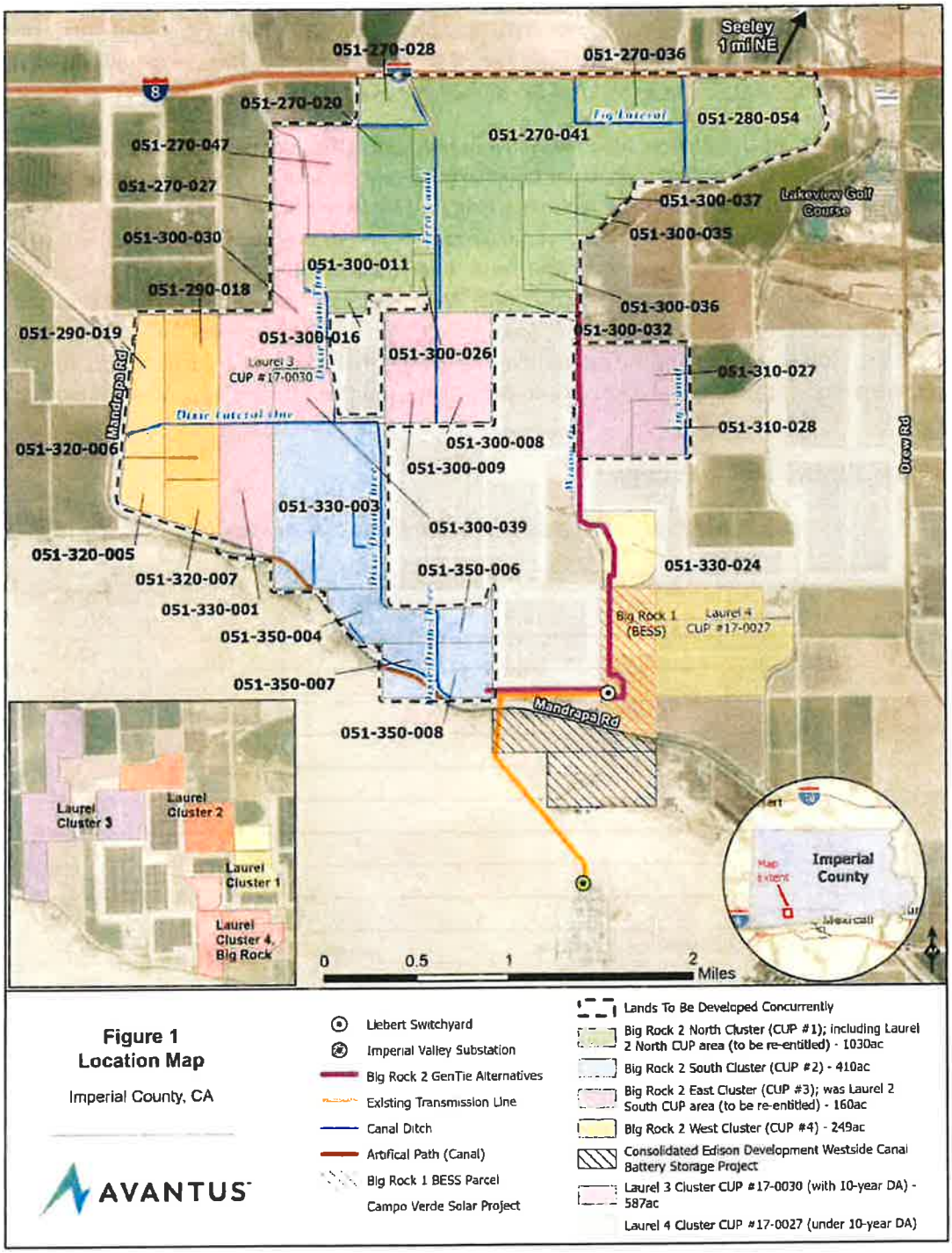
Table 1: Total Project Area and Land Availability

	Acres Available	CUP #
Big Rock 2 Cluster North, including Laurel Cluster 2 North (120 acres) parcels under CUP # 21-0014 (expires Dec. 2024)	1,030	CUP Request #1 (partial re-entitlement)
Big Rock 2 Cluster South	410	CUP Request #2
Big Rock 2 Cluster East/Laurel Cluster 2 South parcels under CUP #21-0013 (expires Dec. 2024)	160	CUP Request #3 (re-entitlement)
Big Rock 2 Cluster West	249	CUP Request #4
Laurel Cluster 3 CUP #17-0030	*587*	*NA (under 10-year DA)*

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 1: Project Location Map



PC ORIGINAL PKG

EEC ORIGINAL PKG

Site Information

Site Characteristics

The proposed Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 1).

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Parcels, Zoning, and Acreage(s)

Table 2: Big Rock 2 Cluster North (New CUP Request #1)

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	**85.5**
	Sub-total		**910**
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
12	051-300-032 (southern portion) *(to be re-entitled)*	A-2-RE	80
13	051-300-036 *(to be re-entitled)*	A-3-RE	40.3
	Sub-total		**120**
	TOTAL ACRES		**1,030**

Table 3: Big Rock 2 Cluster South (New CUP Request #2)

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4

PC ORIGINAL PKG

EEC ORIGINAL PKG

	APN	Zoning	Acres
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410**

Table 4: Big Rock Cluster 2 East (to be re-entitled) (New CUP Request #3)

	Laurel Cluster 2 South CUP #21-0013 (Expires December 2024)		
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	Total		**160**

Table 5: Big Rock 2 Cluster West (New CUP Request #4)

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249**

Site Information

Site Characteristics

The Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 3).

The topography of the Project area is relatively flat, consisting primarily of agricultural fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

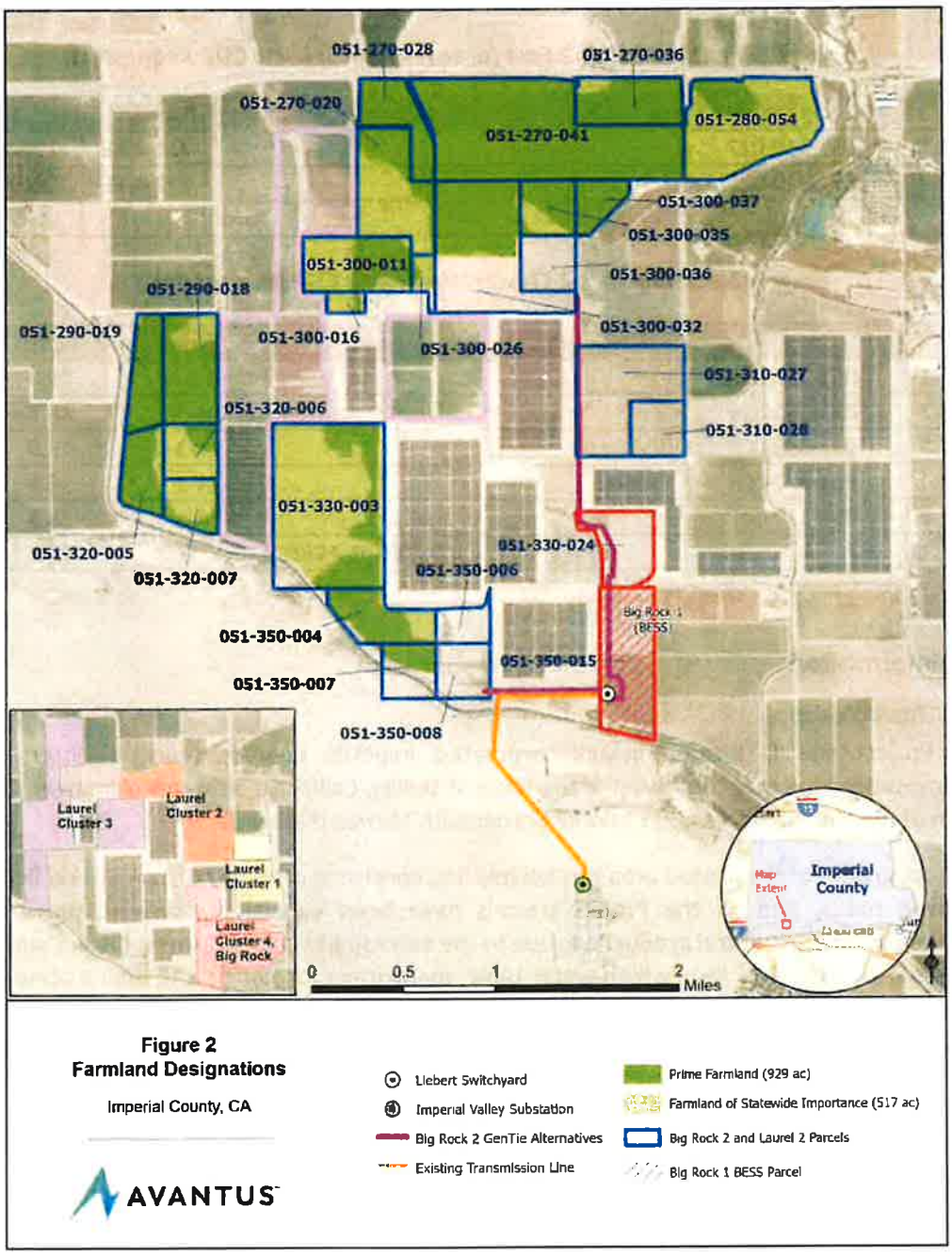
The entire Project area is designated Agricultural in the Imperial County General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 2 also illustrates Prime Farmland and Farmland of Statewide Importance; however, the Project does not include agricultural lands designated under the "Williamson Act".

Figure 2: Farmland Designations



PC ORIGINAL PKG

EEC ORIGINAL PKG

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 1).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 1).

PC ORIGINAL PKG

EEC ORIGINAL PKG

PROJECT DESCRIPTION

Overview

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. The Project contemplates two gen-tie line alternatives as depicted in Figure 1.

The Applicant has considered the following in its selection of the Big Rock 2 PV solar and BESS Project for detailed evaluation:

- Private land availability suitable for renewable energy development
- Compatible Land Use Zoning: Agricultural/Rural Zone(s)
- Proximity to the SDG&E Imperial Valley substation
- Proximity to the applicant's previously approved PV solar and BESS projects entitled with Imperial County

Project Objectives

The primary objective of 90FI 8me LLC is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the Project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional Project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed Project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.

PC ORIGINAL PKG EEC ORIGINAL PKG

- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

Project Components

PV Module Configuration

The Project would use PV panels or modules[1] on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height (H), depending on the mounting system used, panels are expected to remain between six (6) and eight (8) feet in height.

[1] Including but not limited to bi-facial or concentrated photovoltaic (CPV) technology.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical fixed-tilt solar panel rows



Typical single axis tracking solar panels

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis tracking solar panels

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

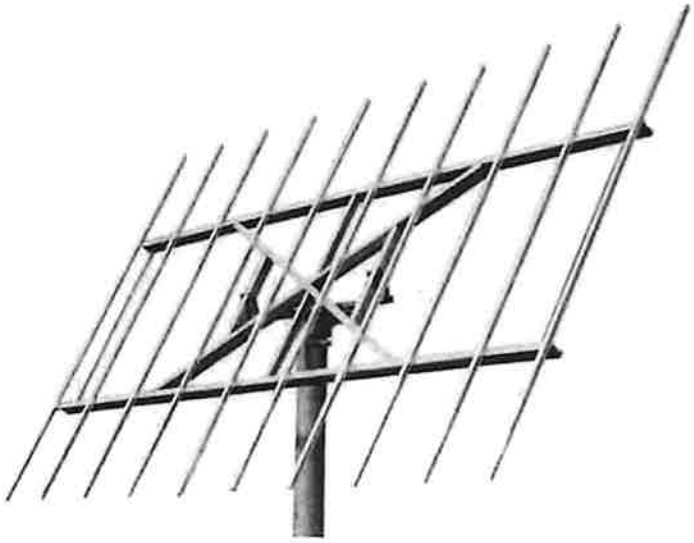
Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the Project area characteristics and the desired energy production profile.



Typical fixed-tilt mounting structure

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis mounting structure

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these Project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the Project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are provided in Figure 1; however, not all routes will ultimately be developed. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the Project by Imperial County.

PC ORIGINAL PKG EEC ORIGINAL PKG



Typical inverter stations

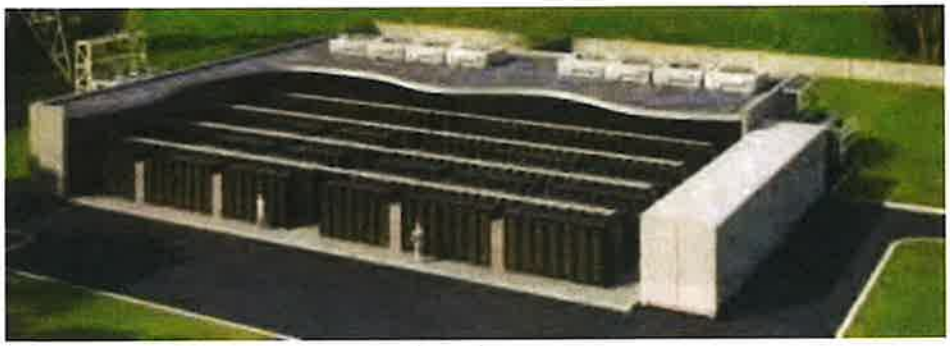
Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.



BESS Installed in Dedicated Structure

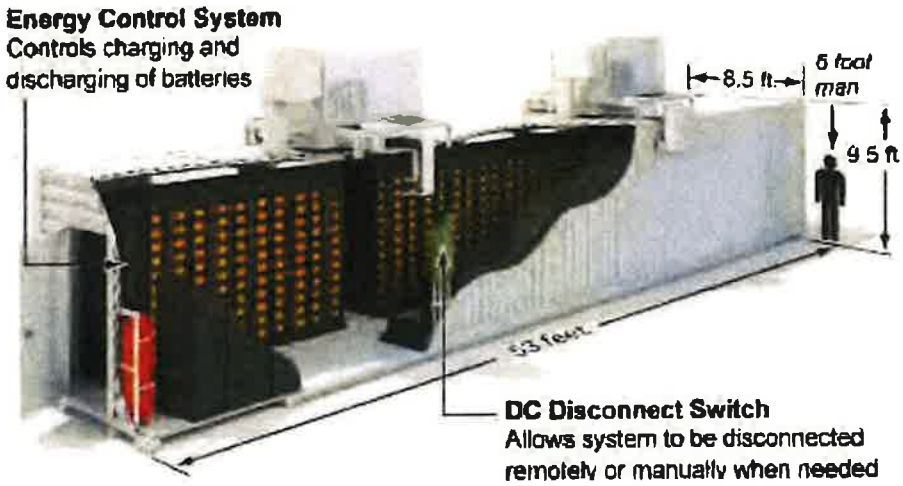


PC ORIGINAL PKG

EEC ORIGINAL PKG



Modular BESS Installed on Multiple Concrete Pads



Typical BESS module configuration



PC ORIGINAL PKG

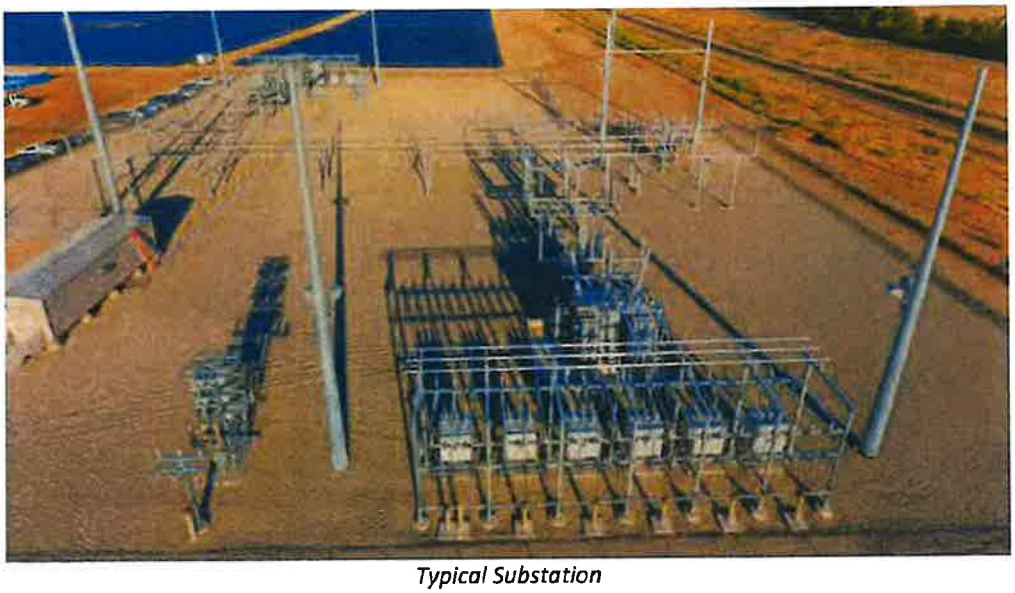
EEC ORIGINAL PKG

Typical BESS

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building described later in this Project Description.



Typical Substation

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard, via one of the proposed gen-tie line alternatives (Figure 1). The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be

PC ORIGINAL PKG

EEC ORIGINAL PKG

undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) is depicted in Figure 1 and may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40' x 80' in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Roadway and IID Crossings

The Project may require the following crossing types of Imperial Irrigation District (IID) canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner's water supply, local irrigation district, or delivered via truck from off-area source(s). A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

PC ORIGINAL PKG EEC ORIGINAL PKG

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic would access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). Large trucks would likely utilize Interstate 8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the Project Area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the Project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The Project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Site preparation would be planned and designed to minimize the amount of earth movement required for the Project, to the extent feasible. The hydrology design would be given priority to protect the Project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

Laydown Areas

At full build-out, most of the Project footprint would be disturbed by construction of the Project. Therefore, temporary construction lay down and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the Project disturbance footprint. Due to the large scale of the Project, the lay down areas may be relocated periodically within the solar field acreage as the project is built out.

Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation
- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

Workforce

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Project Compliance Plans and Best Management Practices

The following sections describe standard Project feature compliance plans and best management practices that would be applied during construction and/or long-term operation of the Project, as applicable, to maintain human health and safety, ensure local, state, and federal regulatory compliance, and to avoid or minimize unplanned environmental impacts resulting from construction and/or operation of the Project.

Hazardous Materials and Hazardous Waste Management

The Project would utilize and store materials onsite that have been defined as hazardous under Title 40 of the Code of Federal regulations (CFR) Part 261, require a Material Safety Data Sheet (MSDS) per the California Labor Code Section 6360, is a listed substance in Section 339 of Title 8 of the California Code of Regulations (CCR), or is defined as hazardous waste per Chapter 6.5 of the California Health and Safety Code.

The following hazardous materials are expected to be used during the construction, operation, and long-term maintenance of the Project:

- Insulating mineral oil for electrical transformers and other electrical equipment
- Lubricating oil for maintenance vehicles
- Various solvents and detergents for cleaning equipment
- Gasoline for maintenance vehicles
- Lithium-ion batteries for storage of electrical energy

Note that additional materials may be used for the project, as required. All hazardous materials would be transported, managed, used, handled, and stored on the Project site during construction and operations. Hazardous waste would be inventoried, stored, transported, and disposed of in accordance with all applicable local, state, and federal regulations at the end of construction or as required during Project operation. Most hazardous materials would be maintained at the Project site in quantities below the threshold requiring a Hazardous Material Business Plan (HMBP) per California Environmental Protection Agency (CalEPA): 55-gallons of a liquid, 200 cubic feet of a gas, and 500 pounds of a solid.

The Project anticipates preparing and implementing a HMBP for the lithium-ion batteries within the BESS, as well as any other hazardous materials that may be stored on the Project site at or above the state-defined thresholds. Chemical storage tanks (if any) would also be designed and installed to meet applicable local and state regulations. Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers would be stored in an approved storage facility/shed/structure onsite and disposed of as required by local, state, and federal regulations, as outlined in the HMBP.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of the Project would adhere to the Environmental Protection Agency's (EPAs) Rule on Spill Prevention Control and Countermeasures (SPCC), which helps facilities prevent oil spills into navigable waters of the U.S. Although aboveground stored quantities of diesel fuel, gasoline, lubricating or hydraulic oils are not expected to exceed EPA storage thresholds during construction, the quantity of insulating

PC ORIGINAL PKG

EEC ORIGINAL PKG

mineral oil required for operation of the Project substation transformers may reach EPA thresholds. SPCC plans would be developed for both Project construction and operations to ensure compliance with the EPA SPCC Rule, and ensure that appropriate spill prevention, control and countermeasures are developed to ensure that potential spills would not discharge into the New River or other navigable waters of the U.S. (e.g., IID canals) located in proximity to the Project.

Wastewater/Septic System

A standard onsite septic tank and leach field may be installed and used at the O&M building to dispose of small daily volumes of sanitary wastewater generated by the Projects' operational personnel. The septic system would be designed to meet operation and maintenance guidelines required by Imperial County.

Solid Waste Management

Inert solid wastes resulting from Project construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1 through 4 plastics, wood, and lubricating oils. Non-recyclable items may include insulation, drywall, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. To ensure that these wastes are recycled and disposed of properly, the applicant will prepare a Construction Waste Management Plan for review by the County prior to issuance of building permits. Consistent with Imperial County Public Health Department solid waste regulations and the California Green Building Code, the Plan would provide for diversion of a minimum of 50 percent of construction waste from landfill. Project operations are not anticipated to generate significant amounts of any inert solid wastes, recyclable or otherwise, and therefore are not expected to require a management plan.

Dust Control

Fugitive dust generated during Project construction would be controlled by utilizing Best Available Control Measures for Fugitive Dust (PM10) (e.g., watering, soil binders or tackifiers, wind screens, signage, speed restrictions, etc.) required by Imperial County Air Pollution Control District (ICAPCD) Rule 801, or California Air Resources Board (CARB) Rule 403. The applicant would prepare a Project Dust Control Plan (DCP) for review by Imperial County prior to issuance of building permits. The DCP would specify appropriate control measures to implement during both active construction and while construction on the Project site is inactive and outline appropriate control measures for both disturbed onsite Project areas, as well as any offsite unimproved or unpaved roads utilized for the Project construction access. During long-term project operations, fugitive dust control is not anticipated to be required for the Project to comply with ICAPCD or CARB Fugitive Dust Rules.

Pest and Vegetation Management

Non-native invasive plants and other pests that establish within the Project area would be controlled during Project construction and operations, consistent with the Imperial County office of the Agricultural Commissioner requirements for solar projects. The Applicant would prepare a Pest Management Plan for submission to the Imperial County Agricultural Commission. Long-term implementation of the Plan would include routine pest monitoring of the Project area, use of physical, mechanical, or chemical controls as necessary to manage pests, maintenance of

PC ORIGINAL PKG EEC ORIGINAL PKG

proper records documenting monitoring and pest management controls, and regular reporting to the Agricultural Commission as required.

Fire Management

The Project is located within the jurisdiction of Imperial County Fire Department. The Applicant will prepare a Fire Management Plan in accordance with Fire Department requirements for Project construction activities as well as long-term operations, including establishing appropriate emergency access to the Project site for first responders, and identifying Project-specific onsite fire protection or suppression systems that comply with Imperial County requirements.

The Project will incorporate many fire safety features to be described in detail in the Fire Management Plan, including access gates and service roads along the perimeter of the Project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems. Portable fire extinguishers would be provided at various locations throughout the Project site, while fixed fire suppressions systems would be employed throughout the Project based on equipment manufacturer specifications and coordination with the Fire Department. These may include onsite water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems. The Plan will also describe best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities. Access to nearby properties would not be hindered or restricted by any aspect of the Project Fire Management Plan.

Health and Safety

Health and safety precautions and best practices consistent with local, state, and federal regulations would be identified and implemented to ensure the safety for all personnel during Project construction and long-term operations. These administrative procedures and controls for Project construction and operational personnel will be supplemented with emergency response plans.

Administrative controls would include classroom and hands-on training in safe procedures for personnel operating and maintaining PV solar, BESS, and high-voltage electrical facilities, including general safety and implementation of a planned maintenance program. These controls would enhance overall Project safety and reliability when applied with the other physical Project safety system(s) and monitoring features incorporated as part of the Project design.

The Applicant will also prepare a Project-specific Emergency Response Plan (ERP). The ERP would outline the major components of an ERP specific to the Project, and address potential facility emergencies including chemical releases, fires, or personnel injuries, as well as identify appropriate protocols and actions during larger emergencies like earthquakes or regional emergency responses led by the Imperial County Office of Emergency Services. All Project employees would be provided with communication devices (e.g., cell phones and/or walkie-talkies) to ensure the ability to provide aid in the event of an emergency as described in the Plan.

PC ORIGINAL PKG

EEC ORIGINAL PKG

General Plan Consistency

An amendment to the Imperial County General Plan and a zone change are anticipated to be required to implement the proposed Project. The Project parcels are located outside of the Imperial County Renewable Energy (RE) Overlay Zone, but directly adjacent to areas within the RE Overlay Zone. CUP applications proposed for specific RE projects not located in the RE Overlay Zone are not allowed without an amendment to the RE Overlay Zone. Therefore, the applicant is anticipating a General Plan amendment and zone change to include/classify the Project area in its entirety into the RE Overlay Zone.

Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed Project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

The applicant would prepare a Project Reclamation Plan that would be implemented at the end of the Project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.

PC ORIGINAL PKG EEC ORIGINAL PKG

- Description of the activities necessary to restore the Project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

Anticipated Required Project Entitlements

Imperial County (Lead Agency)

- Consideration and certification of the Final EIR
- Adoption of the Mitigation Measure Monitoring Program (MMMP)
- Approval of the proposed CUP by the County Board of Supervisors
- Approval by the County Board of Supervisors for applicable items as follows:
    - General Plan Amendment to the Renewable Energy Overlay Element (Zone Change(s),
    - Height Variances, and/or
    - Development Agreement and/or Voluntary Public Benefit Agreement
    - County Grading Permit
    - County Building permit(s)
    - County encroachment permits, easements and/or licenses, as applicable.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The following ministerial reviews and permit approvals are anticipated to be required for the Project by the Imperial County Department(s) and/or Division(s) shown below:

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Anticipated Imperial Irrigation District Approvals

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the Proposed Project would cross IID facilities with access points and electrical crossings. The Proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge

PC ORIGINAL PKG EEC ORIGINAL PKG

Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)

- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

**The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may ultimately be required to implement the proposed Project.*

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX A: SITE PLAN
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX B: FULL RESOLUTION MAP FIGURES
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D

D1 – Site Plan
D2 – Full Resolution Figures

PC ORIGINAL PKG

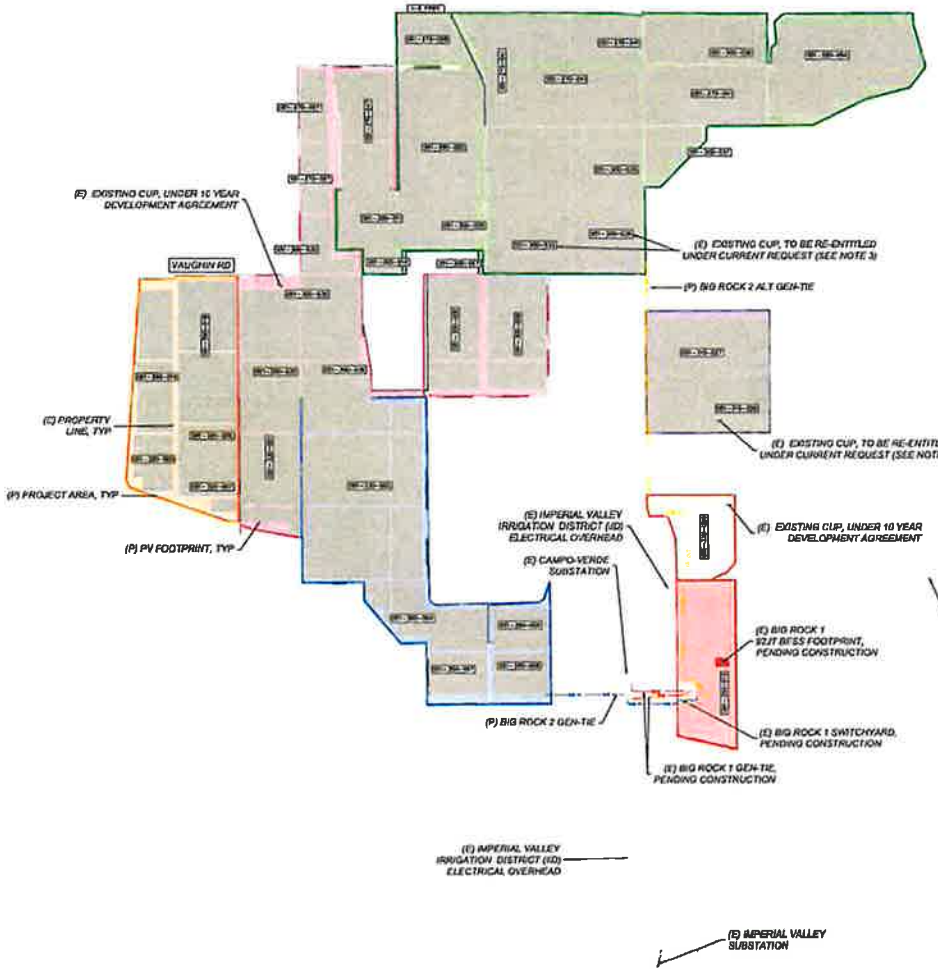
EEC ORIGINAL PKG

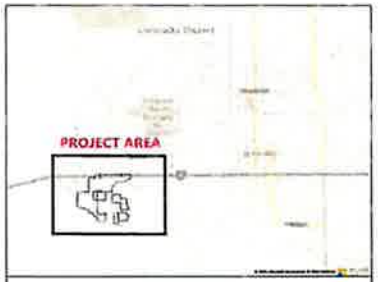
Attachment D1

Site Plan

PC ORIGINAL PKG

EEC ORIGINAL PKG





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

REVISIONS		
#	DATE	COMMENT
1	[illegible]	[illegible]
2	[illegible]	PRELIMINARY LAYOUT UPDATE
3	[illegible]	PRELIMINARY LAYOUT UPDATE
4	[illegible]	PRELIMINARY LAYOUT UPDATE

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.
3. APNS TO BE RE-ENTITLED INCLUDE: LAUREL 2 NORTH CUP # 21-0014: [illegible] LAUREL 2 SOUTH CUP #21-0013: [illegible]

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

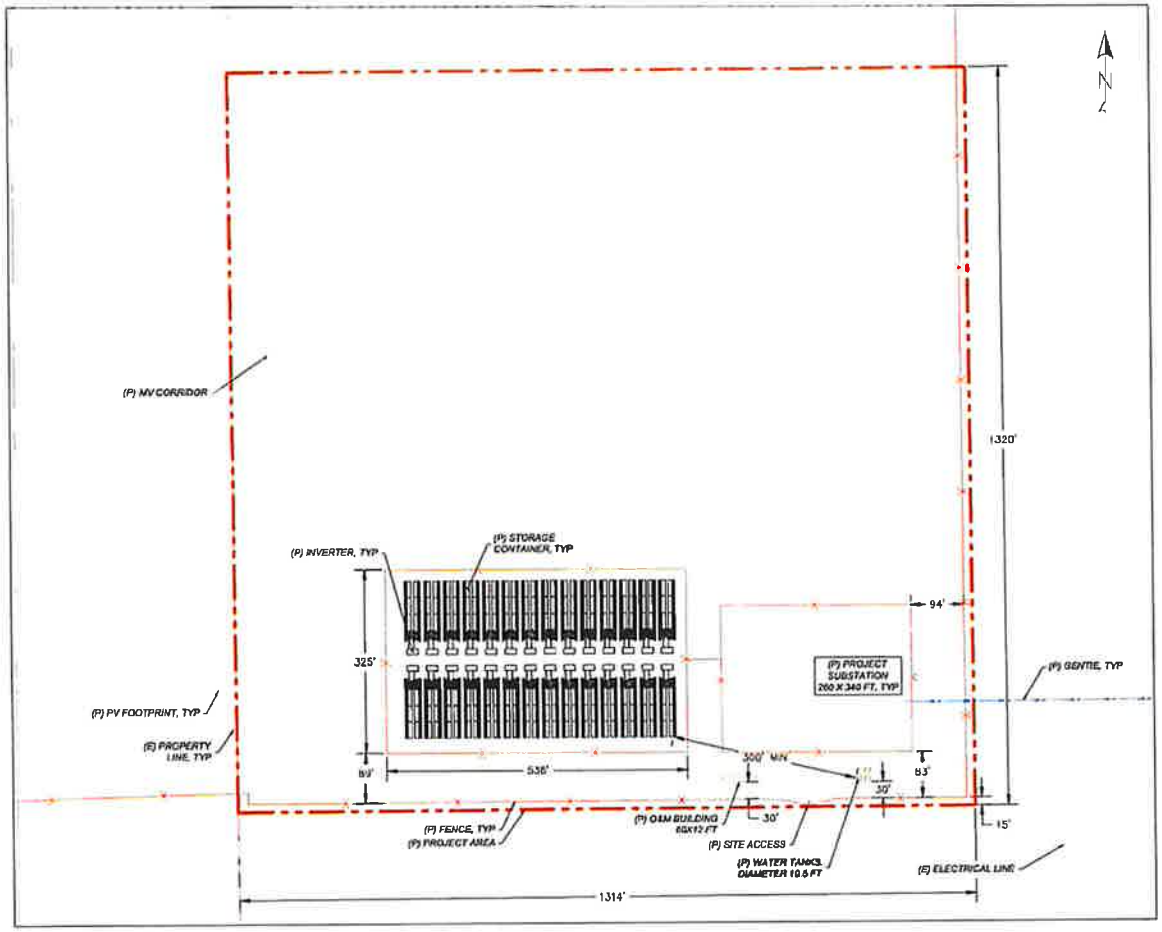
CONCEPTUAL SITE PLAN

DATE: March 18, 2024

SHEET: EX-1

PC ORIGINAL PKG

EEC ORIGINAL PKG



AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

#	DATE	COMMENT
1	8/11/2023	PRELIMINARY LAYOUT
2	11/1/2023	PRELIMINARY LAYOUT UPDATE
3	12/8/2023	PRELIMINARY LAYOUT UPDATE
4	03/13/2024	PRELIMINARY LAYOUT UPDATE

NOTES:

1. *CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.*
2. *FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS*

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL BESS LAYOUT

DATE March 13, 2024

SHEET EX-2

PC ORIGINAL PKG

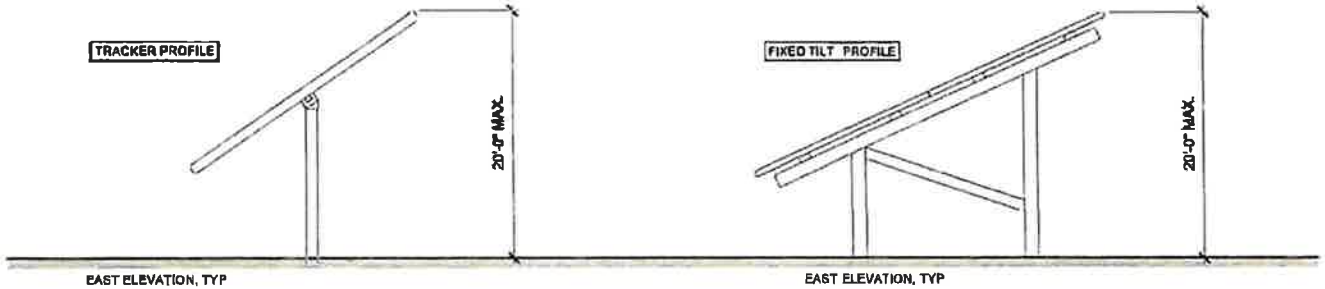
EEC ORIGINAL PKG

PC ORIGINAL PKG

EEC ORIGINAL PKG

1 TYPICAL PANEL & MOUNTING STRUCTURE

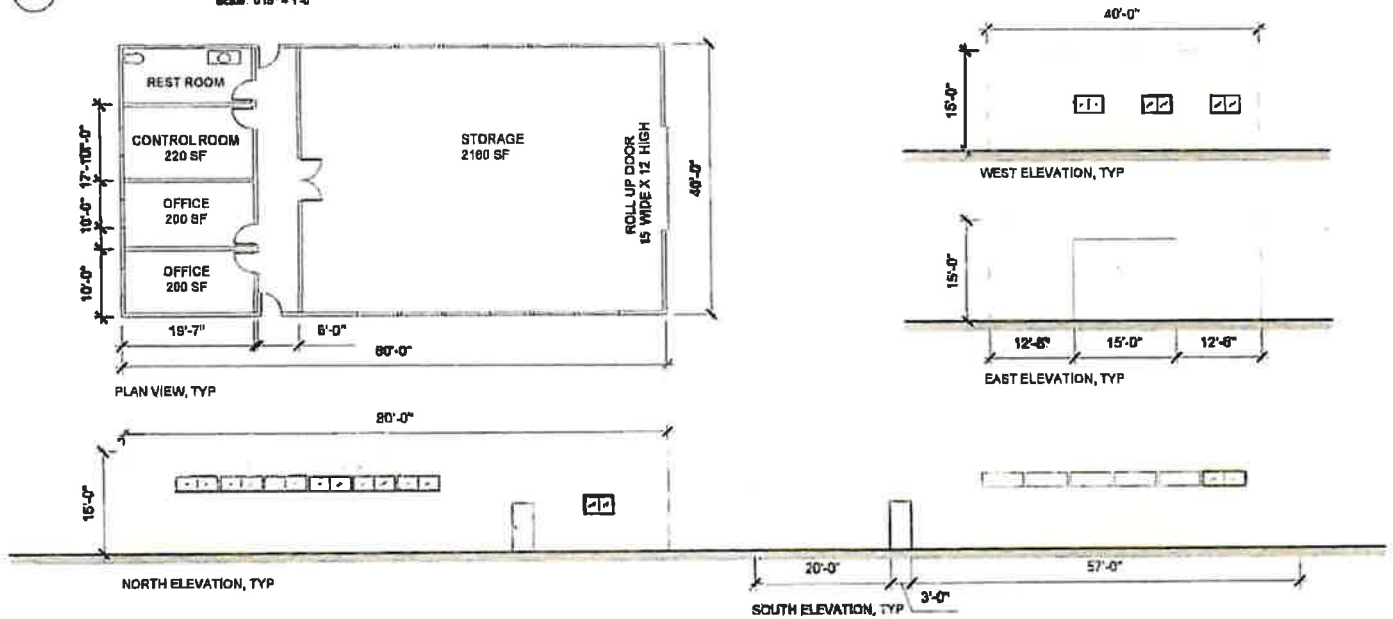
Scale: N T S



PRELIMINARY NOT FOR CONSTRUCTION

2 O&M BUILDING, TYP.

Scale: 1/16" = 1'-0"



AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

TRACKER AND O&M BUILDING DETAILS, TYP.

EX-3

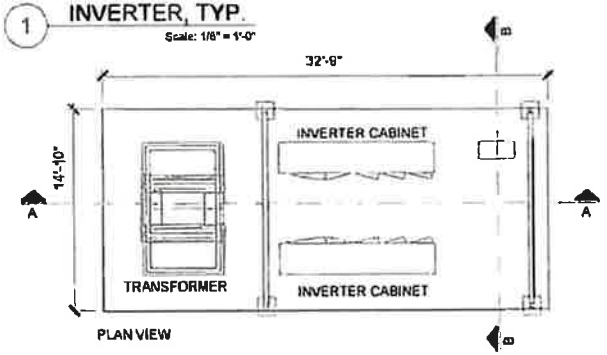
AS NOTED

PC ORIGINAL PKG

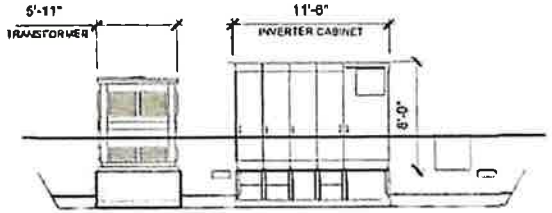
EEC ORIGINAL PKG

1 INVERTER, TYP.

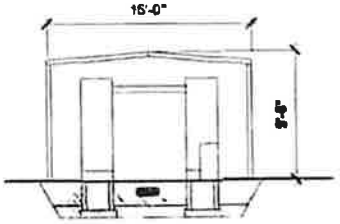
Scale: 1/8" = 1'-0"



PLAN VIEW



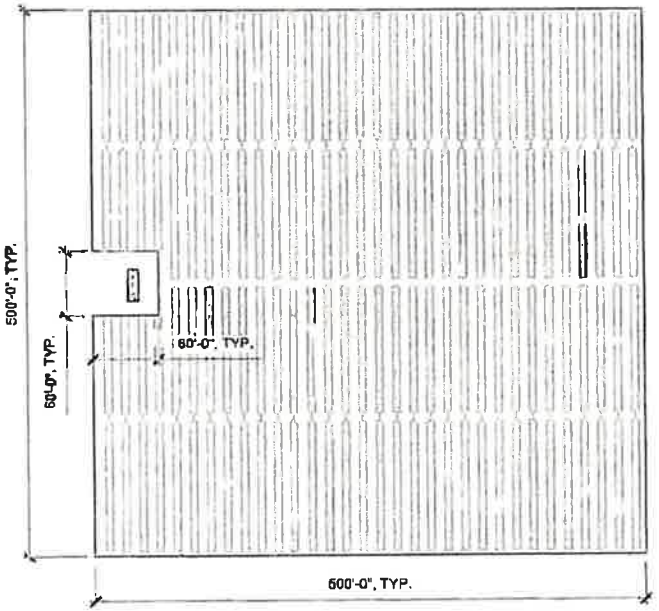
SECTION A-A



SECTION B-B

2 STANDARD SOLAR BLOCK

Scale: N T S.



MOUNTING STRUCTURE (BASE AREA)

INVERTER STATION

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

INVERTER AND STANDARD BLOCK DETAILS, TYP.

EX-4

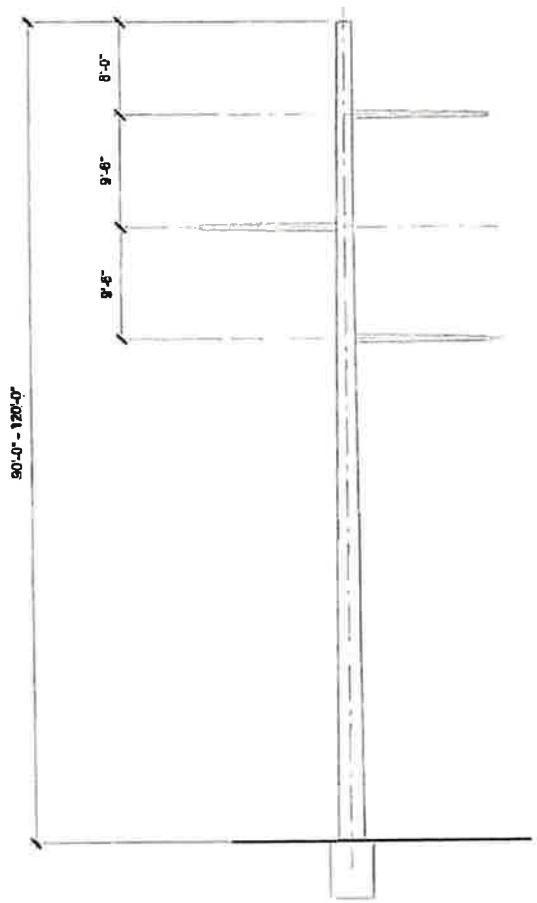
AS NOTED

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project SUBSTATION DETAILS, TYP.	EX-5 AS NOTED

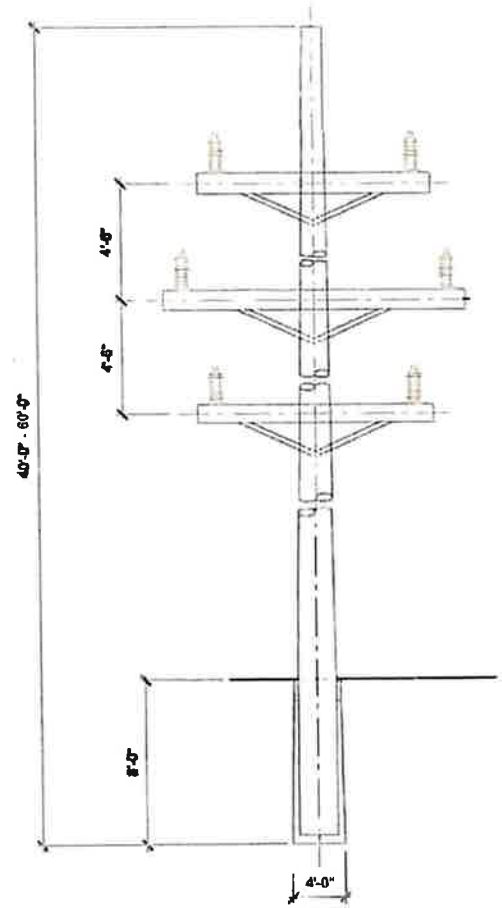
PRELIMINARY
NOT FOR
CONSTRUCTION

1 SUBSTATION and CONTROL BUILDING
Scale: NTS

PC ORIGINAL PKG
EEC ORIGINAL PKG



1 230 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S



2 66 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

PRELIMINARY NOT FOR CONSTRUCTION

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

MONOPOL DETAILS, TYP.

EX-6

AS NOTED

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D2

Figures 1 and 2 (Full Resolution)

PC ORIGINAL PKG

EEC ORIGINAL PKG

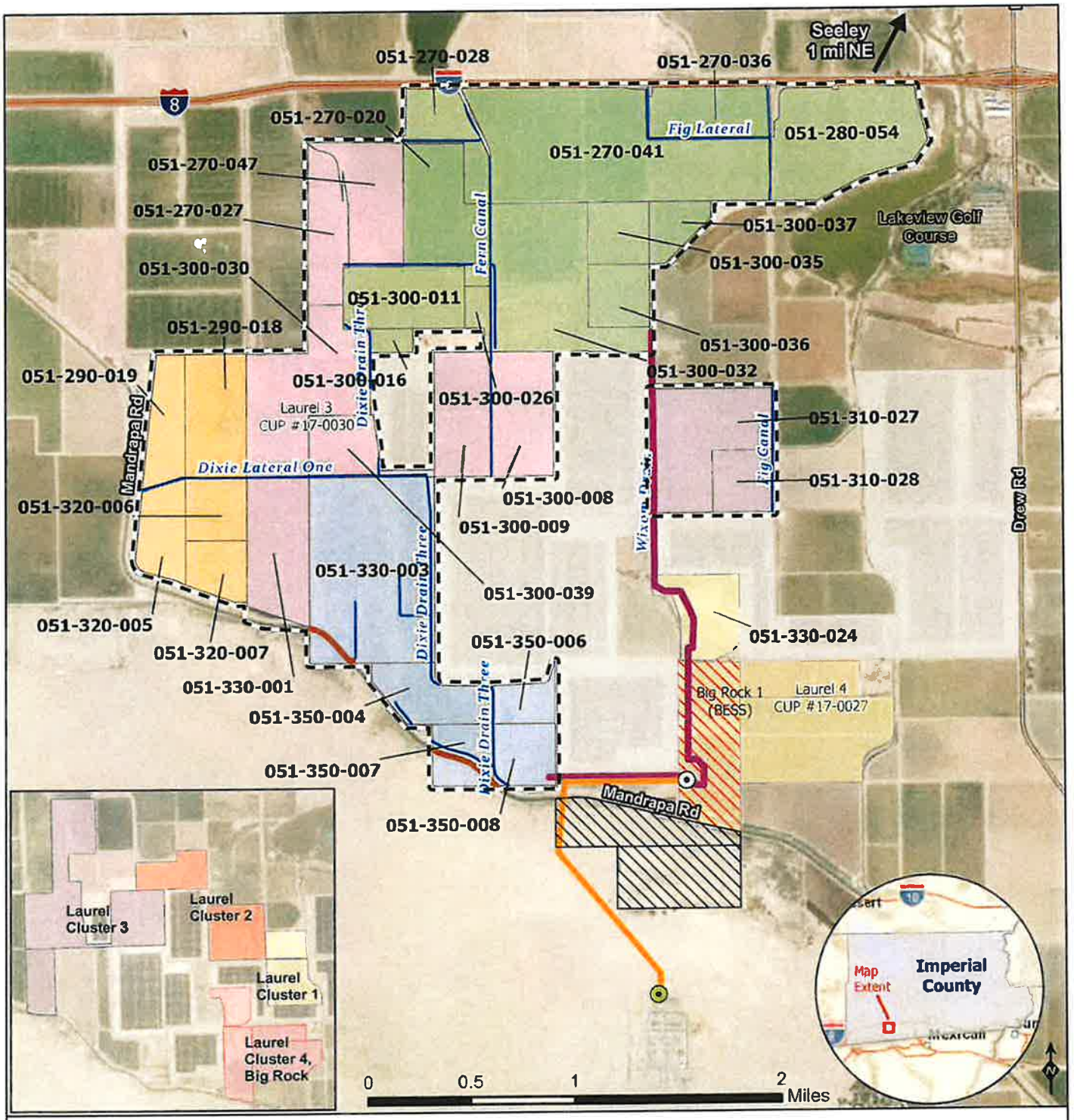


Figure 1
Location Map

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Canal Ditch
- Artifical Path (Canal)
- Big Rock 1 BESS Parcel
- Campo Verde Solar Project

- Lands To Be Developed Concurrently
- Big Rock 2 North Cluster (CUP #1); including Laurel 2 North CUP area (to be re-entitled) - 1030ac
- Big Rock 2 South Cluster (CUP #2) - 410ac
- Big Rock 2 East Cluster (CUP #3); was Laurel 2 South CUP area (to be re-entitled) - 160ac
- Big Rock 2 West Cluster (CUP #4) - 249ac
- Consolidated Edison Development Westside Canal Battery Storage Project
- Laurel 3 Cluster CUP #17-0030 (with 10-year DA) - 587ac
- Laurel 4 Cluster CUP #17-0027 (under 10-year DA)

PC ORIGINAL PKG

EEC ORIGINAL PKG

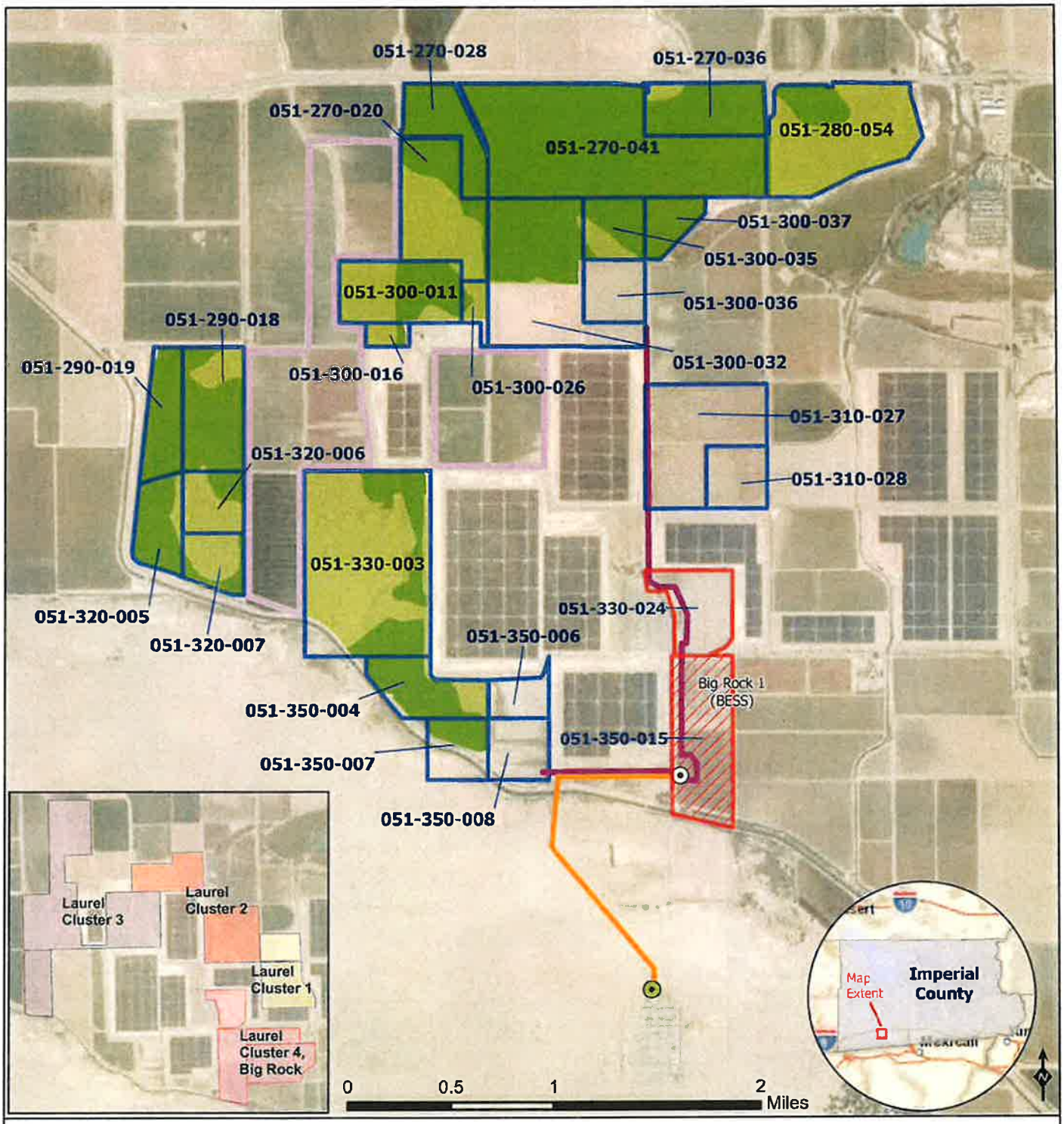


Figure 2
Farmland Designations

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Prime Farmland (929 ac)
- Farmland of Statewide Importance (517 ac)
- Big Rock 2 and Laurel 2 Parcels
- Big Rock 1 BESS Parcel

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment 4

CUP West

PC ORIGINAL PKG

EEC ORIGINAL PKG

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1.	PROPERTY OWNER'S NAME Multiple owners. Please see attachment.	EMAIL ADDRESS Multiple owners. Please see attachment.	
2.	MAILING ADDRESS (Street / P O Box, City, State) Multiple owners. Please see attachment.	ZIP CODE See attachment.	PHONE NUMBER See attachment.
3.	APPLICANT'S NAME 90FI 8me LLC	CUP Request #4 of 4	
4.	MAILING ADDRESS (Street / P O Box, City, State) 4370 Town Center Blvd., Suite 110 El Dorado Hills, CA 95762	ZIP CODE 95762	jjackson@avantus.com 303.588.3855
4.	ENGINEER'S NAME CA. LICENSE NO. TBD	EMAIL ADDRESS	
5.	MAILING ADDRESS (Street / P O Box, City, State)	ZIP CODE	PHONE NUMBER

6.	ASSESSOR'S PARCEL NO. Multiple APNs. Please see attachment.	249 acres	ZONING (existing) A 2-R, A-3
7.	PROPERTY (site) ADDRESS Multiple APNs. Please see attachment.		
8.	GENERAL LOCATION (i.e. city, town, cross street) Approximately 1 mile southwest of Seely, immediately south of Interstate 8, west of Drew Road and east and north of Mandrapa Road.		
9.	LEGAL DESCRIPTION Multiple APNs. Please see attachment.		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10.	DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail) Please see attachment.	
11.	DESCRIBE CURRENT USE OF PROPERTY	Farmland
12.	DESCRIBE PROPOSED SEWER SYSTEM	Septic tank with leach field
13.	DESCRIBE PROPOSED WATER SYSTEM	IID distribution system and private water treament facility
14.	DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	Above-ground tanks with gallons dedicated fire protection water
15.	IS PROPOSED USE A BUSINESS? ☒ Yes ☐ No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE? Please see attachment.

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Stephanie Perry — Chief Operating Officer of Avantus LLC, ultimate parent, duly authorized — 3/6/2024
Print Name — Date

Signature

Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY: _____ DATE _____
APPLICATION DEEMED COMPLETE BY: _____ DATE _____
APPLICATION REJECTED BY: _____ DATE _____
TENTATIVE HEARING BY: _____ DATE _____
FINAL ACTION: ☐ APPROVED ☐ DENIED DATE _____

REVIEW / APPROVAL BY OTHER DEPT'S required
☐ P. W.
☐ E. H. S.
☐ A. P. C. D.
☐ O. E. S.
☐ _____
☐ _____

CUP # _____

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B

B1 Legal Description
B2 Indemnification Forms
B3 Owner Affidavits
B4 Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B1

Legal Description

PC ORIGINAL PKG

EEC ORIGINAL PKG

Legal Descriptions:

Big Rock 2 Cluster West (CUP Request #4)

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249**

Landowners: Derrick-Downs, Brundy

Derrick-Downs

Parcel A:

That part of the Southwest quarter of the Northeast quarter, and of Lot 2 of Section 29, lying North of Foxglove Lateral No. 1, and East of the East right of way line of Dixie No. 2 Drain, and also, all that part of the Northwest quarter of the Northeast quarter of Section 29, lying East of the East right of way line of Dixie No. 2 Drain and within Tract 107, and also the Southwest quarter of the Southeast of Section 20, lying East of the East right of way lines of Dixie No. 2 Drain and wholly within Tract 107, all in Township 16 South, Range 12 East, San Bernardino Base and Meridian, as per map of the Resurvey approved June 14, 1910 and filed in the United States Land Office at Los Angeles, California.

APN: 051-290-019

Parcel B:

That part of the Southwest quarter of the Northeast quarter and the Northwest quarter of the Southeast quarter of Section 29, Township 16 South, Range 12 East, San Bernardino Base and Meridian, according to the United States Government Play of Resurvey approved June 14, 1910 and on file in the United States Land Office at Los Angeles, California, lying East of the East right of way of Dixie Drain No. 2, South of the Foxglove Lateral Canal No. 1 and West of the County Road as it is now located.

APN: 051-320-005

Brundy

Parcel I:

Lot 1 of Section 29, Township 16 South, Range 12 East, San Bernardino Base and Meridian, together with that portion of Tract 107, lying within the Southeast quarter of the Southeast quarter of Section 20 and the Northeast quarter of the Northeast quarter of Section 29, all in Township 16 South, Range 12 East, San Bernardino Base and Meridian, in an unincorporated area of the County of Imperial, State of California, according to the official government plat thereof.

PC ORIGINAL PKG EEC ORIGINAL PKG

APN: 051-290-018-0

Parcel II:

The Northeast quarter of the Southeast quarter of Section 29, Township 16 South, Range 12 East, San Bernardino Base and Meridian, according to the plat of resurvey approved and filed in the District Land Office;

Excepting that portion lying southwesterly of the northeasterly right(s) of way line of Dixie Drain No. 2.

APN: 051-320-007

Parcel III:

The Southeast quarter of the Northeast quarter of Section 29, Township 16 South, Range 12 East, San Bernardino Base and Meridian, according to the plat of resurvey approved and filed in the District Land Office.

APN: 051-320-006

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B2

Indemnification Forms

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at El Centro California on Jan, 25, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, attorney in fact, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Thomas D. Brundy and Karen D. Brundy

By Thomas D. Brundy & Karen Brundy

Title husband and wife as joint tenants

Mailing Address:

APNs 051-320-007, 051-320-006 and 051-290-018

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Imperial, CA California on 1/25/ 2024

APPLICANT

Name: 90Fl 8me LLC, Michael Healy

By

Title CCO of Avantus LLC, ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Timothy ~~Derick~~ Derrick

By Timothy Derrick

Title an individual

Mailing Address:

APNs 051-320-005 and 051-290-019

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES
GENERAL INDEMNIFICATION AGREEMENT

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. Applicant shall be fully responsible for all costs incurred. Applicant shall be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

Executed at Imperial California on Jan - 24, 2024

APPLICANT

Name: 90FI 8me LLC, Michael Healy

By [signature]

Title CCO of Avantus LLC, Ultimate parent, duly authorized

Mailing Address:

c/o Avantus Clean Energy LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

REAL PARTY IN INTEREST
(If different from Applicant)

Name Susan Downs

By Susan Downs

Title an individual

Mailing Address:

APNs 051-320-005 and 051-290-019

ACCEPTED/RECEIVED BY _____ Date _____

PROJECT ID NO _____ APN ___-___-___

S:\FORMS _ LISTS\General Indemnification FORM 041516.doc

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment B3

Owner Affidavits

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

2525 West Vaughn Rd., El Centro CA 92243 Further identified by Assessor's Parcel Number

(APN) 051-320-005 and 051-290-019 is hereby granted.

Timothy Olin Derrick
OWNER (SIGNATURE)

Timothy Olin Derrick
OWNER (TYPED OR PRINT)

600 North D St., Imperial, CA 92251
OWNER'S ADDRESS

9/21/2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 21, 2023 before me, Amparo Chavez Notary Public, personally appeared Timothy Olin Derrick, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

AMPARO CHAVEZ
Notary Public - California
Imperial County
Commission # 2404192
My Comm. Expires May 13, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document Owner's Affidavit
Number of Pages 1 Date of Document 09/21/23
Signer(s) Other Than Named Above No other Signers

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC to apply for this
(Lessee, Tenant, Contractor-Specify)

any and all permits, applications and CEQA actions on the described property located at address
(State permit type clearly i.e. building, land used)

2525 W. Vaughn Rd. El Centro CA 92243 Further identified by Assessor's Parcel Number

(APN) 051-320-005 and 051-290-019 is hereby granted.

Susan Downs
OWNER (SIGNATURE)

Susan Downs
OWNER (TYPED OR PRINT)

490 W. Belford Rd, Imperial, CA 92251
OWNER'S ADDRESS

9-21-2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 21, 2023 before me, Amparo Chavez, Notary Public, personally appeared Susan Lee Downs, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

AMPARO CHAVEZ
Notary Public - California
Imperial County
Commission # 2404192
My Comm. Expires May 13, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document Owners Affidavit
Number of Pages 1 Date of Document 09/21/23
Signer(s) Other Than Named Above No other signers

PC ORIGINAL PKG EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address

Further identified by Assessor's Parcel Number

(APN) 051-320-007, 051-320-006 and ~~051-290-018~~ is hereby granted.

Tom Brundy
OWNER (SIGNATURE)

Tom Brundy
OWNER (TYPED OR PRINT)

1452 McCabe Cove Rd. El Centro Ca. 92243
OWNER'S ADDRESS

9/18/2023
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 19, 2023 before me, Valerie Cardenas personally appeared Tom Brundy, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

VALERIE CARDENAS
Notary Public - California
Imperial County
Commission # 2418661
My Comm. Expires Sep 27, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG

EEC ORIGINAL PKG

OWNER'S AFFIDAVIT

In the event the applicant is not owner, the following shall be signed and acknowledge by the owner.

Permission is hereby granted to 90FI 8ME LLC (Lessee, Tenant, Contractor-Specify) to apply for this any and all permits, applications and CEQA actions (State permit type clearly i.e. building, land used) on the described property located at address _____ Further identified by Assessor's Parcel Number (APN) 051-320-007, 051-320-006 and 051-290-018 is hereby granted.

Karen Brudy
OWNER (SIGNATURE)

Karen Brudy
OWNER (TYPED OR PRINT)

1452 McCabe Cove Rd
OWNER'S ADDRESS

9/18/23
DATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Imperial } S.S.

On September 18, 2023 before me, ~~Karen Brudy~~ Valerie Cardenas, personally appeared Karen Brudy, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

VALERIE CARDENAS
Notary Public - California
Imperial County
Commission # 2418661
My Comm. Expires Sep 27, 2026

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document _____
Number of Pages _____ Date of Document _____
Signer(s) Other Than Named Above _____

PC ORIGINAL PKG EEC ORIGINAL PKG

Attachment B4

Project Owner Contact Information

PC ORIGINAL PKG

EEC ORIGINAL PKG

BIG ROCK 2 CLUSTER WEST, CUP #4 LANDOWNER INFORMATION

CUP Request #	CUP Area	APN	Owner	Contact Information
CUP #4	Big Rock 2 Cluster West	051-290-019	Derrick/Downs	Timothy Derrick 600 N. D Street Imperial, CA 92251 (760) 996-0361 tderrick@sbcglobal.net Susan Downs 490 W. Belford Road Imperial, CA 92251 (760) 554-4856 susandowns@gmail.com
CUP #4	Big Rock 2 Cluster West	051-320-005	Derrick/Downs	Timothy Derrick 600 N. D Street Imperial, CA 92251 (760) 996-0361 tderrick@sbcglobal.net Susan Downs 490 W. Belford Road Imperial, CA 92251 (760) 554-4856 susandowns@gmail.com
CUP #4	Big Rock 2 Cluster West	051-320-006	Brundy	Thomas D. Brundy and Karen D. Brundy 1452 McCabe Cove Road El Centro, CA 92243 (760) 768-3010 tbrundy@thegrid.net
CUP #4	Big Rock 2 Cluster West	051-320-007	Brundy	Thomas D. Brundy and Karen D. Brundy 1452 McCabe Cove Road El Centro, CA 92243 (760) 768-3010 tbrundy@thegrid.net

PC ORIGINAL PKG

EEC ORIGINAL PKG

BIG ROCK 2 CLUSTER WEST, CUP #4 LANDOWNER INFORMATION

CUP Request #	CUP Area	APN	Owner	Contact Information
CUP #4	Big Rock 2 Cluster West	051-290-018	Brundy	Thomas D. Brundy and Karen D. Brundy 1452 McCabe Cove Road El Centro, CA 92243 (760) 768-3010 tbrundy@thegrid.net

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment C

Project Description

PC ORIGINAL PKG

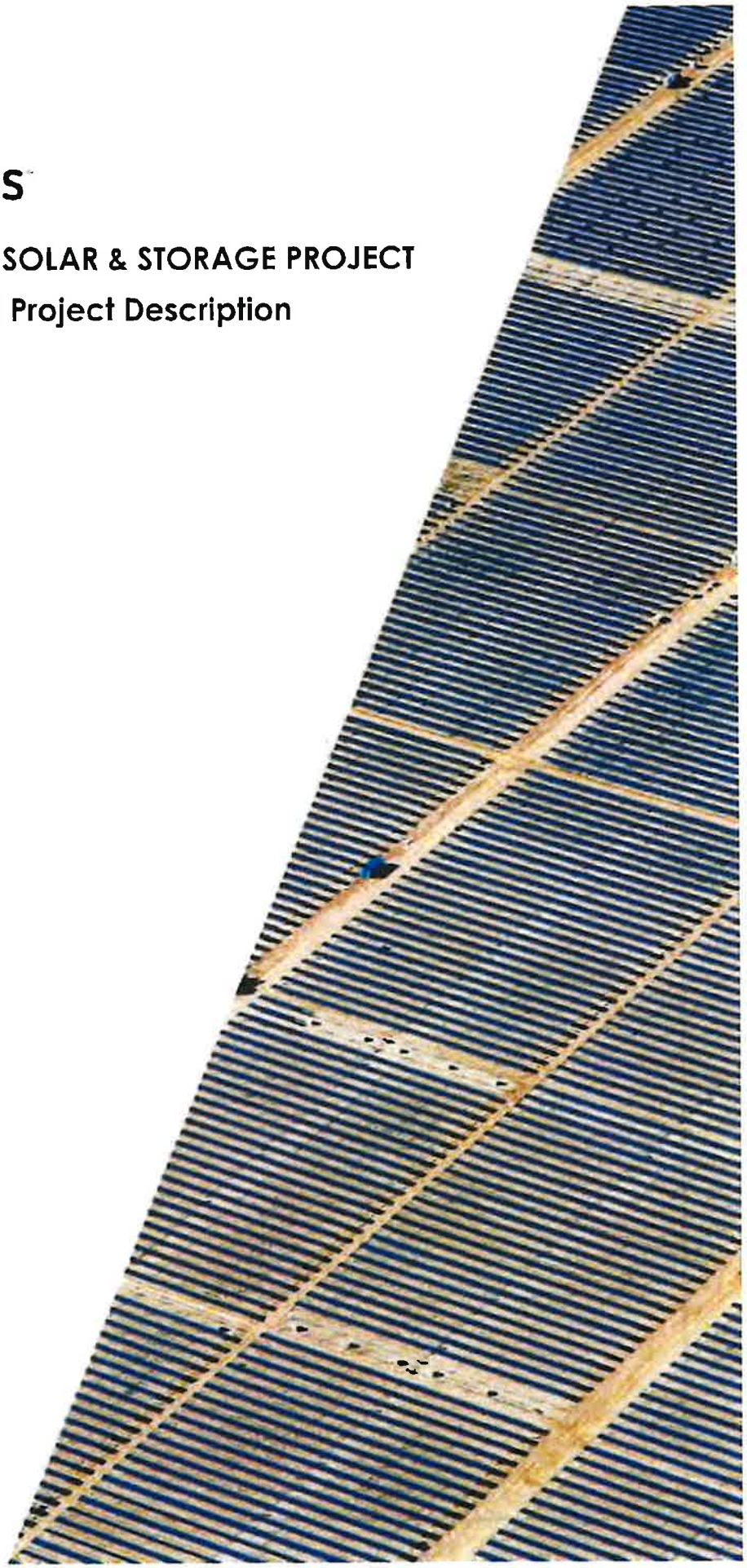
EEC ORIGINAL PKG

AVANTUS

BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT

CUP Application and Project Description

18 March 2024



Submitted by:
90FI 8me LLC
4370 Town Center Blvd., Suite 110
El Dorado Hills, CA 95762

PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

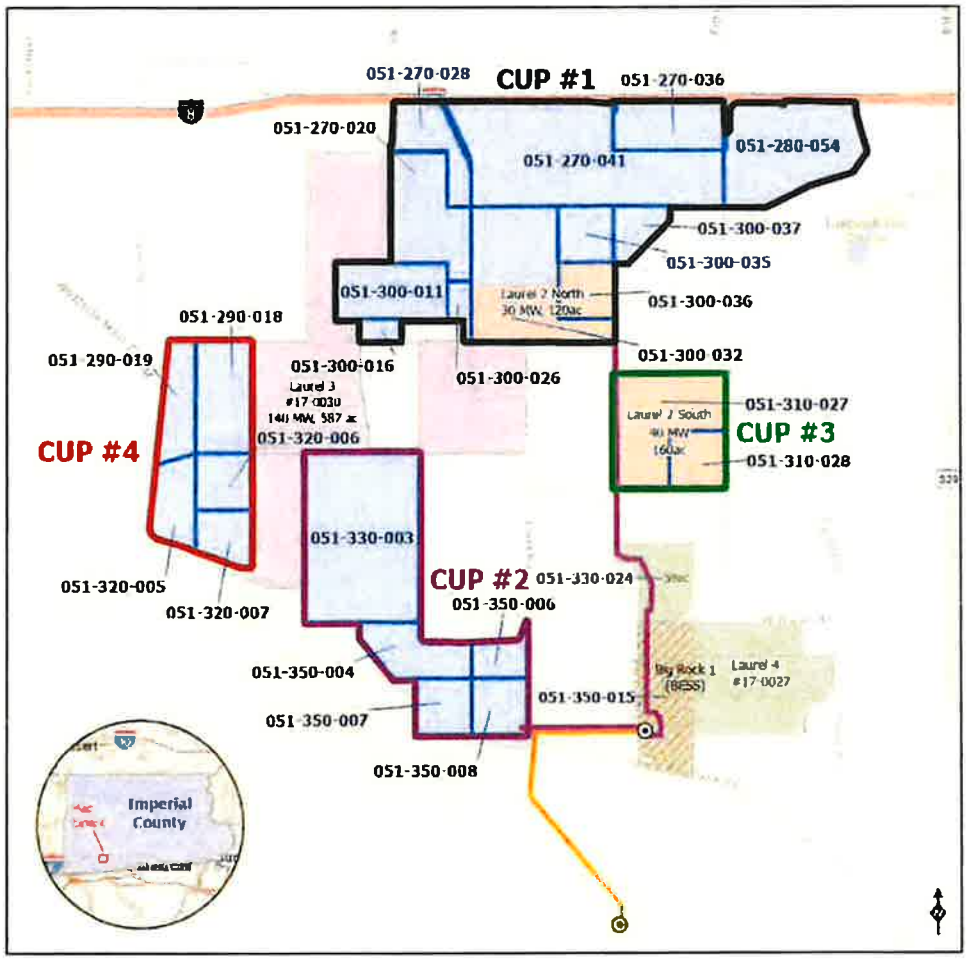
PC ORIGINAL PKG

EEC ORIGINAL PKG

Big Rock 2 Cluster Solar and Storage Project

This document contains Supporting Materials for the following Conditional Use Permit Applications Packages:

1. CUP #1: Big Rock 2 Cluster North (1,030 acres)
    - Big Rock 2 Cluster North (910 acres), including;
        - Laurel Cluster 2 North /CUP # 21-0014 (120 acres) *(to be re-entitled)*
2. CUP #2: Big Rock 2 Cluster South (410 acres)
3. CUP #3: Big Rock 2 Cluster East/Laurel Cluster 2 South CUP # 21-0013) (160 acres) *(to be re-entitled)*
4. CUP #4 Big Rock Cluster West (249 acres)



PC ORIGINAL PKG

EEC ORIGINAL PKG

This page left blank intentionally.

PC ORIGINAL PKG

EEC ORIGINAL PKG

TABLE OF CONTENTS

INTRODUCTION **1**

Site Information **4**

PROJECT DESCRIPTION **7**

Overview **7**

Project Objectives **7**

Project Components **8**

PV Module Configuration 8

Collection, Inverter and Transformer Systems 11

Battery Energy Storage System 12

Substation(s) 15

Transmission Line and Interconnection 15

Operations and Maintenance (O&M) Building 16

Roadway and IID Crossings 16

Water Usage 16

Water Storage 17

Site Security and Fencing 17

Lighting 17

Annual Production 17

Electric Service 17

Project Construction **18**

Construction Activities and Duration 18

Laydown Areas 19

Workforce 19

Project Operation **19**

Operational Activities 19

Workforce 19

Project Compliance Plans and Best Management Practices **20**

Hazardous Materials and Hazardous Waste Management 20

Spill Prevention and Containment 20

Wastewater/Septic System 21

Solid Waste Management 21

Dust Control 21

Pest and Vegetation Management 21

Fire Management 22

Health and Safety 22

General Plan Consistency 23

Decommissioning and Reclamation **23**

Anticipated Required Project Entitlements **24**

PC ORIGINAL PKG EEC ORIGINAL PKG

APPENDICES

Appendix A **Site Plan**

Appendix B **Full Resolution Map Figures**

PC ORIGINAL PKG

EEC ORIGINAL PKG

INTRODUCTION

90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale [up to 500-megawatt (MW) in capacity] photovoltaic ("PV") solar energy generation and Battery Energy Storage System ("BESS") facility (also up to 500-MW in capacity). The proposed Project, collectively called, the Big Rock 2 Cluster Solar and Storage Project ("Big Rock 2" or the "Project") contemplates utilizing approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development (Figure 1).

Energy generated by the Project would be collected using up to 66 kilovolt ("kV") collector lines which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the Project substation to the Liebert Switchyard (pending construction), which will then be connected via an overhead 230-kV gen-tie line to the existing San Diego Gas and Electric (SDG&E) Imperial Valley Substation (Figure 1). It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

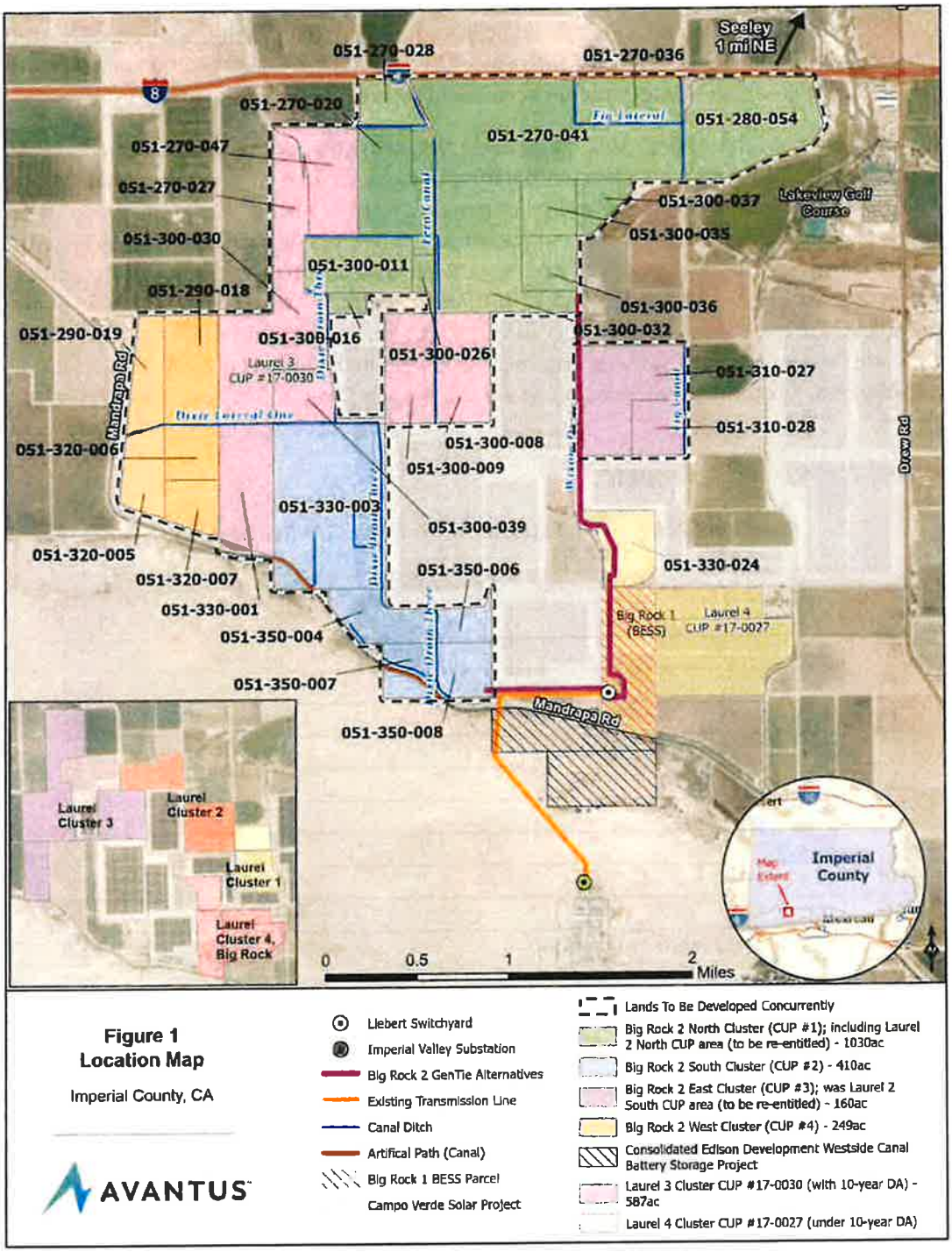
The Applicant intends to secure CUPs from Imperial County as the lead agency, along with permits and approvals from other relevant agencies as required by law. Laurel Cluster 3 CUP (#17-0030) is associated with a 10-year Development Agreement (DA) (Document Number 2023012228). However, Laurel Cluster 2 CUPs may expire prior to this approval, therefore, those areas have been integrated into this request, upon approval, Imperial County would void CUPs #21-0014 and #21-0013. Table 1 provides a breakdown of Project areas and acreage availability.

Table 1: Total Project Area and Land Availability

	Acres Available	CUP #
Big Rock 2 Cluster North, including Laurel Cluster 2 North (120 acres) parcels under CUP # 21-0014 (expires Dec. 2024)	1,030	CUP Request #1 (partial re-entitlement)
Big Rock 2 Cluster South	410	CUP Request #2
Big Rock 2 Cluster East/Laurel Cluster 2 South parcels under CUP #21-0013 (expires Dec. 2024)	160	CUP Request #3 (re-entitlement)
Big Rock 2 Cluster West	249	CUP Request #4
Laurel Cluster 3 CUP #17-0030	*587*	*NA (under 10-year DA)*

PC ORIGINAL PKG EEC ORIGINAL PKG

Figure 1: Project Location Map



PC ORIGINAL PKG

EEC ORIGINAL PKG

Site Information

Site Characteristics

The proposed Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 1).

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Parcels, Zoning, and Acreage(s)

Table 2: Big Rock 2 Cluster North (New CUP Request #1)

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	**85.5**
	Sub-total		**910**
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
12	051-300-032 (southern portion) *(to be re-entitled)*	A-2-RE	80
13	051-300-036 *(to be re-entitled)*	A-3-RE	40.3
	Sub-total		**120**
	TOTAL ACRES		**1,030**

Table 3: Big Rock 2 Cluster South (New CUP Request #2)

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4

PC ORIGINAL PKG EEC ORIGINAL PKG

	APN	Zoning	Acres
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410**

Table 4: Big Rock Cluster 2 East (to be re-entitled) (New CUP Request #3)

	Laurel Cluster 2 South CUP #21-0013 (Expires December 2024)		
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	Total		**160**

Table 5: Big Rock 2 Cluster West (New CUP Request #4)

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249**

Site Information

Site Characteristics

The Project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico (Figure 3).

The topography of the Project area is relatively flat, consisting primarily of agricultural fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

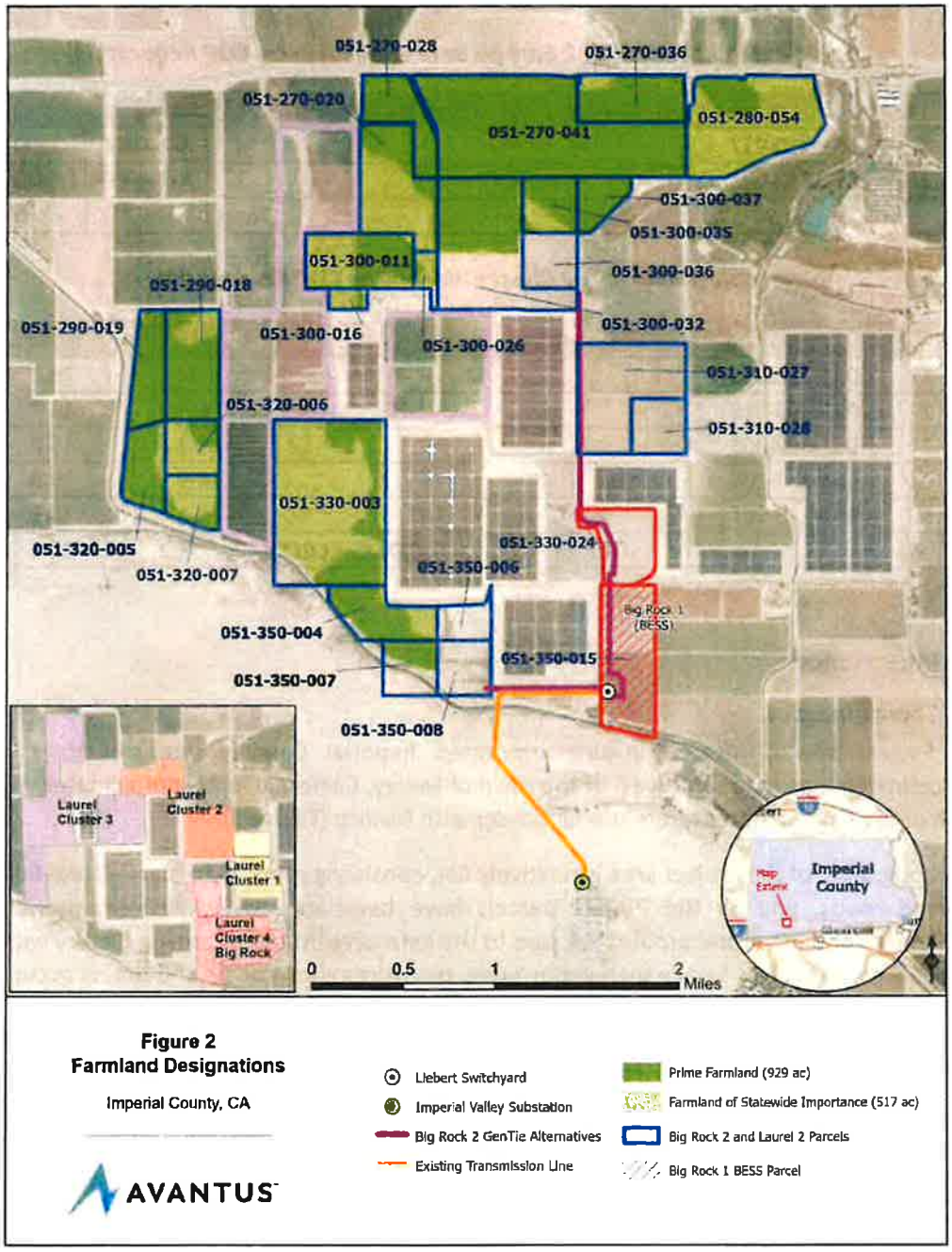
The entire Project area is designated Agricultural in the Imperial County General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Figure 2 also illustrates Prime Farmland and Farmland of Statewide Importance; however, the Project does not include agricultural lands designated under the "Williamson Act".

Figure 2: Farmland Designations



PC ORIGINAL PKG EEC ORIGINAL PKG

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 1).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 1).

PC ORIGINAL PKG

EEC ORIGINAL PKG

PROJECT DESCRIPTION

Overview

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. The Project contemplates two gen-tie line alternatives as depicted in Figure 1.

The Applicant has considered the following in its selection of the Big Rock 2 PV solar and BESS Project for detailed evaluation:

- Private land availability suitable for renewable energy development
- Compatible Land Use Zoning: Agricultural/Rural Zone(s)
- Proximity to the SDG&E Imperial Valley substation
- Proximity to the applicant's previously approved PV solar and BESS projects entitled with Imperial County

Project Objectives

The primary objective of 90FI 8me LLC is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the Project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional Project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed Project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.

PC ORIGINAL PKG EEC ORIGINAL PKG

- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.

- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.

- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

Project Components

PV Module Configuration

The Project would use PV panels or modules[1] on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height (H), depending on the mounting system used, panels are expected to remain between six (6) and eight (8) feet in height.

[1] Including but not limited to bi-facial or concentrated photovoltaic (CPV) technology.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical fixed-tilt solar panel rows



Typical single axis tracking solar panels

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis tracking solar panels

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

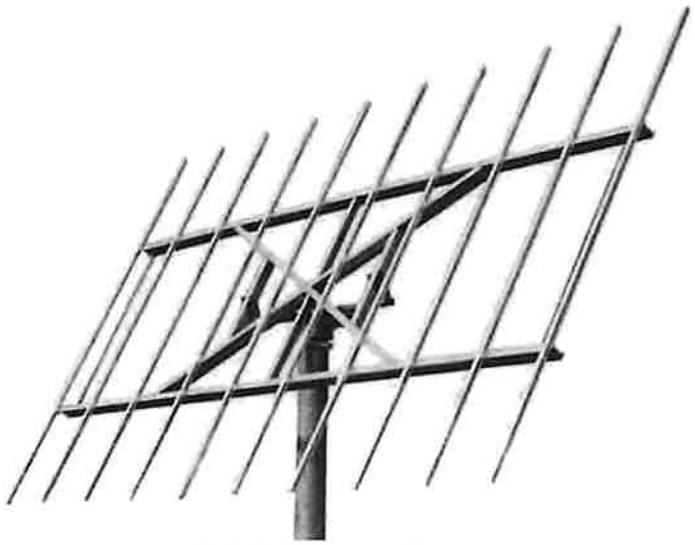
Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the Project area characteristics and the desired energy production profile.



Typical fixed-tilt mounting structure

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical dual axis mounting structure

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these Project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the Project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are provided in Figure 1; however, not all routes will ultimately be developed. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the Project by Imperial County.

PC ORIGINAL PKG

EEC ORIGINAL PKG



Typical inverter stations

Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the Project.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.



BESS Installed in Dedicated Structure

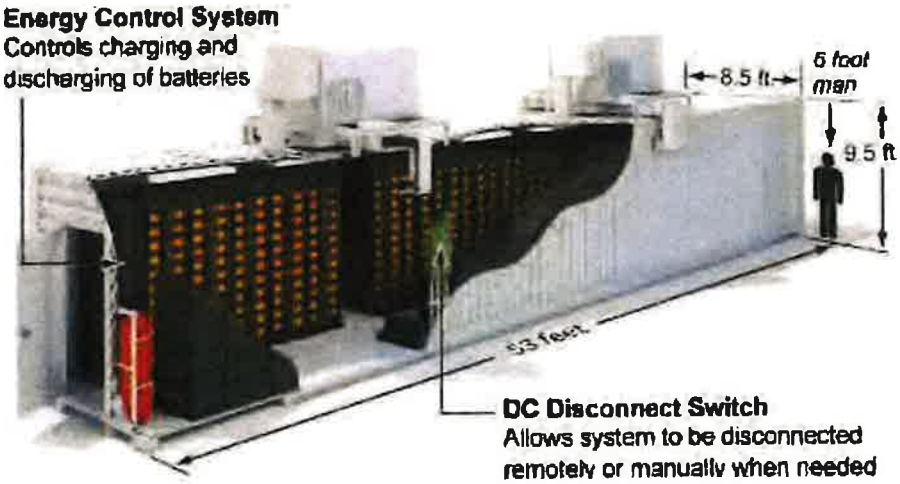


PC ORIGINAL PKG

EEC ORIGINAL PKG



Modular BESS Installed on Multiple Concrete Pads



Typical BESS module configuration



PC ORIGINAL PKG

EEC ORIGINAL PKG

Typical BESS

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building described later in this Project Description.



Typical Substation

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard, via one of the proposed gen-tie line alternatives (Figure 1). The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be

PC ORIGINAL PKG EEC ORIGINAL PKG

undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) is depicted in Figure 1 and may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40' x 80' in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Roadway and IID Crossings

The Project may require the following crossing types of Imperial Irrigation District (IID) canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner's water supply, local irrigation district, or delivered via truck from off-area source(s). A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

PC ORIGINAL PKG EEC ORIGINAL PKG

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic would access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). Large trucks would likely utilize Interstate 8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the Project Area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the Project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The Project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Site preparation would be planned and designed to minimize the amount of earth movement required for the Project, to the extent feasible. The hydrology design would be given priority to protect the Project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

Laydown Areas

At full build-out, most of the Project footprint would be disturbed by construction of the Project. Therefore, temporary construction lay down and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the Project disturbance footprint. Due to the large scale of the Project, the lay down areas may be relocated periodically within the solar field acreage as the project is built out.

Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation
- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

Workforce

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

PC ORIGINAL PKG EEC ORIGINAL PKG

Project Compliance Plans and Best Management Practices

The following sections describe standard Project feature compliance plans and best management practices that would be applied during construction and/or long-term operation of the Project, as applicable, to maintain human health and safety, ensure local, state, and federal regulatory compliance, and to avoid or minimize unplanned environmental impacts resulting from construction and/or operation of the Project.

Hazardous Materials and Hazardous Waste Management

The Project would utilize and store materials onsite that have been defined as hazardous under Title 40 of the Code of Federal regulations (CFR) Part 261, require a Material Safety Data Sheet (MSDS) per the California Labor Code Section 6360, is a listed substance in Section 339 of Title 8 of the California Code of Regulations (CCR), or is defined as hazardous waste per Chapter 6.5 of the California Health and Safety Code.

The following hazardous materials are expected to be used during the construction, operation, and long-term maintenance of the Project:

- Insulating mineral oil for electrical transformers and other electrical equipment
- Lubricating oil for maintenance vehicles
- Various solvents and detergents for cleaning equipment
- Gasoline for maintenance vehicles
- Lithium-ion batteries for storage of electrical energy

Note that additional materials may be used for the project, as required. All hazardous materials would be transported, managed, used, handled, and stored on the Project site during construction and operations. Hazardous waste would be inventoried, stored, transported, and disposed of in accordance with all applicable local, state, and federal regulations at the end of construction or as required during Project operation. Most hazardous materials would be maintained at the Project site in quantities below the threshold requiring a Hazardous Material Business Plan (HMBP) per California Environmental Protection Agency (CalEPA): 55-gallons of a liquid, 200 cubic feet of a gas, and 500 pounds of a solid.

The Project anticipates preparing and implementing a HMBP for the lithium-ion batteries within the BESS, as well as any other hazardous materials that may be stored on the Project site at or above the state-defined thresholds. Chemical storage tanks (if any) would also be designed and installed to meet applicable local and state regulations. Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers would be stored in an approved storage facility/shed/structure onsite and disposed of as required by local, state, and federal regulations, as outlined in the HMBP.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of the Project would adhere to the Environmental Protection Agency's (EPAs) Rule on Spill Prevention Control and Countermeasures (SPCC), which helps facilities prevent oil spills into navigable waters of the U.S. Although aboveground stored quantities of diesel fuel, gasoline, lubricating or hydraulic oils are not expected to exceed EPA storage thresholds during construction, the quantity of insulating

PC ORIGINAL PKG

EEC ORIGINAL PKG

mineral oil required for operation of the Project substation transformers may reach EPA thresholds. SPCC plans would be developed for both Project construction and operations to ensure compliance with the EPA SPCC Rule, and ensure that appropriate spill prevention, control and countermeasures are developed to ensure that potential spills would not discharge into the New River or other navigable waters of the U.S. (e.g., IID canals) located in proximity to the Project.

Wastewater/Septic System

A standard onsite septic tank and leach field may be installed and used at the O&M building to dispose of small daily volumes of sanitary wastewater generated by the Projects' operational personnel. The septic system would be designed to meet operation and maintenance guidelines required by Imperial County.

Solid Waste Management

Inert solid wastes resulting from Project construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1 through 4 plastics, wood, and lubricating oils. Non-recyclable items may include insulation, drywall, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. To ensure that these wastes are recycled and disposed of properly, the applicant will prepare a Construction Waste Management Plan for review by the County prior to issuance of building permits. Consistent with Imperial County Public Health Department solid waste regulations and the California Green Building Code, the Plan would provide for diversion of a minimum of 50 percent of construction waste from landfill. Project operations are not anticipated to generate significant amounts of any inert solid wastes, recyclable or otherwise, and therefore are not expected to require a management plan.

Dust Control

Fugitive dust generated during Project construction would be controlled by utilizing Best Available Control Measures for Fugitive Dust (PM10) (e.g., watering, soil binders or tackifiers, wind screens, signage, speed restrictions, etc.) required by Imperial County Air Pollution Control District (ICAPCD) Rule 801, or California Air Resources Board (CARB) Rule 403. The applicant would prepare a Project Dust Control Plan (DCP) for review by Imperial County prior to issuance of building permits. The DCP would specify appropriate control measures to implement during both active construction and while construction on the Project site is inactive and outline appropriate control measures for both disturbed onsite Project areas, as well as any offsite unimproved or unpaved roads utilized for the Project construction access. During long-term project operations, fugitive dust control is not anticipated to be required for the Project to comply with ICAPCD or CARB Fugitive Dust Rules.

Pest and Vegetation Management

Non-native invasive plants and other pests that establish within the Project area would be controlled during Project construction and operations, consistent with the Imperial County office of the Agricultural Commissioner requirements for solar projects. The Applicant would prepare a Pest Management Plan for submission to the Imperial County Agricultural Commission. Long-term implementation of the Plan would include routine pest monitoring of the Project area, use of physical, mechanical, or chemical controls as necessary to manage pests, maintenance of

PC ORIGINAL PKG EEC ORIGINAL PKG

proper records documenting monitoring and pest management controls, and regular reporting to the Agricultural Commission as required.

Fire Management

The Project is located within the jurisdiction of Imperial County Fire Department. The Applicant will prepare a Fire Management Plan in accordance with Fire Department requirements for Project construction activities as well as long-term operations, including establishing appropriate emergency access to the Project site for first responders, and identifying Project-specific onsite fire protection or suppression systems that comply with Imperial County requirements.

The Project will incorporate many fire safety features to be described in detail in the Fire Management Plan, including access gates and service roads along the perimeter of the Project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems. Portable fire extinguishers would be provided at various locations throughout the Project site, while fixed fire suppressions systems would be employed throughout the Project based on equipment manufacturer specifications and coordination with the Fire Department. These may include onsite water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems. The Plan will also describe best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities. Access to nearby properties would not be hindered or restricted by any aspect of the Project Fire Management Plan.

Health and Safety

Health and safety precautions and best practices consistent with local, state, and federal regulations would be identified and implemented to ensure the safety for all personnel during Project construction and long-term operations. These administrative procedures and controls for Project construction and operational personnel will be supplemented with emergency response plans.

Administrative controls would include classroom and hands-on training in safe procedures for personnel operating and maintaining PV solar, BESS, and high-voltage electrical facilities, including general safety and implementation of a planned maintenance program. These controls would enhance overall Project safety and reliability when applied with the other physical Project safety system(s) and monitoring features incorporated as part of the Project design.

The Applicant will also prepare a Project-specific Emergency Response Plan (ERP). The ERP would outline the major components of an ERP specific to the Project, and address potential facility emergencies including chemical releases, fires, or personnel injuries, as well as identify appropriate protocols and actions during larger emergencies like earthquakes or regional emergency responses led by the Imperial County Office of Emergency Services. All Project employees would be provided with communication devices (e.g., cell phones and/or walkie-talkies) to ensure the ability to provide aid in the event of an emergency as described in the Plan.

PC ORIGINAL PKG

EEC ORIGINAL PKG

General Plan Consistency

An amendment to the Imperial County General Plan and a zone change are anticipated to be required to implement the proposed Project. The Project parcels are located outside of the Imperial County Renewable Energy (RE) Overlay Zone, but directly adjacent to areas within the RE Overlay Zone. CUP applications proposed for specific RE projects not located in the RE Overlay Zone are not allowed without an amendment to the RE Overlay Zone. Therefore, the applicant is anticipating a General Plan amendment and zone change to include/classify the Project area in its entirety into the RE Overlay Zone.

Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed Project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

The applicant would prepare a Project Reclamation Plan that would be implemented at the end of the Project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.

PC ORIGINAL PKG EEC ORIGINAL PKG

- Description of the activities necessary to restore the Project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

Anticipated Required Project Entitlements

Imperial County (Lead Agency)

- Consideration and certification of the Final EIR
- Adoption of the Mitigation Measure Monitoring Program (MMMP)
- Approval of the proposed CUP by the County Board of Supervisors
- Approval by the County Board of Supervisors for applicable items as follows:
    - General Plan Amendment to the Renewable Energy Overlay Element (Zone Change(s),
    - Height Variances, and/or
    - Development Agreement and/or Voluntary Public Benefit Agreement
    - County Grading Permit
    - County Building permit(s)
    - County encroachment permits, easements and/or licenses, as applicable.

PC ORIGINAL PKG

EEC ORIGINAL PKG

The following ministerial reviews and permit approvals are anticipated to be required for the Project by the Imperial County Department(s) and/or Division(s) shown below:

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Anticipated Imperial Irrigation District Approvals

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the Proposed Project would cross IID facilities with access points and electrical crossings. The Proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge

PC ORIGINAL PKG EEC ORIGINAL PKG

Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)

- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

**The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may ultimately be required to implement the proposed Project.*

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX A: SITE PLAN
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

APPENDIX B: FULL RESOLUTION MAP FIGURES
(Provided Under Separate Cover)

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D

D1 – Site Plan
D2 – Full Resolution Figures

PC ORIGINAL PKG

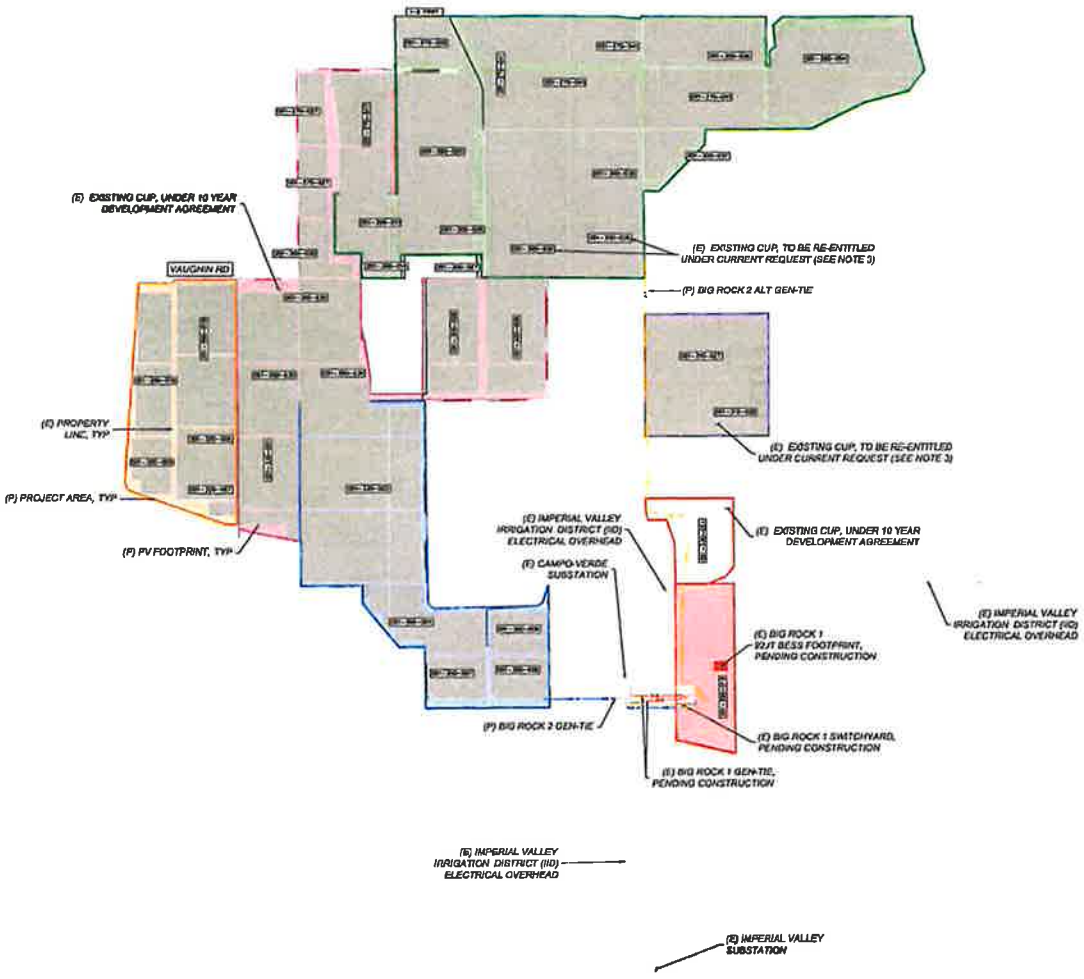
EEC ORIGINAL PKG

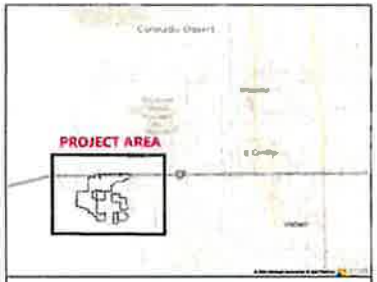
Attachment D1

Site Plan

PC ORIGINAL PKG

EEC ORIGINAL PKG





VICINITY MAP
NOT TO SCALE

SYSTEM INFORMATION

MWac @ POI	500
MWdc	TBD
GCR	TBD
INVERTER SIZE MWac	TBD
INVERTER	TBD
BESS MWac	500
BESS HOURS	TBD

LEGEND

	PROJECT AREA
	PROPERTY LINE
	ELECTRICAL OVERHEAD
	BIG ROCK 2 GENTIE LINE
	BIG ROCK 2 ALTERNATIVE GENTIE LINE
	BIG ROCK 2 EAST CLUSTER
	LAUREL 3 CLUSTER (WITH 10YR DA)
	BIG ROCK 1 BESS PARCEL
	LAUREL 4 CUP (WITH 10YR DA)
	BIG ROCK 2 SOUTH CLUSTER
	BIG ROCK 2 NORTH CLUSTER
	BIG ROCK 2 WEST CLUSTER
	BIG ROCK 1 BESS FOOTPRINT
	BIG ROCK 1 GEN-TIE
(E)	EXISTING
(P)	PROPOSED
TYP	TYPICAL

AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

REVISIONS		
#	DATE	COMMENT
1	[illegible]	PRELIMINARY LAYOUT
2	[illegible]	PRELIMINARY LAYOUT UPDATE
3	[illegible]	PRELIMINARY LAYOUT UPDATE
4	[illegible]	PRELIMINARY LAYOUT UPDATE

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.
3. APNS TO BE RE-ENTITLED INCLUDE: LAUREL 2 NORTH CUP # 21-0014; #051-300-000 (SOUTH) AND #051-300-026 LAUREL 2 SOUTH CUP #21-0013; #051-310-027 AND #051-310-028

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

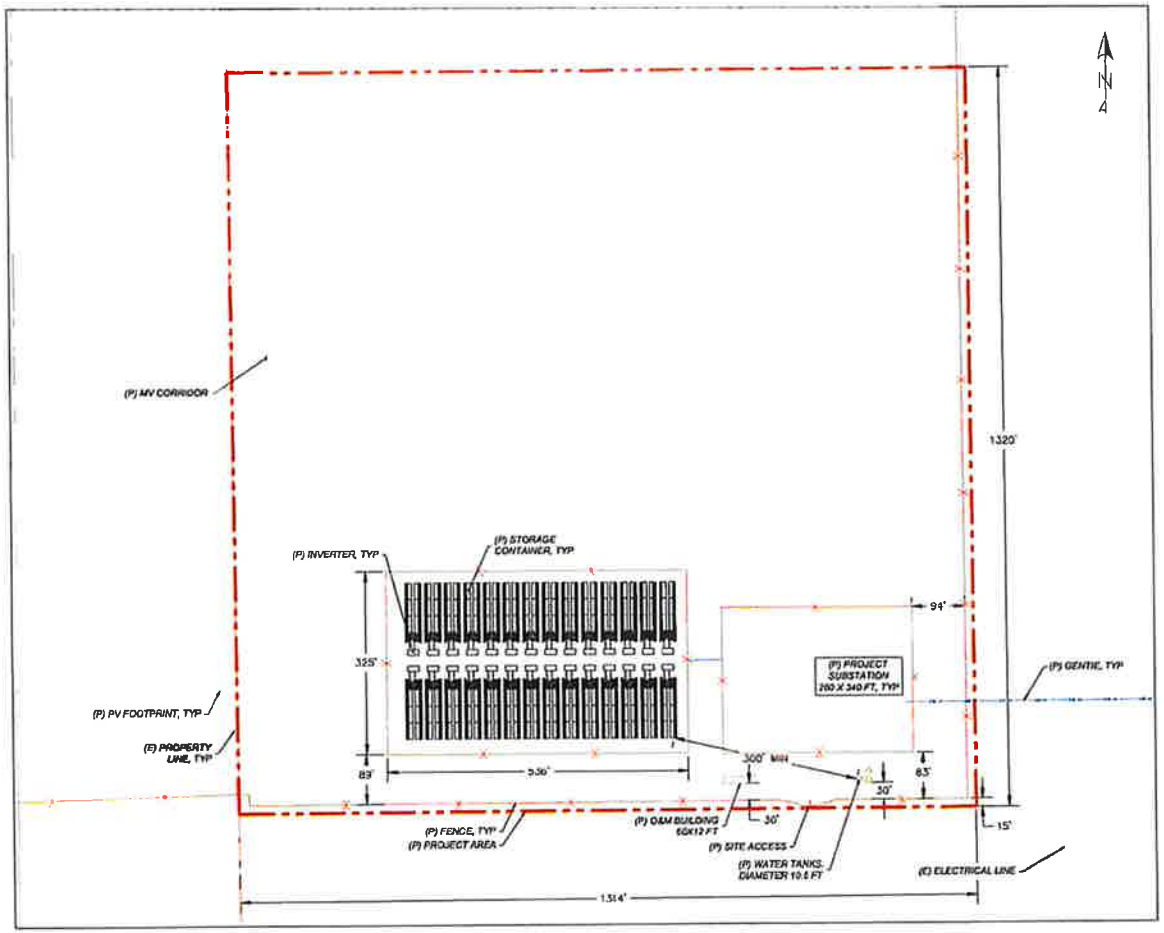
CONCEPTUAL SITE PLAN

DATE: March 18, 2024

SHEET: EX-1

PC ORIGINAL PKG

EEC ORIGINAL PKG



AVANTUS
1801 Century Park East, Suite 700
Los Angeles, CA 90067

NOTES:

1. CURRENT DESIGN IS PRELIMINARY AND SUBJECT CHANGE.
2. FINAL DESIGN TO ADHERE TO ALL CONSTRAINTS, SETBACKS, AND OTHER REQUIREMENTS. FINAL DESIGN SHALL BE SUBJECT TO REVIEW AND BUILDING PERMIT APPROVALS.

90FI 8ME LLC
Big Rock 2
IMPERIAL COUNTY, CA

CONCEPTUAL BESS LAYOUT

DATE: March 13, 2024

SHEET: EX-2

PC ORIGINAL PKG

EEC ORIGINAL PKG

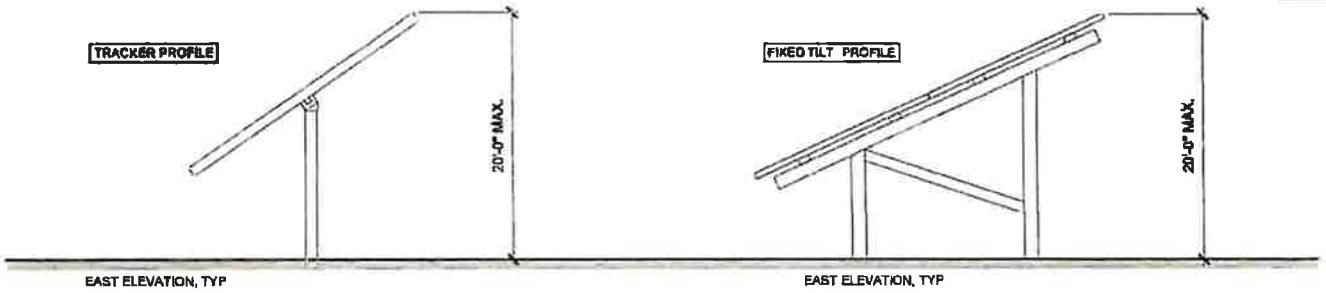
PC ORIGINAL PKG

EEC ORIGINAL PKG

PRELIMINARY NOT FOR CONSTRUCTION

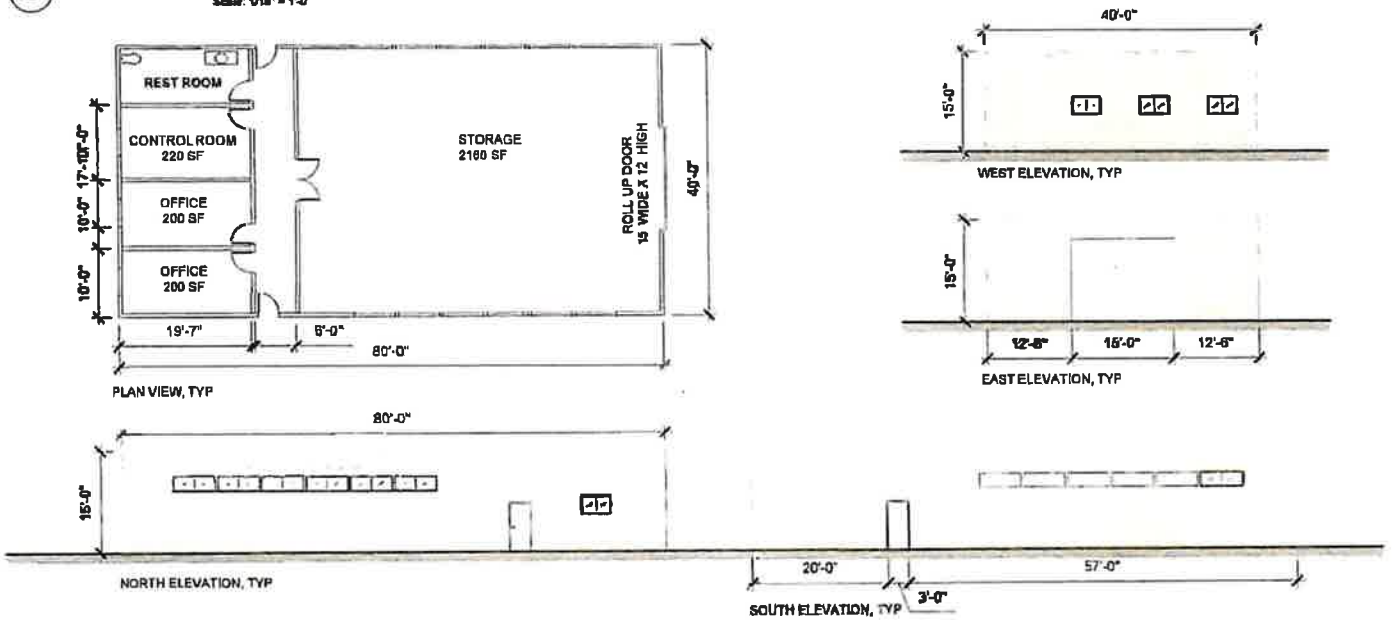
1 TYPICAL PANEL & MOUNTING STRUCTURE

Scale: N.T.S



2 O&M BUILDING, TYP.

Scale: 1/16" = 1'-0"



AVANTUS

1601 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

TRACKER AND O&M BUILDING DETAILS, TYP.

EX-3

AS NOTED

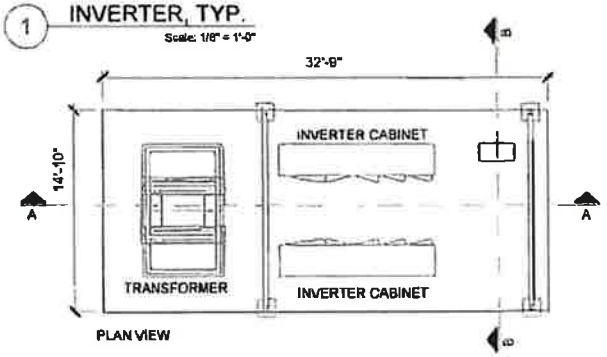
PC ORIGINAL PKG

EEC ORIGINAL PKG

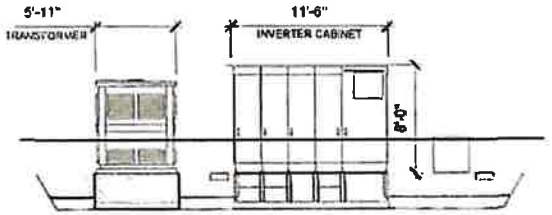
PRELIMINARY NOT FOR CONSTRUCTION

1 INVERTER, TYP.

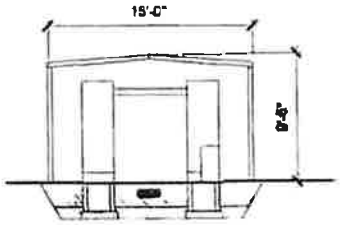
Scale: 1/8" = 1'-0"



PLAN VIEW



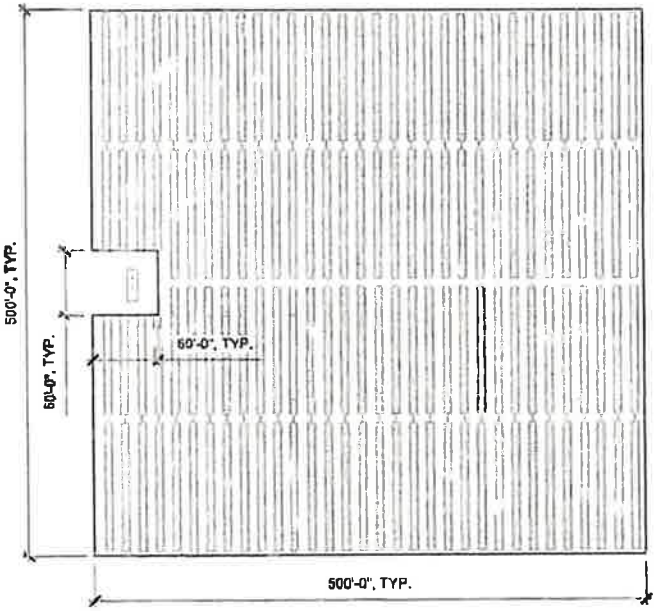
SECTION A-A



SECTION B-B

2 STANDARD SOLAR BLOCK

Scale: N.T.S.



MOUNTING STRUCTURE (BASE AREA)

INVERTER STATION

AVANTUS

1801 Century Park East, Suite 700
Los Angeles, CA 90067

90FI 8me LLC Big Rock 2 Solar and Storage Project

INVERTER AND STANDARD BLOCK DETAILS, TYP.

EX-4

AS NOTED

AVANTUS 1901 Century Park East, Suite 700 Los Angeles, CA 90067	90FI 8me LLC Big Rock 2 Solar and Storage Project SUBSTATION DETAILS, TYP.	EX-5 AS NOTED

PC ORIGINAL PKG

EEC ORIGINAL PKG

Attachment D2

Figures 1 and 2 (Full Resolution)

PC ORIGINAL PKG

EEC ORIGINAL PKG

AVANTUS 1801 Century Park East, Suite 700 Los Angeles, CA 90067	90FI Bme LLC Big Rock 2 Solar and Storage Project MONOPOL DETAILS, TYP.	EX-6 AS NOTED

PRELIMINARY
NOT FOR
CONSTRUCTION

2 66 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

1 230 kV MONOPOLE STRUCTURE, TYP.
Scale: N.T.S

PC ORIGINAL PKG
EEC ORIGINAL PKG

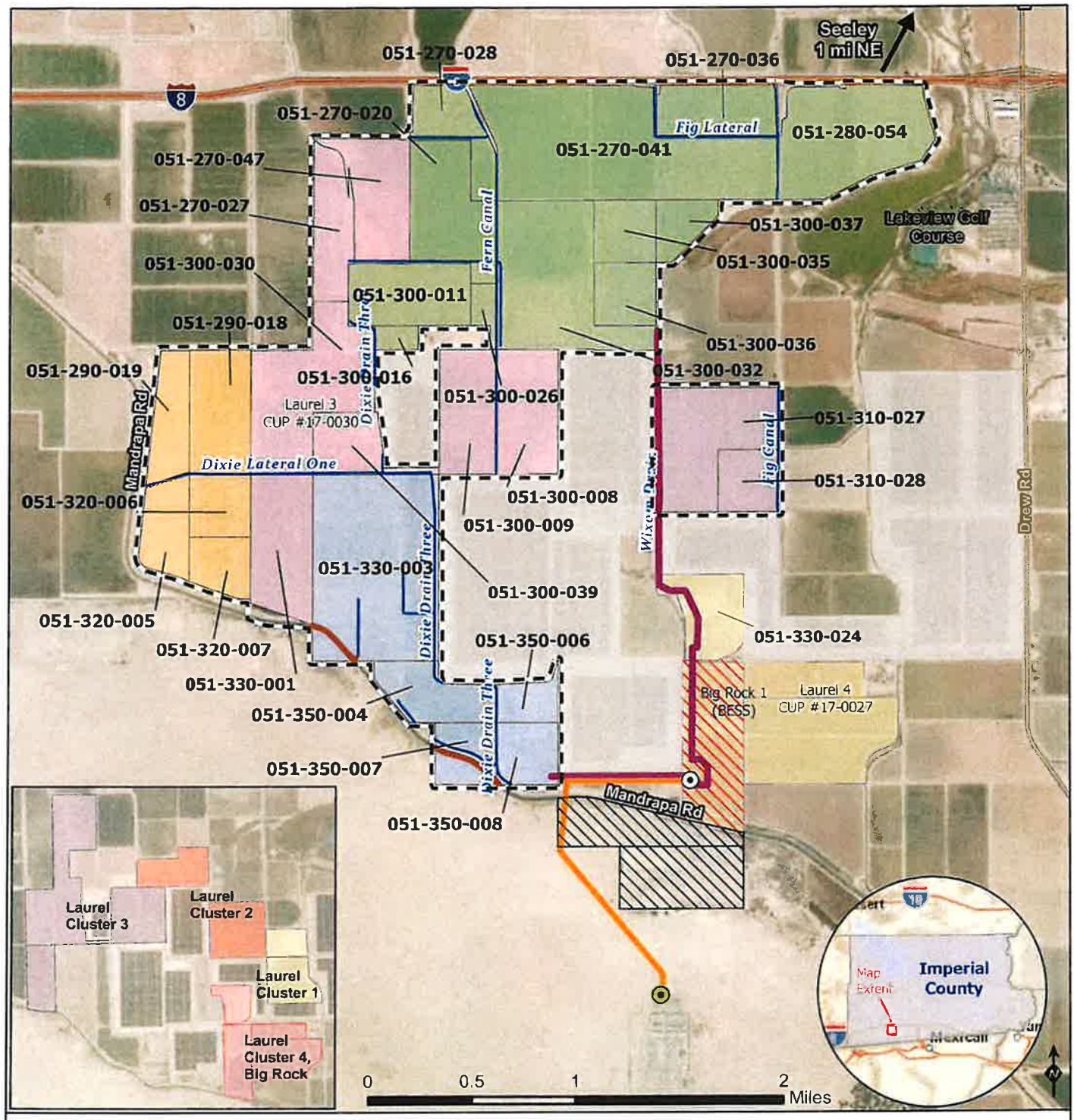


Figure 1
Location Map

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Canal Ditch
- Artifical Path (Canal)
- Big Rock 1 BESS Parcel
- Campo Verde Solar Project

- Lands To Be Developed Concurrently
- Big Rock 2 North Cluster (CUP #1); including Laurel 2 North CUP area (to be re-entitled) - 1030ac
- Big Rock 2 South Cluster (CUP #2) - 410ac
- Big Rock 2 East Cluster (CUP #3); was Laurel 2 South CUP area (to be re-entitled) - 160ac
- Big Rock 2 West Cluster (CUP #4) - 249ac
- Consolidated Edison Development Westside Canal Battery Storage Project
- Laurel 3 Cluster CUP #17-0030 (with 10-year DA) - 587ac
- Laurel 4 Cluster CUP #17-0027 (under 10-year DA)

PC ORIGINAL PKG

EEC ORIGINAL PKG

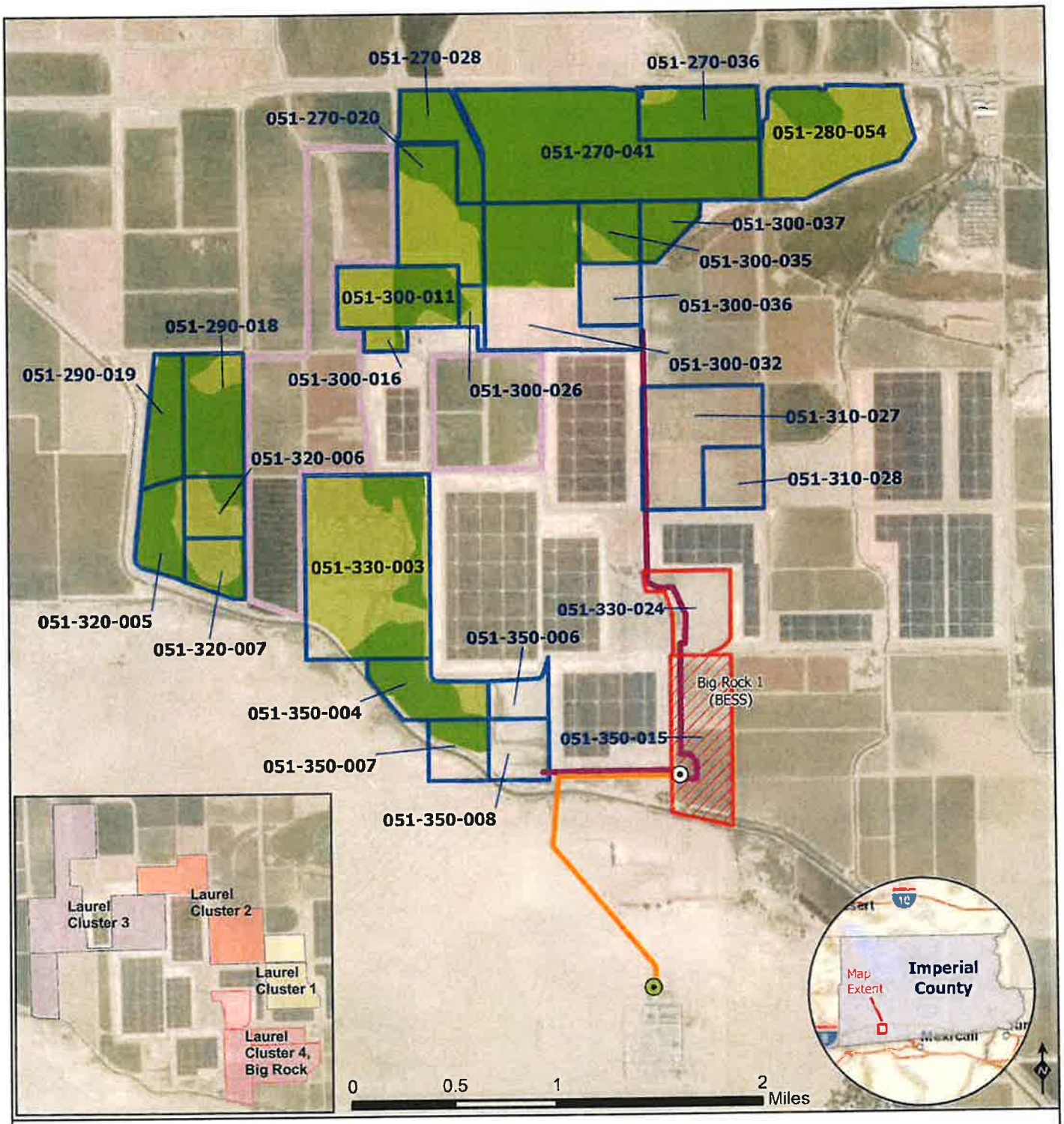


Figure 2
Farmland Designations

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Prime Farmland (929 ac)
- Farmland of Statewide Importance (517 ac)
- Big Rock 2 and Laurel 2 Parcels
- Big Rock 1 BESS Parcel

PC ORIGINAL PKG

EEC ORIGINAL PKG

COMMENT LETTERS

PC ORIGINAL PKG

EEC ORIGINAL PKG

Office of the Agricultural Commissioner
Sealer of Weights and Measures
852 Broadway, El Centro CA 92243

Jolene Dessert
Commissioner / Sealer

Rachel Garewal
Asst. Commissioner / Sealer

September 13, 2024

Rocio Yee, Planner I
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

Re: 90FI 8me LLC BESS Project

Dear Ms. Yee:

Our department received and reviewed the documents pertaining to GPA24-0002, submitted by applicant 90FI 8me LLC. The applicant is proposing to develop, design and construct a PV solar energy generation and BESS facility on approximately 2,436 acres near 1520 Jessup Rd., El Centro, CA 92243.

The California Department of Conservation has classified some of the farm ground for this project to be either Prime Farmland or Farmland of Statewide importance. Mitigation for loss of this farmland is needed as the removal of any farmland out of production of a 30 year period (average life span of solar projects) will have a negative effect on direct, indirect and induced employment, income, sales and tax revenue.

Any plans to mitigate farmland taken out of production through the use of easements must ensure that the mitigating farm ground is in farmable condition. If the mitigation plan involves a Parceling Project, any parcels to remain in farming must align with existing infrastructure such as canals, delivery ditches, and surface & subsurface drainage systems. Mitigating farmland must be maintained in farmable condition, including repairs as needed to the infrastructure.

This project will require an ongoing Pest Management Plan to mitigate negative impacts to surrounding farmland from pests such as insects, vertebrates, weeds, and plant pathogens. The plan must be submitted to our office for approval prior to the issuance of a grading or building permit, whichever occurs first). Attached are the requirements that your company will need to meet.

Projects constructed on farm ground will also require a reclamation plan that would return the land to its pre-constructed agricultural condition at the conclusion or abandonment of the project. The reclamation plan needs to include a written description of the crop history of each field, water delivery system, drainage system, physical infrastructure, the parties responsible for conducting reclamation, and a detailed description of the recycling, and/or disposal of all solar arrays, inverters, transformers and other structures on each of the sites. The plan must be submitted to our office for approval prior to the issuance of a grading permit.

If you or the applicant has any questions, please contact me at 442-265-1500.

Respectfully,

Jolene Dessert

PC ORIGINAL PKG

EEC ORIGINAL PKG

Office of the Agricultural Commissioner
Sealer of Weights and Measures
852 Broadway, El Centro CA 92243

Jolene Dessert
Commissioner / Sealer

Rachel Garewal
Asst. Commissioner / Sealer

Pest Management Plan Requirements for Solar Projects

The Project Shall:

- Maintain a Pest Management Plan until reclamation is complete.
- Develop and implement a Pest Management Plan that will reduce negative impacts to surrounding (not necessarily adjacent) farmland.
- Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business.
- "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, biocontrol, cultural control, or chemical treatments.
- Use of "permanent" soil sterilants to control weeds or other pests is prohibited due to the fact that this would interfere with reclamation.
- Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture (CDFA) and the United States Department of Agriculture (USDA). Request a sample be taken by the Agricultural Commissioner's Office for a suspected invasive species. Eradication of exotic pests will be performed under the direction of the Agricultural Commissioner's Office and/or CDFA.
- Obey all pesticide use laws, regulations, and permit conditions.
- Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties.
- Ensure that all project employees that handle pest control issues are appropriately trained and certified, that all required records are maintained and available for inspection, and that all permits and other required legal documents are current.
- Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides, include the chemical(s) used, EPA Registration numbers, application rates, etc. A pesticide use report may be used for this.
- Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request.

Reimbursement:

The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.

PC ORIGINAL PKG

EEC ORIGINAL PKG

Office of the Agricultural Commissioner
Sealer of Weights and Measures
852 Broadway, El Centro CA 92243

Jolene Dessert
Commissioner / Sealer

Rachel Garewal
Asst. Commissioner / Sealer

January 29, 2024

Dear Pest Management Teams and others to whom it may concern:

Imperial County's "Pest Management Plan Requirements for Solar Projects" outlines critical activities needed for solar projects to comply with the Agricultural Commissioner's Office. Part of those requirements include developing and implementing a pest management plan that will reduce negative impacts to surrounding (not necessarily adjacent) farmland.

Recently, it has come to our attention that overgrowth of various weeds has been found on and around development access roads, especially along the dirt and unpaved roads within and surrounding many solar projects. As per the Pest Management Plan requirements developed prior to installation and for continued maintenance, solar projects are required to monitor for all pests, including weeds. Furthermore, the Pest Management Plan also requires promptly controlling or eradicating pests when found during your routine surveys, or when notified by the Agricultural Commissioner's Office that a pest problem is present at the project site.

Please make sure to actively monitor all project areas, including perimeters and surrounding access roads, for weeds and ensure weed abatement practices are set in place for timely removal. The assistance of a licensed pest control advisor is encouraged and recommended, and note that all pesticide use and treatments must be performed by a qualified applicator or a licensed pest control business.

For suspected exotic or invasive pest species as defined by the California Department of Food Agriculture (CDFA) and the United States Department of Agriculture (USDA), contact our office for additional information.

Thank you for your prompt attention to this matter.

Sincerely,

Margo Sanchez
Deputy Agricultural Commissioner

(442) 265-1500 | fax (760) 353-9420 | agcom@co.imperial.ca.us | agcom.imperialcounty.org

PC ORIGINAL PKG

EEC ORIGINAL PKG

COUNTY EXECUTIVE OFFICE

Miguel Figueroa
County Executive Officer
miguelfigueroa@co.imperial.ca.us
www.co.imperial.ca.us

County Administration Center
940 Main Street, Suite 208
El Centro, CA 92243
Tel: 442-265-1001
Fax: 442-265-1010

September 5, 2024

RECEIVED
SEP 05 2024
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

TO: Rocio Yee, Planning and Development Services Department

FROM: Rosa Lopez, Executive Office

SUBJECT: Request for Comments – Big Rock 2 Cluster Solar and Storage Project / APN 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-300-011, 051-300-016, 051-300-026, 051-300-035, 051-300-037, 051-300-032, 051-330-003, 051-350-004, 051-350-006, 051-350-007, 051-350-008, 051-310-027, 051-310-028, 051-290-018, 051-290-019, 051-320-005, 051-320-006, 051-320-007

The County of Imperial Executive Office is responding to a request for comments: Big Rock 2 Cluster Solar and Storage Project / APN 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-300-011, 051-300-016, 051-300-026, 051-300-035, 051-300-037, 051-300-032, 051-330-003, 051-350-004, 051-350-006, 051-350-007, 051-350-008, 051-310-027, 051-310-028, 051-290-018, 051-290-019, 051-320-005, 051-320-006, 051-320-007. The Executive Office would like to inform the developer of the conditions and responsibilities of the applicant seeking Conditional Use Permits (CUPs). The conditions commence prior to the approval of an initial grading permit, subsequently continue throughout the permitting process and are individually placed on all CUPs. This includes, but not limited to:

- Sales Tax Guarantee. The permittee is required to have Construction Site Permits reflecting the individual project site address, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account numbers and sub-permits for its contractor and subcontractors (if any) related to the jobsites. Permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained, prior to the issuance of any grading permits.
- Construction/Material Budgets: The permittee will provide the County Executive Office a construction materials budget for each project: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.
- At developers cost, the County Executive Office shall hire a third-party consultant to produce individual project Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) for all CUPs, prior to the project being placed on Planning Commission meeting.
- Public Service Agreement. The developer shall enter into individual project Public Service Agreements with the County of Imperial for all CUPs.

Should there be any concerns and/or questions, do not hesitate to contact me.

PC ORIGINAL PKG
EEC ORIGINAL PKG

IMPERIAL COUNTY SHERIFF'S OFFICE
FRED MIRAMONTES
SHERIFF-CORONER-MARSHAL

Chief Deputy Ryan Kelley
328 Applestill Road
El Centro, Ca. 92243
(442) 265-2003
rkelley@icso.org

RECEIVED
SEP 09 2024
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

September 9, 2024

Imperial County Planning & Development Services
801 Main Street
El Centro, Ca. 92243
(442) 265-1736

Planning & Development Services,

The proposed project sites are located within the Imperial County Sheriff's Office jurisdiction. The projects are at various locations to include Big Rock 2 Cluster North, Big Rock 2 Cluster South, Big Rock 2 Cluster East and Big Rock Cluster West. The sites are approximately 11 miles from the Imperial County Sheriff's Office and southwest of the Township of Seeley, California.

The applicant is proposing to construct a utility-scale [up to 500-megawatt (MW) in capacity] photovoltaic ("PV") solar energy generation and Battery Energy Storage System (BESS) facility (also up to 500-MW in capacity). The proposed project will be utilizing approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres.

The Imperial County Sheriff's Office provides services to similar projects where calls for service can vary from burglaries, vandalisms, thefts and trespassing. Calls can result in arrests of offenders for felony property crimes. Some investigations require extensive follow up from our criminal investigations division and our scientific investigations unit. The Imperial County Sheriff's Office is committed to facilities operating in our area of responsibility and will deploy every resource available to assist in the apprehension and prosecution of those responsible for these crimes.

The Imperial County Sheriff's Office requests that the below conditions be incorporated onto Conditional Use Permits #24-0006, #24-0007, #24-0008 and #24-0009. This request is in consideration of the potential hazards to the Imperial County Sheriff's Office employees associated with responding to calls for service originating at these facilities:

PC ORIGINAL PKG
EEC ORIGINAL PKG

1. The Imperial County Sheriff's Office request that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.
2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.
3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project sites and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project sites to allow for 24/7, three hundred and sixty degree remote viewing capabilities and recording of activity on the lots. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

The Sheriff's Office feels that this project would create a significant impact and there are safety concerns for Sheriff's Office personnel and members of our community if a natural or manmade disaster were to occur that resulted in damage or destruction to the facility.

As first responders to emergency situations, the Sheriff's Office would deploy our resources from the El Centro Station in the event of a threat to public safety. If there is an increase for calls for service as a result of this project and the Sheriff's Office maintains its current personnel allocations, funding and equipment, service levels may drop below acceptable levels or industry standards for the residents of the County.

The Imperial County Sheriff's Office is available to discuss our concerns with the advancement of CUP #24-0006, #24-0007, #24-0008 and #24-0009. If you have any questions, please contact the Imperial County Sheriff's Office at (442)265-2002.

PC ORIGINAL PKG EEC ORIGINAL PKG

Rocio Yee

From: Ray Teran <rteran@viejas-nsn.gov>
Sent: Tuesday, September 3, 2024 1:16 PM
To: Aimee Trujillo; Ernest Pingleton
Cc: Jim Minnick; Michael Abraham; Diana Robinson; Rocio Yee; Jenyssa Gutierrez; Kamika Mitchell; Kayla Henderson; Marsha Torres; Olivia Lopez; Valerie Grijalva
Subject: RE: SB-18 Big Rock 2 Solar & Storage Project

Categories: BIG ROCK 2

CAUTION: This email originated outside our organization; please use caution.

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the APE-DE of the proposed project.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

If you wish to utilize Viejas cultural monitors (Viejas rate is $54.15/hr. plus GSA mileage), please call Ernest Pingleton at 619-655-0410 or email, epingleton@viejas-nsn.gov, for contracting and scheduling. Thank you.

If a Tribe, having a closer proximity to the Project, requests to perform cultural monitoring, Viejas will differ to them.

From: Aimee Trujillo <aimeetrujillo@co.imperial.ca.us>
Sent: Tuesday, September 3, 2024 11:55 AM
To: Ray Teran <rteran@viejas-nsn.gov>; Ernest Pingleton <epingleton@viejas-nsn.gov>
Cc: Jim Minnick <JimMinnick@co.imperial.ca.us>; Michael Abraham <MichaelAbraham@co.imperial.ca.us>; Diana Robinson <DianaRobinson@co.imperial.ca.us>; Rocio Yee <rocioyee@co.imperial.ca.us>; Aimee Trujillo <aimeetrujillo@co.imperial.ca.us>; Jenyssa Gutierrez <jenyssagutierrez@co.imperial.ca.us>; Kamika Mitchell <kamikamitchell@co.imperial.ca.us>; Kayla Henderson <kaylahenderson@co.imperial.ca.us>; Marsha Torres <marshatorres@co.imperial.ca.us>; Olivia Lopez <olivialopez@co.imperial.ca.us>; Valerie Grijalva <valeriegrijalva@co.imperial.ca.us>
Subject: SB-18 Big Rock 2 Solar & Storage Project

Good morning,

Please see attached SB18 letter for **Big Rock 2 (GPA24-0002 ZC24-0003 CUP24-0006 -0009 V24-0002-0005)**

Should you have any questions, feel free to contact Rocio Yee at 442-265-1736 or via email at rocioyee@co.imperial.ca.us

Thank you,

Aimee Trujillo
Office Technician

PC ORIGINAL PKG EEC ORIGINAL PKG

ATTACHMENT "R"

FINAL EIR

PC ORIGINAL PKG

Final Environmental Impact Report

Big Rock 2 Cluster Solar and Storage Project

SCH No. 2024090063

Imperial County, California

August 2025

Prepared for

County of Imperial

801 Main Street

El Centro, CA 92243

Prepared by

HDR

591 Camino de la Reina

Suite 300

San Diego, CA 92108

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Table of Contents

0.1 Introduction to Final EIR 0.1-1
0.2 Errata to the Draft EIR 0.2-1
0.3 Responses to Comment Letters Received on the Draft EIR 0.3-1
0.4 Mitigation Monitoring and Reporting Program 0.4-1
Executive Summary ES-1
Project Overview ES-1
Purpose of an EIR ES-2
Eliminated from Further Review in Notice of Preparation ES-2
Summary of Significant Impacts and Mitigation Measures that Reduce or Avoid the Significant Impacts ES-2
Areas of Controversy and Issues to be Resolved ES-3
Project Alternatives ES-35
Environmentally Superior Alternative ES-36
1 Introduction 1-1
1.1 Overview of the Proposed Project 1-1
1.1.1 Agency Roles and Responsibilities 1-1
1.2 Relationship to Statutes, Regulations, and Other Plans 1-6
1.2.1 County of Imperial General Plan and Land Use Ordinance 1-6
1.2.2 Renewables Portfolio Standard Program 1-6
1.2.3 Senate Bill 32 1-6
1.2.4 Title 17 California Code of Regulations, Subchapter 10, Article 2, Sections 95100 et seq. 1-7
1.2.5 Federal Clean Air Act 1-7
1.2.6 Imperial County Air Pollution Control District 1-7
1.2.7 Federal Clean Water Act (33 United States Code Section 1251-1387) 1-7
1.2.8 Federal Clean Water Act and California Porter-Cologne Water Quality Control Act 1-8
1.2.9 Federal Endangered Species Act 1-8
1.2.10 National Historic Preservation Act 1-8
1.2.11 California Endangered Species Act 1-8
1.2.12 California Lake and Streambed Program (Fish and Game Code Section 1602) 1-9
1.3 Purpose of an EIR 1-9
1.4 EIR Process 1-9
1.4.1 Availability of Reports 1-9
1.4.2 Public Participation Opportunities/Comments and Coordination 1-9
1.4.3 Environmental Topics Addressed 1-10
1.4.4 Areas of Controversy and Issues to be Resolved 1-11
1.4.5 Document Organization 1-11
2 Project Description 2-1
2.1 Project Location 2-1
2.1.1 Big Rock 2 Cluster North: CUP #24-0006 2-3
2.1.2 Big Rock 2 Cluster South: CUP #24-0007 2-4
2.1.3 Big Rock 2 Cluster East/Laurel Cluster South: CUP #24-0008 2-4
2.1.4 Big Rock 2 Cluster West: CUP #24-0009 2-4
2.2 Project Objectives 2-13

PC ORIGINAL PKG

2.3 Project Characteristics 2-14
2.3.1 Photovoltaic Panels/Solar Arrays 2-14
2.3.2 Collection, Inverter and Transformer Systems 2.3-21
2.3.3 Battery Energy Storage System 2.3-23
2.3.4 Substation(s) 2.3-23
2.3.5 Transmission Line and Interconnection 2-31
2.3.6 Operations and Maintenance (O&M) Building 2-33
2.3.7 Roadway and IID Crossings 2-35
2.3.8 Water Usage 2-35
2.3.9 Water Storage 2-35
2.3.10 Site Security and Fencing 2-36
2.3.11 Lighting 2-36
2.3.12 Site Access 2-36
2.3.13 Fire Protection/Fire Safety Systems 2-36
2.4 Project Construction 2-37
2.4.1 Laydown Areas 2-38
2.4.2 Workforce 2-38
2.5 Project Operation 2-38
2.5.1 Workforce 2-39
2.6 Utility Grid Upgrades 2-39
2.7 Decommissioning and Reclamation 2-39
2.8 Required Project Approvals 2-40
2.8.1 Imperial County 2-40
2.8.2 Imperial Irrigation District 2-44
2.8.3 Discretionary Actions and Approvals by Other Agencies 2-44
3 Environmental Analysis, Impacts, and Mitigation 3.1-1
3.1 Introduction to Environmental Analysis 3.1-1
3.1.1 Organization of Issue Areas 3.1-1
3.1.2 Format of the Impact Analysis 3.1-1
3.2 Aesthetics 3.2-1
3.2.1 Existing Conditions 3.2-1
3.2.2 Regulatory Setting 3.2-11
3.2.3 Impacts and Mitigation Measures 3.2-13
3.2.4 Decommissioning/Restoration and Residual Impacts 3.2-28
3.3 Agricultural Resources 3.3-1
3.3.1 Existing Conditions 3.3-1
3.3.2 Regulatory Setting 3.3-3
3.3.3 Impacts and Mitigation Measures 3.3-9
3.3.4 Decommissioning/Restoration and Residual Impacts 3.3-17
3.4 Air Quality 3.4-1
3.4.1 Existing Conditions 3.4-1
3.4.2 Regulatory Setting 3.4-5
3.4.3 Impacts and Mitigation Measures 3.4-13
3.4.4 Decommissioning/Restoration and Residual Impacts 3.4-27
3.5 Biological Resources 3.5-1
3.5.1 Existing Conditions 3.5-1
3.5.2 Regulatory Setting 3.5-14
3.5.3 Impacts and Mitigation Measures 3.5-17
3.5.4 Decommissioning/Restoration and Residual Impacts 3.5-29
3.6 Cultural Resources 3.6-1
3.6.1 Existing Conditions 3.6-1

PC ORIGINAL PKG

3.6.2 Regulatory Setting 3.6-7
3.6.3 Impacts and Mitigation Measures 3.6-11
3.6.4 Decommissioning/Restoration and Residual Impacts 3.6-15
3.7 Geology and Soils 3.7-1
3.7.1 Existing Conditions 3.7-1
3.7.2 Regulatory Setting 3.7-6
3.7.3 Impacts and Mitigation Measures 3.7-8
3.7.4 Decommissioning/Restoration and Residual Impacts 3.7-17
3.8 Greenhouse Gas Emissions 3.8-1
3.8.1 Existing Conditions 3.8-1
3.8.2 Regulatory Setting 3.8-4
3.8.3 Impacts and Mitigation Measures 3.8-11
3.8.4 Decommissioning/Restoration and Residual Impacts 3.8-15
3.9 Hazards and Hazardous Materials 3.9-1
3.9.1 Existing Conditions 3.9-1
3.9.2 Regulatory Setting 3.9-4
3.9.3 Impacts and Mitigation Measures 3.9-8
3.9.4 Decommissioning/Restoration and Residual Impacts 3.9-14
3.10 Hydrology/Water Quality 3.10-1
3.10.1 Existing Conditions 3.10-1
3.10.2 Regulatory Setting 3.10-7
3.10.3 Impacts and Mitigation Measures 3.10-14
3.10.4 Decommissioning/Restoration and Residual Impacts 3.10-23
3.11 Land Use/Planning 3.11-1
3.11.1 Existing Conditions 3.11-1
3.11.2 Regulatory Setting 3.11-9
3.11.3 Impacts and Mitigation Measures 3.11-19
3.11.4 Decommissioning/Restoration and Residual Impacts 3.11-24
3.12 Noise and Vibration 3.12-1
3.12.1 Existing Conditions 3.12-1
3.12.2 Regulatory Setting 3.12-5
3.12.3 Impacts and Mitigation Measures 3.12-11
3.12.4 Decommissioning/Restoration and Residual Impacts 3.12-16
3.13 Public Services 3.13-1
3.13.1 Existing Conditions 3.13-1
3.13.2 Regulatory Setting 3.13-2
3.13.3 Impacts and Mitigation Measures 3.13-4
3.13.4 Decommissioning/Restoration and Residual Impacts 3.13-6
3.14 Transportation 3.14-1
3.14.1 Existing Conditions 3.14-2
3.14.2 Regulatory Setting 3.14-5
3.14.3 Impacts and Mitigation Measures 3.14-6
3.14.4 Decommissioning/Restoration and Residual Impacts 3.14-12
3.15 Tribal Cultural Resources 3.15-1
3.15.1 Existing Conditions 3.15-1
3.15.2 Regulatory Setting 3.15-1
3.15.3 Impacts and Mitigation Measures 3.15-3
3.15.4 Decommissioning/Restoration and Residual Impacts 3.15-5
3.16 Utilities and Service Systems 3.16-1
3.16.1 Existing Conditions 3.16-1
3.16.2 Regulatory Setting 3.16-5
3.16.3 Impacts and Mitigation Measures 3.16-8

PC ORIGINAL PKG

3.16.4 Decommissioning/Restoration and Residual Impacts 3.16-11

4 Analysis of Long-Term Effects 4-1
4.1 Growth-Inducing Impacts 4-1
4.2 Significant Irreversible Environmental Changes 4-2
4.3 Significant and Unmitigable Impacts 4-3

5 Cumulative Impacts 5-1
5.1 Geographic Scope and Timeframe of the Cumulative Effects Analysis 5-2
5.2 Projects Contributing to Potential Cumulative Impacts 5-2
5.3 Cumulative Impact Analysis 5-2
5.3.1 Aesthetics 5-7
5.3.2 Agricultural Resources 5-7
5.3.3 Air Quality 5-9
5.3.4 Biological Resources 5-11
5.3.5 Cultural Resources 5-13
5.3.6 Geology and Soils 5-13
5.3.7 Greenhouse Gas Emissions 5-14
5.3.8 Hazards and Hazardous Materials 5-14
5.3.9 Hydrology and Water Quality 5-15
5.3.10 Land Use Planning 5-15
5.3.11 Noise and Vibration 5-16
5.3.12 Public Services 5-17
5.3.13 Transportation 5-17
5.3.14 Tribal Cultural Resources 5-17
5.3.15 Utilities/Service Systems 5-18

6 Effects Found Not Significant 6-1
6.1 Agriculture and Forestry Resources 6-1
6.1.1 Forestry Resources 6-1
6.2 Energy 6-1
6.2.1 Energy Consumption 6-1
6.2.2 Compliance with State or Local Plans for Renewable Energy or Energy Efficiency 6-4
6.3 Mineral Resources 6-4
6.4 Population and Housing 6-4
6.5 Public Services 6-4
6.6 Recreation 6-5
6.7 Utilities and Service Systems 6-5
6.8 Wildfire 6-6

7 Alternatives 7-1
7.1 Introduction 7-1
7.2 Criteria for Alternatives Analysis 7-1
7.3 Alternatives Considered but Rejected 7-2
7.3.1 Alternative Site 7-2
7.4 Alternative 1: No Project/No Development Alternative 7-3
7.4.1 Environmental Impact of Alternative 1: No Project/No Development Alternative 7-3
7.5 Alternative 2: Reduced Project Site 7-8
7.6 Environmentally Superior Alternative 7-12

PC ORIGINAL PKG

8 References 8-1
9 EIR Preparers and Persons and Organizations Contacted 9-1
9.1 EIR Preparers 9-1
9.2 Persons and Organizations Contacted 9-2

PC ORIGINAL PKG

Tables

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures ES-5
Table ES-2. Comparison of Alternative Impacts to Proposed Project ES-37
Table 1-1. Big Rock 2 Cluster North Existing and Proposed Zoning 1-2
Table 1-2. Big Rock 2 Cluster Existing and Proposed Zoning 1-3
Table 1-3. Big Rock 2 Cluster East Existing and Proposed Zoning 1-3
Table 1-4. Big Rock 2 Cluster West Existing and Proposed Zoning 1-3
Table 2-1. Big Rock 2 Cluster North Assessor Parcel Numbers, Zoning, and Acreage 2-3
Table 2-2. Big Rock 2 Cluster South Assessor Parcel Numbers, Zoning, and Acreage 2-4
Table 2-3. Big Rock 2 Cluster East/Laurel Cluster South Assessor Parcel Numbers, Zoning, and Acreage 2-4
Table 2-4. Big Rock 2 Cluster West Assessor Parcel Numbers, Zoning, and Acreage 2-5
Table 2-5. Proposed Megawatt Output 2-14
Table 2-6. Big Rock 2 Cluster North Existing and Proposed Zoning 2-41
Table 2-7. Big Rock Cluster South Existing and Proposed Zoning 2-41
Table 2-8. Big Rock 2 Cluster East/Laurel Cluster South Existing and Proposed Zoning 2-42
Table 2-9. Big Rock 2 Cluster West Existing and Proposed Zoning 2-42
Table 3.2-1. Consistency with Applicable General Plan Conservation and Open Space Element Policies 3.2-13
Table 3.3-1. Farmland Mapping and Monitoring Program Designations within the Project Site 3.3-3
Table 3.3-2. Imperial County Change in Agricultural Land Use Summary (2016 to 2018) 3.3-5
Table 3.3-3. Project Consistency with Applicable General Plan Agricultural Policies 3.3-7
Table 3.3-4. California LESA Model Scoring Thresholds 3.3-10
Table 3.3-5. Final Land Evaluation Site Assessment Score Sheet Summary 3.3-11
Table 3.4-1. Criteria Air Pollutants - Summary of Common Sources and Effects 3.4-2
Table 3.4-2. Attainment Status of Criteria Pollutants in the Imperial County Portion of the Salton Sea Air Basin 3.4-3
Table 3.4-3. Ambient Air Quality Monitoring Data 3.4-4
Table 3.4-4. National and California Ambient Air Quality Standards 3.4-7
Table 3.4-5. Project Consistency with Applicable Plan Policies 3.4-13
Table 3.4-6. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities 3.4-14
Table 3.4-7. Imperial County Air Pollution Control District Significance Thresholds for Operation 3.4-15
Table 3.4-8. Unmitigated Daily Construction Maximum Criteria Air Pollutant Emissions 3.4-20
Table 3.4-9. Mitigated Daily Construction Maximum Criteria Air Pollutant Emissions 3.4-21
Table 3.5-1. Vegetation Communities or Land Cover Types within the Project Site 3.5-1
Table 3.5-2. Aquatic Resource Summary for the Project Site 3.5-14
Table 3.5-3. Project Consistency with General Plan Goals and Policies 3.5-17
Table 3.6-1. Previously Recorded Cultural Resources Within 1-mile of the Project Site 3.6-3
Table 3.6-2. Newly Recorded Built Environment Resources Within the API 3.6-6
Table 3.6-3. Project Consistency with Applicable General Plan Goals and Objectives 3.6-10
Table 3.7-1. Project Consistency with Applicable General Plan Policies 3.7-7
Table 3.8-1. State of California Greenhouse Gas Emissions 3.8-3
Table 3.8-2. Unmitigated Annual Construction GHG Emissions ($MTCO_2e$ per year) 3.8-13
Table 3.10-1. Beneficial Uses of Receiving Waters 3.10-9
Table 3.10-2. Project Consistency with Applicable General Plan Policies 3.10-10

PC ORIGINAL PKG

Tables (cont'd)

Table 3.10-3. Source Control Best Management Practices....3.10-16
Table 3.11-1. Project Assessor Parcel Numbers, Acreages, and Zoning....3.11-2
Table 3.11-2. Project Consistency with Applicable General Plan Policies....3.11-11
Table 3.11-3. Project Consistency with "Adjacent to the Existing RE Overlay Zone" Criteria....3.11-22
Table 3.12-1. California Department of Transportation Vibration Damage Potential Threshold Criteria....3.12-5
Table 3.12-2. Land Use Compatibility for Community Noise Environments....3.123-6
Table 3.12-3. Consistency with Applicable General Plan Noise Policies....3.12-9
Table 3.12-4. Imperial County Property Line Noise Limits....3.12-11
Table 3.12-5. Typical Noise Levels for Construction Equipment....3.12-13
Table 3.12-6. Caltrans Guideline Vibration Annoyance Potential....3.12-15
Table 3.13-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element....3.13-2
Table 3.14-1. Existing Weekday Peak Hour Intersection LOS....3.14-3
Table 3.14-2. Existing ADT Roadway Segment Level of Service....3.14-4
Table 3.14-3. Project Construction Trip Generation Summary....3.14-8
Table 3.16-1. Ten-Year Historic Delivery (AFY), 2015-2024....3.16-3
Table 3.16-2. County of Imperial General Plan Consistency Analysis – Water Service....3.16-8
Table 3.16-3. Project Operational Water Uses (AFY)....3.16-9
Table 5-1. Projects Considered in the Cumulative Impact Analysis....5-5
Table 5-2. Percentage Conversion of Farmland by Proposed Project....5-8
Table 6-1. Proposed Construction Energy Consumption – Diesel....6-2
Table 6-2. Proposed Construction Energy Consumption – Gasoline....6-2
Table 7-1. Comparison of Alternative Impacts to Proposed Project....7-13

PC ORIGINAL PKG

Figures

Figure 2-1. Regional Location 2-2
Figure 2-2. Project Site 2-7
Figure 2-3. Zoning Designations 2-11
Figure 2-4. Proposed Site Plan 2-16
Figure 2-5. Representative Examples of Photovoltaic Panel/Mounting Configuration 2-17
Figure 2-6. Standard Solar Block and Typical Inverter Plan and Profile 2-19
Figure 2-7. Representative Examples of Typical Inverter Stations 2.3-22
Figure 2-8. Conceptual BESS Layout 2.3-25
Figure 2-9. Representative Examples of Typical Energy Storage Systems 2-27
Figure 2-10. Substation Details - Typical 2-29
Figure 2-11. Representative Example of Typical Substation Design 2-31
Figure 2-12. Monopole Details - Typical 2-32
Figure 2-13. Conceptual Operations and Maintenance Building Area Plan 2-34
Figure 3.2-1. Key Observation Points 3.2-4
Figure 3.2-2. Existing Key Observation Point 1 ..... 3.2-5
Figure 3.2-3. Existing Key Observation Point 2 ..... 3.2-6
Figure 3.2-4. Existing Key Observation Point 3 ..... 3.2-7
Figure 3.2-5. Existing Key Observation Point 4 ..... 3.2-8
Figure 3.2-6. Existing Key Observation Point 5 ..... 3.2-9
Figure 3.2-7. Existing Key Observation Point 6 ..... 3.2-10
Figure 3.2-8. Key Observation Point 1 – Proposed Condition 3.2-19
Figure 3.2-9. Key Observation Point 2 – Proposed Condition 3.2-19
Figure 3.2-10. Key Observation Point 3 – Proposed Condition 3.2-20
Figure 3.2-11. Key Observation Point 4 – Proposed Condition 3.2-20
Figure 3.2-12.Key Observation Point 5 – Proposed Condition 3.2-21
Figure 3.2-13. Key Observation Point 6 – Proposed Condition 3.2-21
Figure 3.2-14.Glare Study Area and Potential Receptors 3.2-25
Figure 3.3-1. Important Farmlands 3.3-2
Figure 3.5-1. Vegetation Communities and Land Cover Types within the Project Site (Map 1 of 2) 3.5-3
Figure 3.5-2. Vegetation Communities and Land Cover Types within the Project Site (Map 2 of 2) 3.5-4
Figure 3.5-3. Bat Survey Results 3.5-11
Figure 3.10-1. Watershed 3.10-3
Figure 3.11-1. General Plan Land Use Designations 3.11-5
Figure 3.11-2. Zoning Designations 3.11-7
Figure 5-1. Cumulative Projects 5-3
Figure 7-1. Alternative 2 – Reduced Project Site 7-9

PC ORIGINAL PKG

Appendices

Appendix A Initial Study and Notice of Preparation and Comment Letters
Appendix B Visual Resources Report
Appendix C Land Evalutation and Site Assessment Model
Appendix D Air Quality and Greenhouse Gas Emissions Technical Report
Appendix E1 Biological ResourcesTechnical Report
Appendix E2 Aquatic Resources Delineation Report
Appendix F1 Cultural Resources Inventory
Appendix F2 Built Environment Inventory and Evaluation Report
Appendix G Preliminary Geological and Geotechnical Assessment Report
Appendix H Phase I Environmental Site Assessment
Appendix I Transportation Impact Analysis
Appendix J Water Supply Assessment

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

0.1 Introduction to Final EIR

This Final Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.), and CEQA Guidelines (California Administrative Code Section 15000 et seq.).

According to CEQA Guidelines §15132, the Final EIR shall consist of the following:

a. The Draft EIR or a revision of the Draft;

b. Comments and recommendations received on the Draft EIR, either verbatim or in summary;

c. A list of persons, organizations, and public agencies commenting on the Draft EIR;

d. The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

e. Any other information added by the Lead Agency.

In accordance with these requirements, the Big Rock 2 Cluster Solar and Storage Project Final EIR is comprised of the following:

- Draft EIR, May 2025 (SCH No. 2024090063); and
- This Final EIR document, dated August 2025, that incorporates the information required by §15132.

Format of the Final EIR

Section 0.1 Introduction

This section describes CEQA requirements and content of this Final EIR.

Section 0.2 Errata to the Draft EIR

This section of the Final Environmental Impact Report (EIR) identifies the location of, or contains revisions to, information included in the Draft EIR dated May 2025, based upon additional or revised information required to prepare a response to a specific comment. The information added to the EIR does not meet the requirements for recirculation pursuant to Section 15088.5 of the State *California Environmental Quality Act (CEQA) Guidelines*.

Section 0.3 Responses to Comment Letters Received on the Draft EIR

This section provides copies of the comment letters received and individual responses to written comments. In accordance with Public Resources Code 21092.5, copies of the written proposed responses to public agencies will be forwarded to the agencies at least 10 days prior to certifying the EIR. The responses conform to CEQA Guideline 15088, providing "… good faith, reasoned analysis in response."

PC ORIGINAL PKG

Section 0.4 Mitigation Monitoring and Reporting Program

This section includes the Mitigation Monitoring and Reporting Program (MMRP) which identifies the mitigation measures, timing, and responsibility for implementation of the measures.

PC ORIGINAL PKG

0.2 Errata to the Draft EIR

A. Introduction

This section of the Final Environmental Impact Report (EIR) identifies the location of, or contains revisions to, information included in the Draft EIR dated May 2025, based upon additional or revised information required to prepare a response to a specific comment. The information added to the EIR does not meet the requirements for recirculation pursuant to Section 15088.5 of the State *California Environmental Quality Act (CEQA) Guidelines*.

The new information simply clarifies information presented in the Draft EIR. Text that has been added to the document appears in an underline format. Text that has been deleted appears with strikeout.

This Errata, in conjunction with the Final EIR, will be used by the County of Imperial in its evaluation and analysis of the proposed project and in the adoption of any findings required by law. Substantial evidence in support of findings may be found anywhere in the administrative record. (14CCR 15091(b)(e). The County of Imperial is designated the Lead Agency for California Environmental Quality Act (CEQA) compliance.

B. Corrections and Additions

Executive Summary

Page ES-1

- Big Rock 2 Cluster South: CUP 24-0007

Page ES-7

AG-1b **Site Reclamation Plan.** In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning.

Pages ES-14 through ES-15

AQ-2 **Construction Equipment.** ~~All off-road construction diesel engines not registered under California Air Resources Board's (CARB's) Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression-Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_x and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig engines shall meet a minimum of Tier 4 Interim California Emission Standards.~~ A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower

and ~~expected/~~actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of ~~all~~ construction phases. ~~This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant.~~ During the operational life of the project, ~~T~~the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-6 **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule ~~301~~ 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Pages ES-16 through ES-17

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table: ~~of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0 250 meters (825 feet) during the breeding season (February through August~~)

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

PC ORIGINAL PKG

These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint.

Pages ES-21

BIO-4 **Speed Limit.** During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.

Perimeter Fencing. Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.

Pages ES-25

The training shall be provided to all ~~construction supervisors, forepersons, and operators of ground disturbing equipment~~ personnel.

Pages ES-26

CUL-2 **Archaeological Monitoring.** Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principal archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the ~~to~~ monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

Pages ES-33

HYD-2 **Incorporate Post-Construction Runoff BMPs into Project Drainage Plan.** The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The

Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.

Chapter 1.0 Introduction

Page 1-1

The project applicant, 90FI 8me, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and ~~five~~ four variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility.

***

- Big Rock 2 Cluster South: CUP 24-0007

Page 1-4

4. **Variance (#24-0002 through 24-0005~~6~~).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.

Page 1-9

This Draft EIR ~~has been~~ was distributed to various federal, state, regional, local agencies and interested parties for a 50-day public review period in accordance with Section 15087 of the CEQA Guidelines. This Draft EIR and documents incorporated by reference ~~are~~ were available for public review at the County of Imperial Planning and Development Services Department, 801 Main Street, El Centro, California 92243. Documents ~~may be~~ were available for review~~ed~~ during regular business hours.

Comments received during the public review period of the Draft EIR ~~will be~~ were reviewed and responded to in ~~the~~ this Final EIR. ~~The~~ This Final EIR will ~~then~~ be reviewed by the Imperial County Planning Commission and Board of Supervisors as a part of the procedure to adopt the EIR. Additional information on this process may be obtained by contacting the County of Imperial Planning and Development Services Department at (442) 265-1736.

Pages 1-11 and 1-12

The structure of the ~~Draft~~ Final EIR is identified below. The ~~Draft~~ Final EIR is organized into ~~10~~ 14 chapters, including the Executive Summary.

- **Chapter 0.1 Introduction and Summary** describes the CEQA requirements and content of the Final EIR.
- **Chapter 0.2 Responses to Comment Letters Received on the Draft EIR** provides copies of the comment letters received and individual responses to written comments.

PC ORIGINAL PKG

- **Chapter 0.3 Errata to the Draft EIR** identifies the location of, or contains revisions to, information included in the Draft EIR dated May 2025, based upon additional or revised information required to prepare a response to a specific comment.
- **Chapter 0.4 Mitigation Monitoring and Reporting Program** identifies the mitigation measures, timing, and responsibility for implementation of the measures.

Chapter 2.0 Project Description

Page 2-1

The project applicant, 90FI 8me, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and ~~five~~ four variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility.

Page 2-13

- ~~Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.~~

Page 2-14

Table 2-1. Proposed Big Rock 2 Cluster Solar and Storage Project Megawatt (MW) Output

CUP ~~Site~~	Acreage	Proposed PV MW	Proposed BESS MW	Maximum BESS MW
CUP #1: Big Rock 2 Cluster North: CUP 24-0006	1,030	100	40	140
CUP #2: Big Rock 2 Cluster South: CUP 24-0007	410	120	240	240
CUP #3: Big Rock Cluster East: CUP 24-0008	160	60	20	60
CUP #4: Big Rock 2 Cluster West: CUP 24-0009	249	80	20	60
Note: It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production needs, by allowing one CUP area to utilize "BESS allowances and/or credits" of another; however, in total, the overall Project buildout would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS. ~~Total PV system is 500 MW. Table depicts Big Rock 2 PV MW only. Does not include those portions of the project that have been previously approved associated with the Laurel Cluster Project and will be re-entitled/renewed (140 MW).~~				

Page 2-43

4. **Variance (#24-0002 through 24-0005~~6~~).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone)

PC ORIGINAL PKG

and §90509.07 (within A-3 zone) “nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ...” The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.

Page 2-44

The following IID approvals, ~~although not discretionary approvals,~~ include, but are not limited to:

Section 3.3 Agricultural Resources

Pages 3.3-8 through 3.3-9

County of Imperial Guidelines for the Public Benefit Program for use with Solar Power Plants in Imperial County

Imperial County has created the Public Benefit Program to address the impacts the utility-scale solar power plants have on the community, local economy, agriculture industry, employment, infrastructure economic development and quality of life. On June 26, 2012 per Minute Order #8, Imperial County Board of Supervisors approved the Renewable Energy Public Benefit Agreement:

- (2) restricted funds were created (Agriculture Benefit and Community Benefit)
- (2) advisory committees were created (Agriculture and Community Advisory)
- Seek applications and finalize recommendations

The 2012 adoption of the Public Benefit Program included provisions for the periodic review of the guidelines.

Pursuant to these provisions, the County reviewed and amended the guidelines in May 9, 2023.

Prior to the most recent amendment in 2023, the Public Benefit Program had been in operation for a decade. While the program had been successful in providing benefits to both the agricultural and community projects, the County had also experienced an increase in the development of utility-scale solar power plants. In amending the guidelines, the County acknowledged that the increase in development had not brought the traditional increase in revenue to the County and that over the same time period, the costs of providing public services had continued to climb. These include Sheriff, Public Health and Fire Department, and should benefit the residents in the County.

As such the Public Benefit Program was amended by the Imperial County Board of Supervisors which provides specific guidelines for annual payments for Public Service Benefits, Agriculture Benefits, Community Benefits, and Sales Tax Revenues.

The Public Service Benefits are intended to help offset costs of Imperial County Public Services including law enforcement, fire protection, public works, and other services provided by the County of Imperial. The Agricultural Benefits are intended to offset the temporary negative effects of agricultural conversion to the community, local economy, and agriculture industry. The Community Benefit is intended for infrastructure improvement, job creation, economic development, enhancement to the quality of life in neighboring communities, and also to off-set the costs of Imperial County Public Services.

PC ORIGINAL PKG

Page 3.3-13

AG-1b **Site Reclamation Plan.** In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning.

Section 3.4 Air Quality

Page 3.4-11

Regulation VIII – Fugitive Dust Rules. Regulation VIII sets forth rules regarding the control of fugitive dust, including fugitive dust from construction activities. The regulation requires implementation of fugitive dust control measures to reduce emissions from earthmoving, unpaved roads, handling of bulk materials, and control of track-out/carry-out dust from ~~active~~ any construction site~~s~~ and other earthmoving activities.

Page 3.4-12

Southern California Association of Governments – ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental

Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~

Page 3.4-18

Mitigation Measure(s)

No mitigation measures are required. With implementation of mitigation measures required under Impact 3.4-2, the construction and operation of the project would not exceed ICAPCD's regional mass daily emissions thresholds.

Page 3.4-21

NOTE: An increase in carbon monoxide emissions as compared to the unmitigated emissions depicted in Table 3.4-8 is attributable to water application/water truck use.

Pages 3.4-23 through 3.4-24

AQ-2 **Construction Equipment.** ~~All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig engines shall meet a minimum of Tier 4 Interim California Emission Standards.~~ A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and ~~expected/~~actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted ~~periodically~~ annually to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction

shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of ~~all~~ construction ~~phases~~. ~~This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant.~~ During the operational life of the project, ~~T~~the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-6 **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule ~~301~~ 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Section 3.5 Biological Resources

Page 3.5-6

Wildlife Species

Based on the results of the literature review and database searches, ~~23~~ 25 special-status wildlife species were identified as occurring within the region.

***

The following ~~eight~~ nine non-listed special-status species were determined to have a low potential to occur, nest, or roost within the project site: Colorado Desert fringe-toed lizard (*Uma notata*), mountain plover (*Charadrius montanus*), California black rail, Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), LeConte's thrasher (*Toxostoma lecontei*), Colorado Valley woodrat (*Neotoma albigula venusta*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), ~~and~~ American badger (*Taxidea taxus*), and desert kit fox (*Vulpes macrotis arsipus*).

Page 3.5-8

Most detections were concentrated along roads within the northern and southern areas of the project site. Additionally, burrowing owls were observed during raptor surveys in April 2025.

***

During June 2023 burrowing owl surveys and April 2025 raptor surveys, one northern harrier was observed foraging in agricultural fields ~~at~~ on the project site.

***

No active nests were identified during the April 2025 raptor and nesting bird survey.

Roosting Bats

A bat roost assessment and emergence surveys were conducted within the project site on May 19, 2025 to determine if suitable roosting habitat for bats exists on the project site.

Page 3.5-9

The bat roost assessment determined that the project site is primarily comprised of active agriculture fields and provides little to no suitable roosting habitat for bats. The project site lacks manmade structures that may provide suitable roosting sites for species that are known to roost in crevices of buildings and structures including big free-tailed bat (*Nyctinomops macrotis*) and crevice-roosting bats like western mastiff bat that inhabit rocky canyons and cliff faces.

As such, the pocketed free-tailed bat has a low potential to forage within the project site, but is not expected to roost due to the lack of primary habitat present on the site. Finally, western yellow bat was determined to have a low potential to occur within the project site due to a small area of desert riparian located along the southern border of the project site. During the roost assessment of the site, partially skirted palm trees were observed within the southern portion of the project site, which may provide suitable roosting sites for western yellow bats. Therefore, the emergence surveys were conducted at two locations within the project site where partially skirted palm trees were observed. The emergence surveys were negative, as no bats were detected visually nor acoustically emerging from either of the survey locations. The locations of the emergence surveys and photos of the survey sites are included in Appendix E of this EIR.

The echolocation data collected from the five detectors deployed along the boundaries of the project site determined that eight different bat species are present within the project site. None of the special-status bat species listed above were acoustically detected on the project site. However, as shown in Figure 3.5-3, one special-status species, pallid bat, was detected at two locations (BR-03 and BR-05) in limited numbers (less than 10 recordings).

After three nights of passive acoustic detection, the survey resulted in a total of 834 bat passes attributed to eight different bat species that are all common species except for pallid bat, which despite its SSC listing status is relatively common in desert environments. Canyon bat (*Parastrellus hesperus*) was the most abundant species detected on site which is a very common species, as well as Mexican free-tailed bat (*Tadarida brasiliensis*), which is the most common bat species in the western United States. The remaining bat species detected were in relatively low numbers (i.e. less than 50 passes), indicating only a few individuals of each species are actively foraging within the project site. The total number of bat passes recorded indicates bats are likely foraging throughout the project site but are not roosting on site, as active roosts can record several thousands of bat passes per night for a single species. The acoustic survey data corresponds to the roost assessment and emergence survey results of negative active roosts on site.

Page 3.5-11

Addition of Figure 3.5-3. Bat Survey Results.

Page 3.5-12

There is no USFWS designated critical habitat for federally listed wildlife species within 5 miles of the project site (Appendix E of this EIR).

Page 3.5-18

As described above, burrowing owls and one northern harrier were observed on the project site during biological surveys conducted in 2023, ~~and~~ 2024, and 2025. Potential impacts are described below.

PC ORIGINAL PKG

Page 3.5-20

The following non-listed special-status bat species were determined to have a low potential to forage on the project site: western yellow bat, western mastiff bat, and pocketed free-tailed bat. In addition, pallid bat and Townsend's big-eared bat have yearlong ranges that encompass the project site. Pallid bat was detected in limited numbers on the Project site, suggesting the species forages on site but is not roosting.

Page 3.5-18

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

Location	**Time of Year**	**Level of Disturbance**		
		Low	**Med**	**High**
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

~~of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0 to 250 meters (825 feet) during the breeding season (February through August)~~ These buffers shall be maintained between active burrows and construction activities.

Page 3.5-19

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint.

Page 3.5-21

Perimeter Fencing. Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.

Section 3.6 Cultural Resources

Page 3.6-14

Mitigation Measure CUL-1

The training shall be provided to all ~~construction supervisors, forepersons, and operators of ground disturbing equipment~~ personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

Mitigation Measure CUL-2

PC ORIGINAL PKG

Archaeological Monitoring. Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the ~~to~~ monitoring of all ground-disturbing activities associated with project construction.

Section 3.7 Geology and Soils

Page 3.7-7

The IID has a formal Local Hazard Mitigation Plan ~~Disaster Readiness Standard Operating Procedure~~ for the Water Department, Power Department, and the entire District staff for response to earthquakes and other emergencies.

Section 3.8 Greenhouse Gas Emissions

Page 3.8-4

- **Snowpack:** By 2050, the average water supply from snowpack is projected to decline to 2/3 from historical levels. If emissions reductions do not occur, water from snowpack could fall to less than 1/3 of historical levels by 2100. It should be noted that the sole source of water for IID (and the project) is the Colorado River, which is not affected by the California snowpack.

Pages 3.8-8 and 3.8-9

CARB adopted the latest update to the Climate Change Scoping Plan in December 2022. ~~in December 2017~~. The *2022 Scoping for Achieving Carbon Neutrality* (2022 Scoping Plan) (CARB 2022) was adopted by CARB in November 2022. The 2022 Scoping Plan lays out a path for California to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

~~The 2017 Scoping Plan is guided by the EO B-30-15 GHG reduction target of 40 percent below 1990 levels by 2030. The 2017 Scoping Plan builds upon the framework established by the initial Scoping Plan and the First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources (CARB 2017).~~

~~The majority of the Scoping Plan's GHG reduction strategies are directed at the two sectors with the largest GHG emissions contributions: transportation and electricity generation. The GHG reduction strategies for these sectors involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities. The reduction strategies employed by CARB are designed to reduce emissions from existing sources as well as future sources.~~

Page 3.8-10

The SCAG is the designated MPO for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~In September 2020, SCAG adopted the 2020-2045 RTP/SCS. The RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the NAAQS as set forth by the federal CAA (see Section 3.4, Air Quality, of this EIR). The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality~~

Section 3.10 Hydrology/Water Quality

Pages 3.10-13 through 3.10-14

Several policy documents govern IID operations and are summarized below:

- The ~~Definite Plan, now referred to as the Systems Conservation Plan~~ IID's Water Conservation Plan, which defines the rigorous agricultural water conservation practices being implemented by growers and IID to meet the Quantification Settlement Agreement commitments

- The Equitable Distribution Plan, which defines how IID will apportion its available water supply in order to prevent overruns and stay within the 3.1 million acre-feet annual consumptive use cap ~~on the~~ of Colorado River water ~~rights~~
- Existing IID standards and guidelines for evaluation of new development and define IID's role as a responsible agency and wholesaler of water
- IID's Interim Water Supply Policy for Non-Agricultural Water Users to provide a mechanism to address new water supply requests for proposed projects being developed within the IID water service area

Integrated Water Resources Management Plan

In relation to the project, IID maintains regulation over the drainage of water into their drains~~, including the design requirements of stormwater retention basins. IID requires that retention basins be sized to handle an entire rainfall event in case the IID system is at capacity.~~ Additionally, IID requires that outlets to IID facilities be no larger than 12 inches in diameter and must contain a backflow prevention device (IID 2012).

Page 3.10-18

HYD-2 **Incorporate Post-Construction Runoff BMPs into Project Drainage Plan.** The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.

Page 3.10-21

The project site would remain largely ~~im~~pervious over the operational life of the project. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious.

Section 3.11 Land Use/Planning

Pages 3.11-9 through 3.11-10

Southern California Association of Governments – ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens~~

~~of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

The following SCAG policies are applicable to the project:

- Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts.
- Encourage the conservation and viability of agricultural lands to protect the regional and local food supply and ensure the sustainability of local agriculture as a vital part of the region's economy.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~
- ~~Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats~~

Page 3.11-20

SCAG ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~

As noted above, the ~~2020-2045~~ RTP/SCS ~~(Connect SoCal) (SCAG 2020)~~ identifies two goals which include reducing GHG emissions to improve air quality ~~(Goal 5)~~, and to ~~promote~~ encourage conservation and viability of ~~natural and~~ agricultural lands ~~(Goal 10)~~.

The ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~ identifies strategies to support the goal of reducing regional GHG and improve air quality, such as~~.~~ ~~Strategies include~~ coordinating with local, regional, state and federal partners to meet federal and state ambient air-quality standards and improve public health ~~leveraging technological innovations including incorporating solar energy, hydrogen fuel cell power storage, and power generation~~. The proposed project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Overall, the proposed project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities. Once in operation, the proposed project would contribute to SCAG's goal in reducing GHG emissions and improving air quality.

The ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~ also discusses the ~~decline~~ loss of agricultural land as an issue for the economy. As discussed in Section 3.3, Agricultural Resources, the project site is designated as Farmland of Statewide Importance and Prime Farmland.

The project would temporarily convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. However, as a condition of project approval (CUP condition), the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to its pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. Therefore, no impacts due to a conflict with the ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~ would occur.

Section 3.12 Noise and Vibration

Page 3.12-14

The noise associated with the O&M building or energy storage area do not represent a significant noise source as their operation does not involve the use of external equipment that is considered a significant noise source. ~~and would involve less intensive activities and operation of equipment as compared to existing agricultural operations in the area.~~ Therefore, impacts would be less than significant.

Section 3.16 Utilities and Service Systems

Pages 3.16-6 through 3.16-7

California Water Code

Water Code Sections 10656 and 10657 restrict state funding for agencies that fail to submit their urban water management plan to the DWR. Water Code Section 10631, directs that contents of the urban water management plans include further information on future water supply projects and programs and groundwater supplies.

In addition, Water Code Section 10910 describes the WSA that must be undertaken for projects referred under PRC Section 21151.9, including an analysis of groundwater supplies. Water agencies are given 90 days from the start of consultation in which to provide a WSA to the CEQA lead agency.

PC ORIGINAL PKG

Water Code Section 10910 also specifies the circumstances under which a project for which a WSA was once prepared would be required to obtain another assessment.

~~*Imperial Integrated Regional Water Management Plan*~~

~~The Imperial Integrated Regional Water Management Plan (Imperial IRWMP) serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the City of Imperial City Council and the IID Board of Directors approved it in December 2012. Approval by these 3 stakeholders met the basic requirement of California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.~~

~~Importantly, the Imperial IRWMP provides an assessment of the primary water resource challenges facing the Imperial Valley and their impact on long-term water supplies. As described in Chapter 5 of the Imperial IRWMP, the primary water resource challenge facing the Imperial Valley is long-term availability of Colorado River water. Multiple investigators have evaluated the impacts of climate change on flows in the Colorado River and estimate that Colorado River flows may decrease by 1 million acre-feet (MAF) to 3 MAF annually. This anticipated reduction in flows, "should not impact IID's Priority 3(a) quantified amount of 3.1 MAFY of Colorado River water as reported at Imperial Dam" (IID 2012).~~

~~While IID does not anticipate that reduced Colorado River water flows will impact their appropriation of Colorado River water, the Imperial IRWMP notes that future water demands may exceed the 3.1 MAF annual Priority 3(a) quantified appropriative right. To address this, the Imperial IRWMP identifies a suite of projects that aim to:~~

- ~~Expand the size of the Imperial Valley water supply portfolio~~
- ~~Prevent or recapture water leaving the region~~
- ~~Reapportion water within the water supply portfolio (IID 2012)~~

~~Implementation of the Imperial IRWMP provides an opportunity to actively prioritize projects, evaluate the need to implement these projects, and identify funding opportunities.~~

Equitable Distribution Plan

IID's Equitable Distribution Plan distributes ~~apportions~~ available water supply by Water Users Category (Agricultural Water Users, Potable Water Users, and Industrial/Commercial Water Users) and then apportions the water within each Water Users Category among the water users within that category. The Equitable Distribution Plan provides ~~a framework~~ for: (1) receiving Colorado River water apportionment, (2) aggregating apportionment between farm units, and (3) transferring ~~agricultural~~ water between water ~~agricultural~~ users within the same Water Users Category~~, and (4) receiving IID On-Farm Efficiency Conservation Program or Fallowing Program benefits~~. Implementation of this program is ~~a~~ critical for IID's management of its water supply within its annual entitlement and a component of IID's implementation of on-farm conservation and temporary fallowing programs.

PC ORIGINAL PKG

Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects

The IID Interim Water Supply Policy (IWSP) provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP identifies ~~designates~~ up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects.

Page 3.16-10

In the event that IID determines that the proposed project is subject to the ~~utilize~~ IWSP for Non-Agricultural Projects ~~water~~, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID has adopted an IWSP for non-agricultural projects under ~~from~~ which water supplies can be contracted to serve new non-agricultural developments within IID's water service area. The IWSP identifies ~~sets aside~~ 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, to serve new non-agricultural projects.

Chapter 7.0 Alternatives

Page 7-2

- ~~Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.~~

C. California Environmental Quality Act Requirements and Findings Supporting Decision Not to Recirculate

CEQA Section 15088.5(e) requires that an EIR which has been made available for public review, but not yet certified, be recirculated whenever significant new information has been added to the EIR. The entire document need not be recirculated, if revisions are limited to specific portions of the document. The recirculated portions or document must be sent to responsible and trustee agencies for consultation and fresh public notice must be given in the manner provided for a draft EIR. However, new information is not presumed to be significant simply because it is new. Indeed, pursuant to State CEQA Guidelines Section 15088.5:

> New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect . . . that the project's proponents have declined to implement. State CEQA Guidelines, § 15088.5(a):
>
> In order to be "significant," the new information requiring recirculation includes, for example, a disclosure showing that:
>
> > (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
> >
> > (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

PC ORIGINAL PKG

> (3) A feasible project alternative or mitigation measure considerably different from other previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponent decline to adopt it.
>
> (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (State CEQA Guidelines, §15088.5(a)(1)-(4); *Laurel Heights II*, 6 Cal.4th at 1120.)

It is common, and in most cases necessary, to amplify and elaborate on the analysis of an EIR. CEQA anticipates this and such amplification does not constitute significant new "information" unless it triggers one of the four categories described in State CEQA Guidelines Section 15088.5(a). State CEQA Guidelines Section 15088.5(b) provides that "recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

The County finds that recirculation of the Draft EIR is not required: (1) because recirculation is not required where the new information added to the EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR (CEQA Guidelines, § 15088.5, subd. (b); and (2) because no “substantial adverse” impact would result from any of the revisions to the portions of the Draft EIR that were not recirculated (CEQA Guidelines, § 15088.5, subd. (e)). Therefore, the County has concluded that recirculation of the Draft EIR is not required.

This page is intentionally blank.

PC ORIGINAL PKG

0.3 Responses to Comment Letters Received on the Draft EIR

This section contains responses to all comment letters received on the Draft EIR. The initial public comment period for the Draft EIR was from May 1, 2025 to June 20, 2025. Four letters were received during the comment period. A copy of each letter with bracketed comment numbers on the right margin is followed by the response for each comment as indexed in the letter. The comment letters are listed in Table 0.3-1.

Table 0.3-1. Big Rock 2 Cluster Solar and Storage Project Draft EIR Comment Letters

Letter	Commenter	Date
A	Imperial County Air Pollution Control District	June 17, 2025
B	Defenders of Wildlife	June 20, 2025
C	Center for Energy Efficiency and Renewable Technologies (CEERT)	June 20, 2025
D	Imperial Irrigation District	June 20, 2025

PC ORIGINAL PKG

LETTER A

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

RECEIVED
JUN 17 2025
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

June 17, 2025

Jim Minnick
Planning & Development Services Director
801 Main Street
El Centro, CA 92243

SUBJECT: Big Rock 2 Cluster Solar & Storage Project: Notice of Availability Draft Environmental Impact Report

Dear Mr. Minnick:

The Imperial County Air Pollution Control District (Air District) appreciates the opportunity to review and comment on the Big Rock 2 Cluster Solar & Storage Project ("Project") Notice of Availability for a Draft Environmental Impact Report (DEIR). The proposed project involves the construction and operation and decommissioning of a 500 MW solar generating and 500 MW storage facility on 1,849 acres roughly eight miles southwest of El Centro. A-1

The Air District reviewed the DEIR (April 2025) for consistency and accurate interpretation with District rules and regulations and with its Imperial County California Environmental Quality Act (CEQA) Handbook ("Handbook"). Consistency includes the ability to replicate the California Emissions Estimator Modeler (CalEEMod). Despite a best faith effort using the inputs provided in Appendix B CalEEMod output, the Air District was unable to confirm the "less than significant" finding. Without additional information from the applicant, the Air District finds the modeling to be inconsistent with "less than significant" thresholds. However, the Air District believes that once the following comments regarding the proposed mitigation measures are incorporated as requirements into the CUPs, the project can be adequately mitigated to "less than significant." A-2

With regards to the proposed mitigation measures (AQ-1 through AQ-6), the Air District identified several significant inconsistencies. While most mitigation measures adhered to those found in section 7 of the Handbook, the first Discretionary Measure listed in **MM AQ-1** as written conflicts with and is a violation of Rule 801—Construction and Earthmoving Activities. This rule explicitly applies to **any** construction and other earthmoving activities, not just areas where active grading A-3

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

and vehicle movement occurs. In this instance, the use of non-approved language creates a situation that would violate District rules and regulations and therefore is not a mitigation measure as written.

A-3 con't

Requested changes for MM AQ-1:

- Existing language be changed to the exact wording found in section 7.1 of the Handbook for Discretionary Mitigation Measures for Fugitive PM_{10} Control (a).

Similarly, a portion of the existing language in **MM AQ-2** needs to be deleted to prevent confusion with the California Air Resources Board's (CARB) regulations regarding portable equipment and off-road equipment. As written, the mitigation measure calls out "engines" and calls out CARB's Statewide Portable Equipment Registration Program and the California Code of Regulations (CCR) Title 13, Division 3, Chapter 9, Article 4, Off-Road Compression-Ignition Engines and Equipment, specifically § 2423, which is the Exhaust Emission Standards and Test Procedures that applies to heavy-duty off-road compression-ignition engines. Heavy-duty off-road compression-ignition engines are defined by 13 CCR § 2421 (32) as those engines 175 horsepower and greater. The proposed mitigation measure has no enforceability since it does not define "engines" and it confines the review to those off-road "engines" as 175 horsepower and greater. This is not consistent with the Air District's CEQA Handbook and policies.

A-4

In order to simplify the applicability of the California Code to the construction portion of this project, the Air District is identifying two programs. The first is CARB's Statewide Portable Equipment Registration Program (PERP) codified as 13 CCR § 2450 *et seq*, and the In-Use Off-Road Diesel-Fueled Fleets Regulation, codified as 13 CCR § 2449, *et seq*. "Portable" is defined, 13 CCR § 2452 (dd), as equipment designed and capable of being carried or moved from one location to another. As to the construction equipment, 13 CCR § 2449 applies to all self-propelled off-road diesel vehicles 25 horsepower or greater. Any person, business, or government agency operating in California must be registered using CARB's DOORS portal to verify compliance status.

Requested changes for MM AQ-2:

- All language prior to the section discussing submittal of construction equipment list must be deleted as it is unenforceable as written.
- As for equipment list submittals, "expected" should be deleted to clarify that only actual hours of use are to be reported.
- The following language must be added following discussion of equipment list submittals: "If the NOx analysis is found to exceed the threshold of significance for construction

activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5."

A-4 cont'd

Revised language to **MM AQ-3** is necessary so that the proposed mitigation measure does not conflict with current rules and regulations and is a true mitigation.

Requested changs for MM AQ-3:

- The use of "monthly" needs to be removed. Per Rule 801(F.1.b.3) water or chemical stabilization should be applied as directed by the product manufacturer as necessary to limit Visible Dust Emissions (VDE) to 20% opacity and to meet the conditions of a Stabilized Unpaved Road. The proposed condition currently specifies that the application is for all unpaved roads associated with construction before commencement of all construction phases. For this to be enforceable and a mitigation beyond current regulations, the language should include, at a minimum, the submittal of a schedule at the time the applicant applies for a building permit, whereby the unpaved roads associated with project will be identified and subsequently have chemical stabilization applied prior to any earth moving activity. This would fall under the pre-activity phase of the project.

A-5

- The second part of non-enforceability of MM AQ-3 is the proposed application of chemical stabilization between the panels and other non-used areas. If this is meant to be part of the operational phase, then it should be separated as an operational portion to be included in the Operational Dust Control Plan.

Requested changes for MM AQ-6:

- Rule "301" needs to be changed to Rule 310.

Finally, there are two statements on which the Air District is asking for clarification. Page 2.3-21 states, "...this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage." Page 2.3-23 states, "it may be necessary to augment the batteries at regular intervals during project operations to restore the BESS facility to full capacity due to the life cycle of the battery units." These statements lead to the following questions. Is the main power source of the BESS solely from the solar facility or the transmission line? If the BESS is being augmented with power from the transmission line, please describe if the connection will be behind the meter? Similarly, is the main power source of the ancillary equipment pertaining to the BESS from the batteries, the solar facility or the transmission

A-6

PC ORIGINAL PKG

line? Finally, if the determination is made that a generator is needed for power generation then the applicant is required to contact the Air District for further discussion on this matter. A-6 con'td

Requested changes

- The Air District is **formally requesting** that the project proponent incorporate the above changes. Regardless of whether the changes to the unenforceable mitigation measures are made or not made to the DEIR, the Air District is **requesting that the conditions in the Conditional Use Permits** (CUP 24-0006, CUP 24-007, CUP 24-008, CUP 24-009) as identified in the Executive Summary section of the DEIR reflect **all the aforementioned corrections.** A-7

- With the corrections to the proposed measures as CUP conditions, the Air District could conclude that the project is consistent with the "less than significant" finding.

If the applicant wishes a formal discussion with Air District staff, we can be reached at (442) 265-1800. District rules and regulations can be accessed at https://apcd.imperialcounty.org. A-8

Respectfully,
Curtis Blondell
Curtis Blondell
APC Environmental Coordinator II

Monica N Soucier
APC Division Manager

Imperial County Air Pollution Control District

June 17, 2025

A-1 This is an introductory comment and does not raise an issue regarding the adequacy of the EIR, as such, no further response is necessary.

A-2 As indicated in EIR Section 3.4 Air Quality, air quality impacts associated with construction and operation of the project will be less than significant with the implementation of proposed Mitigation Measures AQ-1 through AQ-6. The County acknowledges that the mitigation measure refinements, as proposed by the ICAPCD in comments A-3 through A-5 will be incorporated into the Mitigation Monitoring and Reporting Program (MMRP) for the project. The County also acknowledges ICAPCDs concurrence with the EIR's conclusion that potential construction and operational air quality impacts associated with the project will be less than significant with proposed mitigation measure refinements. Please also refer to responses to comments A-3 through A-7.

A-3 Mitigation Measure AQ-1 in the Draft EIR is consistent with the exact wording provided in Section 7.1 of the Handbook for Discretionary Mitigation Measures for Fugitive PM10 Control (a). As stated on EIR page 3.4-12, "Compliance with Regulation VIII is mandatory for all construction sites, regardless of size; however, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the Air District is required 10 days prior to the commencement of any construction activity. Furthermore, any use of engine(s) and/or generator(s) of 50 horsepower or greater may require a permit through ICAPCD."

However, the following text in the EIR (which is not the actual text of Mitigation Measure AQ-1, rather a textual description preceding the migration measure) has been revised to clarify to readers that the Regulation VIII applies to any construction sites and other earthmoving activities as follows:

> **Regulation VIII – Fugitive Dust Rules.** Regulation VIII sets forth rules regarding the control of fugitive dust, including fugitive dust from construction activities. The regulation requires implementation of fugitive dust control measures to reduce emissions from earthmoving, unpaved roads, handling of bulk materials, and control of track-out/carry-out dust from ~~active~~ any construction site~~s~~ and other earthmoving activities. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:

A-4 Mitigation Measure AQ-2 has been revised as follows so that it maintains consistency with ICAPCD's CEQA Handbook and policies:

> **AQ-2 Construction Equipment.** ~~All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression-Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig~~

PC ORIGINAL PKG

~~engines shall meet a minimum of Tier 4 Interim California Emission Standards.~~ A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and ~~expected/~~actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted ~~periodically~~ annually to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

A-5 Mitigation Measure AQ-3 has been revised as follows to incorporate the edits recommended by ICAPCD in this comment:

AQ-3 Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of ~~all~~ construction ~~phases~~. ~~This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant.~~ During the operational life of the project, ~~T~~the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

A-6 Mitigation Measure AQ-6 has been revised as follows to incorporate the edits recommended by ICAPCD in this comment:

AQ-6 Operational Dust Control Plan. Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule ~~301~~ 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Further, in response to this comment, the main power source of the BESS will be derived primarily from the energy generated by the photovoltaic solar generation facility; however, the BESS is allowed to be augmented by the grid/transmission line if required. Should the BESS power be augmented by the grid/transmission line, the connection will be front of the meter.

The main source of power for the ancillary equipment would be the photovoltaic solar generation facility and no diesel generator is proposed as part of the proposed project.

A-7 As provided in preceding responses to comments A-3 through A-6, mitigation measure revisions as recommended by the ICAPCD in their comments have been incorporated into the Final EIR and Mitigation Monitoring and Reporting Program for the project. The County acknowledges ICPACD's comment that with the implementation of the revised mitigation

measures, air quality impacts associated with the proposed construction and operation of the project will be less than significant.

A-8 Comment noted.

PC ORIGINAL PKG

LETTER B

California Program Office
P.O. Box 401, Folsom, California ,325763
www.defenders.org

June 20, 2025

Rocio Yee
Imperial County
Planning and Development Services Department
801 Main Street
El Centro, CA 92243

Re: Draft Environmental Impact Report for the Proposed Big Rock 2 Cluster Solar and Storage Project; SCH No. 2024090063

Dear Rocio Yee,

Thank you for the opportunity to provide comments in response to the Draft Environmental Impact Report (DEIR) for the proposed Big Rock 2 Cluster Solar and Storage (Project). Defenders of Wildlife (Defenders) is dedicated to protecting all wild animals and plants in their natural communities and has nearly 2.1 million members and supporters in the United States, with more than 311,000 residing in California. B-1

Defenders strongly supports renewable energy generation. A low-carbon energy future is critical for California's economy, communities and environment. As we transition toward a clean energy future, it is imperative that we consider the near-term impacts of renewable energy development on our biodiversity, fish and wildlife habitat and natural landscapes while addressing the long-term impacts of climate change. Therefore, renewable energy projects must be planned, sited, developed and operated to avoid, minimize and mitigate adverse impacts on wildlife and lands with known high-resource values.

The proposed Project is a solar photovoltaic facility that would generate up to 500 MW of renewable energy and include up to 500 MW of battery storage. The proposed Project would be sited on approximately 1,849 acres of private land in unincorporated Imperial County. It would utilize approximately 1,569 acres of land that have not been previously entitled for solar development, as well as 280 acres of land that were previously entitled under active Conditional Use Permits (CUPs): Laurel Cluster 2 North (120 acres) and Laurel Cluster 2 South (160 acres). These two previous CUPs will be re-entitled as part of the proposed Project. The proposed Project is located south of Interstate 8, one mile southwest of the townsite of Seeley, and six miles north of the United States International Border with Mexico. The site consists primarily of agricultural fields and unpaved roads.

National Headquarters | 1130 17th Street NW | Washington, DC 20036 | 202-682-9400

Comments
We offer the following comments on the DEIR for the proposed Project. B-1 cont'd

Candidate Species
The DEIR acknowledges the burrowing owl (BUOW) as a candidate species for listing under the California Endangered Species Act (CESA). However, the Biological Resources Technical report only identifies Crotch's bumble bee (CBB) as the one candidate for listing under CESA that was observed on site. As a candidate for listing, the species is temporarily afforded the same protections as a state-listed endangered or threatened species. The Biological Resources Technical Report needs to be revised to reflect the BUOW candidate status. B-2

Night-time Construction
The DEIR fails to prohibit nighttime construction activities, which can result in significant, yet avoidable, impacts to wildlife. We recommend limiting all construction to daylight hours to minimize disturbance to sensitive species. B-3

Fencing
The Biological Resource Technical Report states that most detections of BUOW burrows were concentrated along roads within the northern and southern areas of the project site. If the roads are located along the margins of the proposed Project site, they would be in close proximity to where the security fencing, including fence posts, would be installed. The DEIR must consider the long-term impacts of the security fencing on the BUOW use of burrows. B-4

Furthermore, the DEIR states that the project area would be enclosed with a 6-foot-tall chain-link fence topped with barbed wire; however, it does not provide any requirements for wildlife-friendly fencing designs. To minimize impacts on sensitive species, the project should incorporate wildlife-friendly fencing that includes a gap to allow for the passage of wildlife and avoid hazardous materials, such as barbed wire near ground level and electrification. We recommend that the applicant consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures. B-5

Desert Kit Fox
CDFW's scoping comments on the proposed Project state that the Project occurs within the range of the desert kit fox; however, neither the DEIR nor the Biological Resources Technical Report mentions the desert kit fox. A trustee responsible agency specifically noted that desert kit fox may be an issue, and the DEIR must address it. Protocol-level surveys that adhere to US Fish and Wildlife Service San Joaquin kit fox guidelines must be performed.[1] If the species or sign is observed, then avoidance, minimization and mitigation measures B-6

[1] U.S. Fish and Wildlife Service. 2011. *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To or During Ground Disturbance.* Sacramento, California.

PC ORIGINAL PKG

must be implemented and the DEIR must be recirculated to allow for public and decision-maker review. B-6 cont'd

BUOW Avoidance

Mitigation Measure (MM) BIO-1 states that, depending on the project activity type and associated disturbance, an avoidance buffer of 50 to 100 meters will be established during the non-breeding season, and 100 to 250 meter buffers shall be established during the breeding season. This does not adhere to CDFW recommendations and would not be sufficient to prevent take of BUOW. CDFW guidelines establish up to 500-meter buffers with a medium and high level of disturbance, based on the time of year. MM BIO-1 must be revised to be consistent with the *Staff Report on Burrowing Owl Mitigation*.[2] B-7

Table 1: Burrowing Owl Avoidance Buffers

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April 1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

Passive Relocation

MM BIO-1 states passive relocation methods for BUOW are to be used to move the owls out of the impact zone. Defenders stresses that CDFW does not consider passive relocation to be a take avoidance, minimization or mitigation measure as these efforts are experimental in nature and are largely unsuccessful, as iterated in CDFW's scoping comments on the Project.[3] We recommend this acknowledgement be included in the Final EIR. B-8

BUOW Habitat Compensation

MM BIO-2 states that off-site preservation of replacement foraging habitat per pair or unpaired resident BUOW will be required to offset the loss of foraging and burrowing habitat. However, the measure does not specify the exact ratio or acreage that will be preserved in perpetuity. Without this information, the public and decision-makers are unable to adequately evaluate whether the proposed mitigation is sufficient to offset the project's impacts, as required by the California Environmental Quality Act (CEQA). CEQA Guidelines §15126.4(a)(1)(B) state that the formulation of mitigation measures shall not be deferred until some future time. The section continues to state that specific details may be developed after the project approval only when it is impractical or infeasible to include those details during the environmental review process.[4] Including the specific acreage or ratio for BUOW B-9

[2] California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation.*
[3] California Department of Fish and Wildlife. 2024. *Notice of Preparation of a Draft Environmental Impact Report Big Rock 2 Cluster Solar and Storage Project. State Clearinghouse No. 2024090063*
[4] CEQA Guidelines §15126.4(a)(1)(B).

PC ORIGINAL PKG

habitat conservation lands is neither impractical nor infeasible and therefore must be included.

Furthermore, CESA mandates that adequate mitigation be provided for candidate species to minimize and fully mitigate impacts.[5] Therefore, the DEIR must identify the specific acreage and ratio of habitat to be preserved in perpetuity to comply with CEQA and CESA requirements and to ensure meaningful public and decision-maker review.

B-9 cont'd

Avian Buffers

MM BIO-6 states that if an active avian nest is identified, a qualified biologist shall establish a no-work buffer zone around the nest based on their best professional judgment. This buffer should be developed in consultation with and approved by CDFW to ensure consistency with agency recommendations and adequate protection for nesting birds. Additionally, the parameters for determining buffer size (such as species sensitivity, nest location and surrounding disturbance levels) should be included within the DEIR. As noted earlier, CEQA requires that mitigation measures be clearly defined, specific and enforceable (§15126.4), so that the public and decision-makers can meaningfully evaluate their adequacy.[6]

B-10

Conclusion

Thank you once again for the opportunity to provide comments on the DEIR for the proposed Big Rock 2 Cluster Solar and Storage Project and for considering our comments. Defenders looks forward to reviewing the Final EIR for the Project and requests to be notified when it is available. Please feel free to contact me with any questions.

B-11

Respectfully submitted,

Sophia Markowska

Sophia Markowska
Senior California Representative
Defenders of Wildlife
Smarkowska@defenders.org

[5] California Fish & Game Code §2081(b)(2).
[6] CEQA Guidelines §15126.4(a)(1)(B).

PC ORIGINAL PKG

Defenders of Wildlife

June 20, 2025

B-1 This comment is an introductory comment and does not raise a specific issue related to the adequacy of the Draft EIR. As such, no further response is necessary.

B-2 The County acknowledges that the burrowing owl is a candidate species for listing under the California Endangered Species Act. The current candidate species listing status of the burrowing owl was identified in the Draft EIR. As stated on Draft EIR page 3.5-7, "The western burrowing owl was recently named by the CDFW as a candidate for potential listing as a protected species under the California Endangered Species Act (CESA) and is present within the project site."

In response to this comment, the Biological Resources Technical Report (EIR Appendix E) has been updated to reflect the current candidate species listing status of the burrowing owl.

B-3 As described on EIR page 2-37, heavy construction activities are expected to occur between 6:00 am and 5:00 pm, Monday through Saturday, as there is ample daylight during these hours, and these hours represent the typical work windows for workers. However, the EIR also acknowledges that additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Nighttime activities would be less intensive (i.e., would not be the typical heavy construction activity), and could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Further, implementation of Mitigation Measures BIO-1 through BIO-5 address potential direct and indirect impacts to biological resources during construction. Mitigation Measure BIO-1 requires that to avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species.

B-4 Mitigation Measure BIO-4 has been modified to address proposed project perimeter fencing as follows:

> **BIO-4 Speed Limit.** During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.
>
> **Perimeter Fencing.** Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish

and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.

B-5 Please refer to response to comment B-4.

B-6 The updated Biological Resources Report (see Final EIR Appendix E1) addresses desert kit fox, as it is considered a "fur-bearing mammal," protected from take under the California Fish and Game Commission's Mammal Hunting Regulations (Subdivision 2, Chapter 5), which effectively protects the species from hunting pressure. Desert kit fox (*Vulpes macrotis arsipus*) was determined to have a low potential to occur within the project site. While the project site occurs within the range of desert kit fox, the site is nearly entirely comprised of active agriculture, which does not provide suitable habitat for this species. However, there are two small areas in the southern portion of the project site that comprise approximately 20 acres which include creosote bush scrub and allscale scrub. These vegetation communities provide suitable habitat for desert kit fox but are not proposed to be developed with solar panels (see EIR Figure 2-4 Proposed Site Plan); therefore, this species has a low potential to occur within the project site and potential impacts to this species are less than significant.

B-7 Mitigation Measure BIO-1 has been revised to include the burrowing owl avoidance buffers consistent with the *Staff Report on Burrowing Owl Mitigation* as follows:

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

~~of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0~~ to ~~250 meters (825 feet) during the breeding season (February through August)~~ These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

PC ORIGINAL PKG

As noted in the Draft EIR (page 3.5-20), the project applicant may seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 may be superseded by the incidental take authorization permit requirements, if/as applicable.

B-8 The County acknowledges that passive relocation may not avoid take of the burrowing owl. As indicated in response to comment B-7, the project applicant may seek incidental take authorization for burrowing owl.

B-9 Because whether actual take would be determined as part of the additional burrowing owl survey requirements, specific compensatory ratios and corresponding acreages can only be determined as part of the Individual Take Permit, if such a permit is required for impacts to burrowing owl. As stated in Mitigation Measure BIO-2, the California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site.

Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-2 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

B-10 Avian buffers would be established by the qualified biologist based on professional judgement. As stated in Mitigation Measure BIO-6, if any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The exact size of the buffer will be based on the biologist's best professional judgment, the species' sensitivity to disturbance and planned work activities in the vicinity, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. These measures will ensure complete avoidance of nesting birds during construction activities.

B-11 Comment noted. Consistent with CEQA Guideline 15088(b) as it relates to public agencies, the County will also provide responses to comments submitted by Defenders of Wildlife a minimum of 10-days prior to certification of the Final EIR.

LETTER C

June 20, 2025

Rocio Yee, Planner
Imperial County Planning & Development Services Department
801 Main Street
El Centro, CA 92243
via email: rocioyee@co.imperial.ca.us

Introduction

These comments are submitted by the undersigned organizations in response to the Draft Environmental Impact Report (DEIR) for the Big Rock 2 Cluster Solar and Storage Project (SCH No. 2024090063). We recognize the urgent need to accelerate California's renewable energy deployment to meet climate goals. However, the Big Rock 2 Cluster Solar and Storage Project—proposed across over 2,500 acres of farmland in Imperial County—raises serious and significant environmental, health, equity, and accountability concerns that have not been fully resolved in the Draft Environmental Impact Report (DEIR). C-1

Imperial County is already one of the most environmentally overburdened regions in the state, with high asthma rates, water and groundwater scarcity, and chronic exposure to industrial and air pollution.

PC ORIGINAL PKG

Large-scale solar development in this context must be held to a higher standard—not only minimizing harm, but proactively delivering tangible, long-term benefits to frontline communities.

C-1 cont'd

Our comments focus on:

- The lack of enforceable community health protections, despite clear exceedances of air quality thresholds;
- Inadequate economic benefit sharing and limited job creation for local residents;
- Insufficient water resource safeguards, particularly given the region's overdrafted groundwater basin and needs to conserve Colorado River water;
- A failure to include lifecycle emissions in greenhouse gas accounting, undermining climate transparency;
- The near-total absence of environmental justice analysis, despite CalEnviroScreen data highlighting disproportionate burdens;
- Weak tribal consultation protocols and no evidence of Free, Prior, and Informed Consent.

We urge Imperial County to revise the DEIR to include stronger mitigations, binding community benefits, and a full Environmental Justice Impact Assessment. This project must not become another example of a "green sacrifice zone." It must serve as a model for equitable and responsible energy development in California. These comments are submitted pursuant to CEQA Guidelines § 15088, which requires lead agencies to evaluate and respond to substantive environmental concerns raised by public commenters.

Summary of Project

C-2

- Project: 2,551-acre solar PV and battery storage facility in Imperial County, with a 230-kV gen-tie line connection.
- Land Use: Requires rezoning and General Plan Amendment for industrial conversion of farmland. Key EIR Findings:
    - Air quality: PM10 exceedance from construction emissions.
    - GHG: Estimated reduction of 228,189 MTCO2e annually—based on avoided combustion only, no lifecycle analysis.
    - Water: 170 acre-feet groundwater use for dust suppression.
    - Biology: Impacts to 11 sensitive species and habitat types.
    - Culture: Deferred mitigation and weak tribal consultation.
    - Environmental Justice: No formal analysis despite known regional burdens.

I. Land Use and Agricultural Resources

C-3a

- A. Conversion of Prime and Unique Farmland
    - The project proposes to convert agricultural lands, including areas designated as Prime Farmland and Farmland of Statewide Importance, to industrial-scale solar development. The site lies within a proposed Renewable Energy Overlay (REO) zone, but fails to meet

PC ORIGINAL PKG

multiple criteria required under the County's General Plan to justify this designation change. C-3a cont'd

- Section 3.2 (p. 3.2-11) evaluates whether the site meets four General Plan criteria for inclusion in the REO zone. The project meets only one (solar resource availability), but fails on adjacency to existing RE zones, presence of environmentally sensitive areas (e.g., riparian habitats), and proximity to necessary infrastructure. C-3b
- Conversion of non-prime and prime farmland should have the strongest possible mitigations and the specific locations of conservation easements if pursued should take into account factors like quality of farmland, surrounding habitat, and implications for changing drainage flows into the Salton Sea. The suggestion that these easement sites be "outside of the path of development" is not clear. The applicant should consider the Alternative 2 site layout that avoids loss of prime farmland. C-3c

- B. Economic Displacement from Agricultural Transition
  - The Draft EIR (Section 2.5.1, p. 2-38) estimates a peak construction workforce of 237, with long-term operational jobs limited to approximately five positions—raising concerns about the project's economic sustainability for Imperial County. Revenue generation will occur via property taxes, but fiscal benefits to the County are modest and not quantified in detail. C-4a
  - Mulvaney et al. (2025) report in Sustainability Science finds that similar Imperial County projects failed to provide durable economic uplift according to local organizations, often centralizing benefits while outsourcing labor. Rural areas risk becoming "renewable sacrifice zones" without enforceable equity mechanisms.[1] C-4b

- C. Reclamation and Long-Term Stewardship
  - Land use will convert 2,551 acres of agricultural land (some designated prime or unique farmland) to industrial solar. The Draft EIR's mitigation (AG-1b) requires a Reclamation Plan and bonding to restore land post-decommissioning. C-5a
  - However, the Draft EIR lacks substantive evidence or supporting detail on the expected effectiveness of AG-1b. Specifically, it omits: C-5b
    - Clear enforcement mechanisms;
    - Assurance of adequate bonding to cover full reclamation costs;
    - Post-decommissioning monitoring protocols;
    - Adaptive management strategies if full reclamation proves infeasible.
  - We recommend the DEIR be revised to include: C-5c
    - Specific, enforceable standards and triggers for reclamation success;
    - A financial assurance plan with bonding estimates tied to current reclamation costs;
    - A long-term monitoring program overseen by a third-party or agency;

[1] Mulvaney, D., Burke, M., & Ward, K. (2025). *Renewable energy, social equity, and environmental justice in California's Imperial County*. Sustainability Science. https://doi.org/10.1007/s11625-025-01698-4

PC ORIGINAL PKG

- Adaptive management triggers and alternatives should reclamation goals not be met within specified timelines. C-5c cont'd

- Additional references to peer-reviewed studies or analogous reclamation efforts in similar arid, agricultural landscapes would strengthen the feasibility claim. Without such additions, the mitigation cannot be considered fully enforceable or effective under CEQA. C-5d

II. Air Quality and Public Health C-6a

- A. PM10 and PM2.5 Emissions
  - Construction activities will result in exceedances of PM10 (particulate matter) emissions, contributing to already poor air quality in a region designated as nonattainment for PM10 under both federal and state standards. The DEIR proposes outdated Tier 2+ diesel construction equipment and limited dust suppression, which are insufficient for the scale and duration of the disturbance.
  - Section 3.4 (pp. 3.4-13 to 3.4-21) projects construction emissions exceeding ICAPCD thresholds for PM10 and NOx. Fugitive dust from grading and traffic is the primary source. While mitigations like water spraying and speed limits are proposed, they may not be enforceable or adequate during high wind events.

- B. Dust Suppression and Exposure Controls C-6b
  - Mitigation Measures AQ-1 and AQ-2 (Section 3.4, p. 3.4-17) call for daily watering, posted speed limits, and stabilized unpaved roads. However, these methods may be inadequate under the region's frequent high-wind conditions, and enforcement mechanisms are not defined.
  - Dust can be minimized by avoiding disturbance from "blade and grade" or "disc and roll" land use preparation techniques and using approaches that use mowing or no vegetation or topsoil. This can minimize the potential for fugitive dust emissions offsite.
  - The EIR should specify what types of dust suppression will be used onsite. Offering so many options reads as the developer not understanding what types of fugitive emission controls actually work. The EIR should provide references to how well the various dust control efforts work to suppress dust.
  - The EIR should have guardrails to ensure that land disturbance does not occur preceding any major wind event that would cause significant fugitive dust events.
  - An Material Data Safety Sheet should be included in the EIR so the community can understand the composition of the "chemical dust suppressant" that could be used on the site.
  - We recommend the DEIR require the use of Tier 4 Final diesel equipment at a minimum and prohibit the use of disc-and-roll techniques entirely.

- C. Localized Monitoring and Community Notification C-6c

PC ORIGINAL PKG

- The DEIR does not include a requirement for localized air quality monitoring or public notification when emissions exceed safe levels. Given Imperial County's high asthma rates and nonattainment status, this is a critical gap.
- Mitigation should require real-time public-facing air quality monitors with thresholds that trigger notifications and work stoppages.

C-6c cont'd

- D. Cumulative Health Risks and Vulnerable Populations
  - According to the Draft EIR (Section 3.4, pp. 3.4-13 to 3.4-21), project construction will significantly increase PM10 and PM2.5 emissions. Dust generation and exposure are particularly concerning given Imperial County's nonattainment status for PM10 and high regional asthma rates.
  - Air quality concerns are detailed in Section 3.4 of the Draft EIR, with emissions of NOx, VOCs, and PM10 exceeding thresholds during peak construction phases (Tables 3.4-8 and 3.4-9). While mitigated through best management practices, exceedances of significance thresholds still raise red flags for frontline communities
  - No cumulative health impact assessment is provided. The Draft EIR fails to analyze additive air quality impacts from overlapping or nearby solar and geothermal developments, which could elevate chronic exposure to particulate pollution.
  - A peer-reviewed study by Mulvaney et al. (2025) examines renewable energy development in Imperial County and its social and environmental implications. The study highlights how large-scale solar projects have often failed to deliver lasting economic benefits to local communities, particularly low-income Latinx populations, while exacerbating environmental burdens such as air pollution and water scarcity. These findings underscore the need for stronger equity safeguards and enforceable mitigation measures in current and future projects.[2]

C-6d

III. Water Resources

- A. Groundwater Use and Basin Conditions
  - The project anticipates using approximately 170 acre-feet of groundwater during construction, primarily for dust control and minor panel washing. This exacerbates ongoing groundwater overdraft and may contribute indirectly to reduced inflows to the Salton Sea, leading to exposed lakebed and dust hazards. The source is likely from the Ocotillo-Coyote Wells basin, but the report lacks basin-specific depletion modeling or linkage to other users.
  - Section 3.10 (p. 3.10-14) concludes the water use is "less than significant" but does not address cumulative water extraction impacts, basin overdraft, or regional water transfer agreements. No consideration is given to the hydrological or air quality consequences of declining water tables.

C-7a

[2] Mulvaney, D., Burke, M., & Ward, K. (2025). *Renewable energy, social equity, and environmental justice in California's Imperial County*. Sustainability Science. https://doi.org/10.1007/s11625-025-01698-4

PC ORIGINAL PKG

- The project should be conditioned on the completion of a basin-specific hydrogeological study to confirm that water withdrawal will not contribute to long-term overdraft or land subsidence.

C-7a cont'd

- B. Water Demand for Operations and Dust Control
  - Post-construction water use is described as minimal (Section 3.10, p. 3.10-14), primarily for periodic panel cleaning. However, no assurances are made that non-potable or recycled water will be used, nor is there any cap on annual usage.

C-7b

- C. Long-Term Sustainability and Climate Resilience
  - The DEIR does not evaluate the cumulative water drawdown risk from clustered energy development in the western Imperial Valley, nor does it address the project's indirect contribution to reduced inflows to the Salton Sea via regional water transfers and groundwater overdraft

C-7c

IV. Biological and Ecological Resources

C-8a

- A. Habitat Loss and Fragmentation
  - The project will disturb habitat for at least 11 special-status species, including burrowing owls (under CalESA listing consideration), desert kit foxes, and areas classified as desert dry wash woodland. These are biologically sensitive environments that support ecological diversity and connectivity.
  - Section 3.3 (pp. 3.3-17 to 3.3-25) outlines direct habitat loss, species displacement, and vegetation clearing. While mitigation measures such as pre-construction surveys and habitat compensation are proposed, the DEIR lacks specificity on habitat ratios for compensatory mitigation and enforcement and monitoring efforts.

- B. Special-Status Species
  - The DEIR identifies potential presence or habitat for 11 special-status species, including the burrowing owl, desert kit fox, and loggerhead shrike. Mitigation measures call for pre-construction surveys, exclusion fencing, and passive relocation, but lack enforceable habitat conservation outcomes or specific criteria for mitigation site selection to ensure adequate replacement habitat.

C-8b

- C. Mitigation Planning and Long-Term Monitoring
  - While Mitigation Measures BIO-1 through BIO-6 are proposed, there is no comprehensive plan for long-term biological monitoring, adaptive habitat management, or funding mechanisms to ensure compliance beyond initial construction.
  - Pest management (mitigation measure A.2), ostensibly from invasive weeds and plants is described as potentially significant. Land use conversions that minimize disturbance and avoid "blade and grade" or "disc and roll" land use can minimize the potential for invasive weeds and should be considered as a mitigation. This approach would aim to leave groundcover and vegetation intact and potentially mow instead of blade/grade.

C-8c

PC ORIGINAL PKG

- A binding Habitat Management Plan with specified funding, long-term stewardship agreements, and third-party oversight is needed to ensure ecological integrity is preserved post-construction.

C-8c cont'd

V. Noise and Vibration

- A. Construction Noise Impacts
  - Construction will involve pile driving, heavy equipment, and truck traffic. Noise levels are expected to exceed 70 dBA at the nearest receptors during peak activity (Section 3.12). While short-term and "less than significant," this exposure may disrupt adjacent land uses and wildlife without enforceable restrictions on hours and proximity buffers.

C-9a

- B. Operational Noise and Equipment Standards
  - Operational noise from inverter units and battery cooling systems is predicted to remain below 50 dBA at project boundaries, which is under the County's residential noise thresholds. However, no long-term acoustic monitoring is proposed to ensure compliance or detect nuisance conditions over time.

C-9b

VI. Climate and Greenhouse Gas Emissions

- A. Operational GHG Offsets
  - While the project is expected to reduce operational GHG emissions by over 228,000 metric tons CO_2e annually, the DEIR does not account for full lifecycle emissions from panel manufacturing, transport, or decommissioning.
  - Section 3.8 (p. 3.8-11) quantifies operational GHG reductions only. There is no Life Cycle Assessment (LCA), and the DEIR avoids addressing potential embedded emissions in the BESS or solar panels themselves.

C-10a

- B. Lifecycle Emissions and Embedded Carbon
  - The Draft EIR (Section 3.8, pp. 3.8-11 to 3.8-13) estimates a reduction of 228,189 metric tons CO_2e annually by offsetting fossil-fuel power generation. However, the EIR does not assess lifecycle emissions from manufacturing, transportation, or decommissioning. Nor does this analysis demonstrate that fossil-fuel power generation would be eliminated as a genuine offset.
  - The Solar PEIS highlights the importance of life-cycle emissions analysis to fully characterize net climate benefits. Advocating for full LCA can enhance transparency and long-term emissions accountability.[3]

C-10b

- Key Issues and Gaps:

C-10c

[3] U.S. Department of the Interior, Bureau of Land Management (BLM), & U.S. Department of Energy (DOE). (2012). *Final Solar Programmatic Environmental Impact Statement (PEIS): Imperial East Proposed Solar Energy Zone in California.* https://solareis.anl.gov/documents/fpeis/index.cfm

PC ORIGINAL PKG

- No inclusion of embedded GHGs in solar PV production. No mention of carbon footprint from battery energy storage systems (BESS).

C-10c con'td

VII. Environmental Justice and Equity

- A. CalEnviroScreen Indicators and Burdened Communities
  - The project is located in a community ranked in the 95th–100th percentile for PM2.5 exposure, asthma, and socioeconomic vulnerability according to CalEnviroScreen 4.0. Imperial County is among the highest-ranked California counties for cumulative pollution burden (CalEnviroScreen 4.0), with elevated asthma rates, poverty levels, and PM exposure. Yet the DEIR fails to perform any dedicated Environmental Justice (EJ) analysis.
  - The Executive Summary (p. ES-3) briefly references disadvantaged communities but does not provide a full EJ impact review or apply CalEnviroScreen data. There is no proposed mitigation addressing cumulative burdens on vulnerable communities.[4]

C-11a

- B. Tribal Consultation and FPIC Obligations
  - The EIR deferred cultural resource mitigation until after project approval, raising concerns about destruction of undocumented resources. The project also lacks specific commitments to tribal monitoring or transparent documentation of AB 52 and SB 18 consultation.
  - Section 3.5 notes that cultural sites may exist but recommends only post-approval surveys and a stop-work protocol. This fails to protect potentially significant Indigenous and archaeological resources prior to disturbance. How will workers onsite know when they have discovered "previously unidentified archaeological materials," without a trained archeologist onsite?
  - We recommend the DEIR be revised to include signed correspondence, meeting summaries, or consultation timelines demonstrating compliance with AB 52 and SB 18.

C-11b

- C. Community Benefits Agreement and Equity Mechanisms
  - No full EJ analysis under CEQA or NEPA. No tribal consultation analysis per AB 52 or SB 18. No recognition of the region's long-standing pollution legacy and socio-economic disadvantage.

C-11c

VIII. Cumulative Impacts

- A. Overlapping Industrial Projects
  - The Draft EIR (Section 4) provides a brief list of cumulative projects but fails to quantify overlapping environmental effects from other regional solar, geothermal, and lithium-related development. Imperial County has multiple active and pending utility-scale projects—particularly in the Lithium Valley area—that collectively contribute to land use change, habitat fragmentation, and air and water quality degradation.

C-12a

[4] California Office of Environmental Health Hazard Assessment. *CalEnviroScreen 4.0 Data Dashboard and Indicator Maps*. Accessed June 2025. https://oehha.ca.gov/calenviroscreen

- The DEIR does not assess how these combined impacts will affect the same airsheds, aquifers, or ecological corridors impacted by Big Rock 2. This omission conflicts with best practices described in the BLM's Solar PEIS for Imperial East (2012), which recommends that regional project density and landscape-scale degradation be considered in cumulative planning and environmental evaluation.

C-12a con'td

- B. Additive Environmental Burdens
  - The DEIR does not integrate Imperial County's documented CalEnviroScreen vulnerabilities—such as top-tier PM2.5 exposure, asthma prevalence, and poverty rates—into the cumulative analysis of health or environmental risks. This leaves the public and regulators with an incomplete picture of how project-level impacts stack atop existing conditions and concurrent developments.
  - In addition, the cumulative biological impacts of adjacent energy projects—especially on species corridors and sensitive vegetation types—are not assessed beyond the individual project scope. The lack of integrated analysis undermines CEQA's intent to evaluate project significance in light of regional stressors.
  - The project cumulative impacts should consider impacts on dust emissions for broader scale buildout.

C-12b

IX. Alternatives Analysis

- A. Reduced Footprint or Phased Buildout
  - While the DEIR evaluates a reduced acreage alternative (Alt. 2), it fails to consider phased construction or modular build outs that could minimize simultaneous environmental disturbance. A phased approach would allow for adaptive management based on real-time monitoring of dust, emissions, and habitat impacts. Such flexibility could substantially reduce cumulative effects.

C-13a

- B. Distributed Energy or Brownfield Siting
  - The DEIR summarily dismisses alternatives such as distributed rooftop solar, use of built environments, or brownfield redevelopment without adequate exploration of feasibility or economic trade-offs. The rejection of these options lacks a robust grid analysis or comparison of land conservation and equity benefits.

C-13b

- C. Consider an Agrivoltaics Alternative.
  - Agrivoltaics integrate agriculture and energy production and could be a way to mitigate impacts to agriculture, employment, water use, and loss of agroecosystem services like pollination. The EIR should consider an alternative that integrates utility-scale solar and agricultural production.

C-13c

- D. Enhanced Community-Driven Alternatives
  - No alternatives developed in collaboration with local communities or tribal representatives are considered. Alternatives focused on maximizing local benefits—such

C-13d

PC ORIGINAL PKG

as workforce training, air filtration offsets, or household energy credits—could better reflect environmental justice principles and CEQA's intent to assess "reasonable" options with reduced impact.

C-13d cont'd

Conclusion

The Big Rock 2 Cluster Solar and Storage Project presents a critical opportunity to demonstrate how California can lead in climate action without sacrificing environmental integrity, public health, and equity. As currently drafted, the DEIR falls short of CEQA's core intent—to fully disclose, rigorously analyze, and mitigate the environmental consequences of development. It fails to provide a credible framework for ensuring community health protections, environmental justice, and long-term land stewardship.

C-14

We reiterate our call for Imperial County to revise and recirculate the Draft EIR to:

- Incorporate enforceable air quality mitigations with real-time monitoring and community alerts;
- Require robust tribal consultation, including documented Free, Prior, and Informed Consent;
- Include a formal Environmental Justice Impact Assessment grounded in CalEnviroScreen data;
- Evaluate and cap water use in light of regional overdraft and Salton Sea dust impacts;
- Integrate full lifecycle emissions in GHG accounting for accurate climate assessment;
- Commit to a Habitat Management Plan with long-term oversight and dedicated funding.

Without these improvements, the project risks compounding environmental burdens in one of California's most impacted regions. With them, it could serve as a benchmark for responsible, community-aligned renewable energy development. We urge Imperial County to act with the urgency, transparency, and accountability this moment—and this community—deserves.

Sincerely,

Kaitlin Cox
Policy Research & Advocacy Coordinator
Center for Energy Efficiency and Renewable Technologies
kaitlin@ceert.org

Christian Torres
Director, Climate Equity and Resilience
Comite Civico del Valle
christian@ccvhealth.org

Fernanda Vega
Community Organizer
Imperial Valley Equity and Justice Coalition
fvega@ivequityjustice.org

Patrick Dexter
Organizer
United Auto Workers
pdexter@uaw.net

Theo Figurasin
Western Assistant Director of Campaigns
Jobs to Move America
tfigurasin@jobstomoveamerica.org

William Cooper
Executive Director
The Becoming Project
becomingwilliamc@gmail.com

PC ORIGINAL PKG

Cesar Hernandez
Director, San Diego and Imperial Counties
American Civil Liberties Union
chernandez@aclu-sdic.org

PC ORIGINAL PKG

Center for Energy Efficiency and Renewable Technologies

June 20, 2025

C-1 This comment is an introductory comment and provides a summary of more detailed comments provided in the comment letter. As such, no further response is necessary. Please refer to ensuing responses to comments C-2 through C-14 for a detailed response to each comment provided in the comment letter.

C-2 The issues identified in this comment related to air quality, GHG, water, biology, cultural and environmental justice are responded to in detail in ensuing responses to comments C-3a through C-14.

C-3a Please refer to response to comment C-3b.

C-3b The project site meets the "Adjacent to the Existing RE Overlay Zone" criteria for designation as a renewable energy overlay as follows:

The project site is located in immediate vicinity and/or otherwise adjacent to infrastructure necessary to operate the project including public roadways and electrical transmission infrastructure. Therefore, all criteria are met.

1) **<u>Adjacent to the Existing RE Overlay Zone</u>: An amendment may be made to allow for development of a future renewable energy project located adjacent to the existing RE Overlay Zone if the project:**

   As discussed in the EIR, (and shown in EIR Figure 2-3), APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are already located within the RE Overlay Zone. The portions of the project site that are not currently located within the RE Overlay Zone are immediately adjacent to the existing RE Overlay Zone. Therefore, the project meets the adjacency criteria.

   Is not located in a sensitive area?

   The project site is located on primarily disturbed agricultural lands, which are not identified as environmentally sensitive.

   Would not result in any significant impacts?

   CEQA §21068 defines "significant" as "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in the environment. All project impacts have been determined to be mitigated to a level less than significant, therefore, there would be no residual "significant" impacts.

Further, as discussed (see EIR page 3.11-20), an amendment to the overlay zone would only be approved by the County Board of Supervisors if a future renewable energy project met one of the following two conditions:

2) <u>"Island Overlay"</u>: An amendment may be made to allow for development of a future renewable energy project that is not located adjacent to the existing RE Overlay Zone if the project:

Is located adjacent (sharing a common boundary) to an existing transmission source?

The project proposes to connect to the existing Liebert Substation.

Consists of the expansion of an existing renewable energy operation?

The Big Rock 2 Cluster East/Laurel Cluster South site is located on two parcels comprising approximately 160 acres. EIR Table 2-3 identifies the individual APNs associated with the Big Rock 2 Cluster East/Laurel Cluster South site with their respective acreage and zoning. The 160-acre site is associated with the previously-approved CUP for Laurel Cluster 2 South and will be re-entitled as part of the proposed project.

Would not result in any significant environmental impacts.

CEQA §21068 defines "significant" as "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in the environment. All project impacts have been determined to be mitigated to a level less than significant, therefore, there would be no residual "significant" impacts.

C-3c Mitigation measures proposed to address the temporary conversion of agricultural resources are implemented based on previously-adopted County Board policy, which has been in effect for over 10 years, and has recently been re-assessed and reviewed by the Board, with updates made to the policy to continue an appropriate mitigation framework for the temporary conversion of agricultural lands associated with solar projects. These measures have been determined to mitigate the temporary impact to agricultural conversion to a level less than significant. As stated in Mitigation Measure AG-1a, (should Option 1 be selected by the applicant), under Option 1: *Provide Agricultural Conservation Easement(s). "*The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits..."

C-4a The project applicant will be required to enter into a public benefit agreement with the County of Imperial, which will memorialize fiscal and economic benefits to the County. An economic analysis is under preparation which will be reviewed and accepted by the County. The Board of Supervisors will consider this information as part of the decision-making process for the proposed project. Fiscal and economic benefits in and of themselves of the project are not required to be addressed in an EIR.

C-4b Comment noted. This comment does not raise a specific issue related to the adequacy of the Draft EIR, as such, no further response is required.

C-5a As required by EIR Mitigation Measure AG-1b, the Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition <u>during decommissioning</u>. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.

C-5b Mitigation Measure AG-1b will be included in the Mitigation Monitoring and Reporting Program (MMRP) for the proposed project, which will specify monitoring and enforcement conditions. Additionally, the requirement for a Reclamation Plan will be a conditional of approval of the CUP for the project. The Reclamation Plan would provide bonding cost estimates/financial assurance, decommissioning requirements, reclamation standards/criteria, and monitoring protocols as applicable.

C-5c Please refer to response to comment C-5b.

C-5d Please refer to response to comment C-5b.

C-6a As shown in EIR Table 3.4-8 (EIR page 3.4-18), the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10} prior to implementation of measures to reduce dust/PM_{10} emission. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissions. As shown in EIR Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold and PM10 emissions associated with construction activities would be reduced to a level less than significant.

Tier II construction equipment is not proposed (as indicated by this comment). Rather, as required by Mitigation Measure AQ-2, a list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted annually to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5.

Further, as required by Mitigation Measure AQ-4, the project will submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval. Enhanced measures include the requirement to cease dust generating activities when wind speeds exceed 25 mph.

Pursuant to Rule 105 Enforcement, the Air Pollution Control Officer may issue citations, seek a misdemeanor complaint, assess civil penalties, seek an injunction, or take other enforcement action.

C-6b As required by Mitigation Measure AQ-4, the project will submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval. Enhanced measures include the requirement to cease dust generating activities when wind speeds exceed 25 mph.

As required by Mitigation Measure AQ-4, the project will submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval. As required by the Enhanced Dust Control Plan, the project applicant is required to specify contact person responsible for the implementation of the Dust Control Plan, listing of all identified actual and potential sources of fugitive dust emissions, listing of sensitive receptors with ¼ mile of the project, disturbance areas and phasing, watering and dust control requirements for unpaved access, hauls roads, traffic and equipment storage areas, outdoor handling of bulk materials, outdoor storage of bulk materials, on-site/off-site transporting of bulk materials, source of water supply and methods of application.

C-6c Through the Enhanced Dust Control Plan, the person responsible for implementation of the plan would be required to conduct field visits and prepare and submit field records including observations on-site of dust opacity and necessary corrective measures (if necessary).

C-6d Please refer to responses to comments C-6a, C-6b, and C-6c. Additionally, cumulative impacts are addressed in EIR Section 5.3.3 Air Quality. As discussed on EIR page 5-10, the proposed project, in conjunction with the construction of other cumulative projects as identified in Table 5-1, could result in a cumulatively considerable increase in the generation of PM_{10}, $PM_{2.5}$, and NO_x; however, like the proposed project, cumulative projects would be subject to mitigation pursuant to County ICAPCD's Regulations and Rules, and the cumulative impact would be reduced to a level less than significant through compliance with these measures.

C-7a The use of groundwater for project construction and operation is not proposed nor required for the project. As discussed in EIR Section 3.16 Utilities and Service Systems (EIR page 3.16-9), water for construction purposes would be obtained from IID canals or laterals in conformance with IID rules and regulations for Municipal, Commercial, and Industrial (MCI) temporary water use. Water for project operations would be obtained via the Westside Main Canal. Therefore, the proposed project would not impact groundwater at a project level or cumulative basis.

C-7b As identified on EIR page 2-35, the project's operational water demand is approximately 10 acre feet per year. As described on EIR page 2-35, "untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7)."

C-7c The proposed project will not utilize groundwater. Please refer to response to comment 7a. Potential cumulative impacts related to reduced inflows to the Salton Sea are addressed in EIR Section 5.3.4 Biological Resources (see EIR page 5-11).

<u>The Reduction in Irrigation Water Reaching IID Canals is Both Directly and Cumulatively Less Than Significant</u>

As provided in Section 5.3.16 (Cumulative Effects – Utilities and Service Systems) of the EIR, implementation of the Project would result in conversion of approximately 1,849 acres of land currently under or available for agricultural production to non-agricultural uses.

The Project site is situated approximately 23 miles southeast of the Salton Sea. Agricultural drainage water often carries salts, fertilizers, pesticides and other pollutants. This runoff, combined with the sea's lack of an outlet, leads to increased salinity and other nutrient buildup, potentially harming the ecosystem and creating potential public health concerns. Increased salinity may lead to habitat loss for fish and birds. Fish die-offs have become more frequent, impacting the food chain and potentially affecting bird populations.

The California Natural Resources Agency estimates that in 2023 approximately 840,000 acre-feet of water flowed from the Imperial Valley into the Salton Sea (<u>https://pacinst.org/current-information-saltonsea/</u>). Imperial Irrigation District delivers water to approximately 520,000 acres of land (<u>https://www.iid.com/home/showpublisheddocument/22785/638742828323270000</u>). Assuming the majority of the 840,000 acre-feet of water came from irrigation return flow of the 520,000 acres of land, that's approximately 1.62 acre-feet of return flow per acre of land so the analysis area would contribute approximately 2,995 acre-feet of water per year to the Salton Sea, or approximately 0.36% of the total flow.

PC ORIGINAL PKG

C-8a No desert dry wash woodland is present on the project site. As identified on EIR Table 3.5-1 Vegetation Communities or Land Cover Types within the Project Site, only 5 vegetation communities/land cover types are located within the project site with the majority of the site consisting of general agriculture (1,590.38 acres) and disturbed habitat (165.86 acres). Approximately 80.97 acres are mapped as creosote bush scrub and allscale scrub shrubland, with the majority of this vegetation type located south of the West Side Main canal and not proposed to be developed with solar panels (see EIR Figure 2-4 Proposed Site Plan).

Please refer to response to comment B-9 regarding compensatory mitigation.

C-8b Please refer to response to comment B-9 regarding compensatory mitigation.

C-8c The impact analysis in the EIR assumes that vegetation would not remain where construction of solar panels and other project features is proposed. As such, Mitigation Measure A-G2 is proposed to address the potential that weeds or other pests may occur within the solar field if the area is not properly maintained and managed to control weeds and pests.

A habitat management plan is not required as preservation of on-site habitat is not proposed, as Mitigation Measures BIO-1 through BIO-6 have been determined to be adequate to mitigation potential biological impacts as a result of construction and operation of the proposed project to a level less than significant.

C-9a As identified on EIR page 3.12-4, sensitive noise receptors are limited in the project area, consisting of 3 residences. Construction activities would not exceed the Imperial County daytime noise standard for construction activities of 75 dBA Leq at the nearest sensitive receptor and nighttime activities would not result in perceptible noise levels at the nearest sensitive receptors. Therefore, impacts would be less than significant. Further, the site is located in an area of active agricultural lands and associated farming, therefore, project construction and operational activities would not impact adjacent land uses. As indicated in the EIR, Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning. These low level noise activities are not expected to disrupt wildlife activity on adjacent lands as the area surrounding the project site is largely developed with agricultural lands and existing utility-scale solar facilities.

C-9b No long-term acoustic monitoring is proposed due to the very low noise levels associated with the operation of the inverter units and battery cooling systems. There would be no significant impact associated with this low-level noise source; therefore, no mitigation measures are required that would necessitate long-term noise monitoring of these project components.

C-10a Assessing impacts of manufacturing or production of facilities elsewhere is speculative. It is not known when, where, and how materials that would be used for the project will be manufactured. Additionally, under CEQA, a life cycle analysis is not required (Save the Plastic Bag Coalition v. City of Manhattan Beach [2011] 52 Cal. 4th 155.) Rather, under Section 15064.4 of the CEQA Guidelines, the determination of the significance of GHG emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project. Here, the County properly estimated and analyzed the direct and indirect GHG emissions reasonably related to the project using similar methods for quantification of criteria air pollutants and information from a combination of emission factors from various sources. The County is not required to consider indirect and uncertain consequences of the project.

C-10b Please refer to response to comment C-10a.

C-10c Please refer to response to comment C-10a.

C-11a A specific analysis of environmental justice impacts is not required by CEQA. However, a detailed analysis of potential air quality impacts associated with PM_{10} is provided in EIR Section 3.4 Air Quality, which addresses potential impacts to sensitive receptors. As discussed in the EIR, some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive Receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or California Air Resources Board may determine. Sensitive receptors were identified and evaluated as part of the air quality analysis, which would include those identified in this comment as being located in a "burdened" , vulnerable or disadvantaged community.

C-11b As stated in the EIR (EIR page 3.6-13), no newly identified prehistoric or historic-era archaeological resources were recorded on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to §15064.5. Mitigation Measures CUL-1 and CUL-2 are proposed to address the potential for inadvertent discovery of archaeological resources. Mitigation Measure CUL-2 specifically requires that, "a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction."

C-11c Please refer to response to comment 11a. Additionally, the project is not subject to NEPA.

As discussed on EIR page 3.15-4, In accordance with AB 52, the County provided notification of the proposed project to Native American tribes that the County understands to be traditionally and culturally affiliated with the geographic area of the proposed project. Notification letters were provided and sent via certified mail on September 3, 2024 and emails were also sent to the contacts in an effort to elicit a quicker response. The County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians have requested to be involved with monitoring efforts. No other responses have been received at this time.

Ray Teran of the Viejas Band of Kumeyaay Indians ("Viejas") responded via email on September 3, 2024, stating he had reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas. He further noted that cultural resources have been located within or adjacent to the project site and requested that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities. In addition, he requested that Viejas be informed of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains. Implementation of Mitigation Measures CUL-2 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance.

C-12a As explained on EIR page 5-2, the cumulative impact analysis utilizes an expanded list method (as defined under CEQA) and considers environmental effects associated with those projects identified in EIR Table 5-1, in conjunction with the impacts identified for the project in Chapter

3 of the EIR. As discussed, EIR Table 5-1 includes projects known at the time of release of the NOP of the Draft EIR, as well as additional projects that have been proposed since the NOP date. EIR Figure 5-1 provides the general location for each of these projects in relation to the project site. As shown on EIR Figure 5-1 (and listed in Table 5-1), 16 utility-scale solar energy projects were considered as part of the cumulative analysis in the EIR. The geographic scope for the cumulative analysis varies depending on the environmental issue, and is explained within each environmental topic.

C-12b A detailed air quality analysis is provided in EIR Section 3.4 Air Quality. This analysis includes any potential localized effects from project construction and operation. Because environmental justice is not a topic area that is required to be addressed, the CalEnviroScreen is specifically not applicable to the project.

C-13a While the construction period for the proposed project would be approximately 18 to 24 months, it is also possible that the project could be constructed in different phases. For purposes of estimating worst-case conditions, such as air quality emissions, this construction period has been assumed. Construction of this alternative would also occur in a similar fashion as the proposed project, and like the proposed project, may ultimately occur in phases. Specific measures to address potential impacts associated with construction related air quality and biological resources are proposed that would reduce project-related impacts to a level less than significant. As discussed in Section 3 of the EIR, cumulative projects would also be required to adhere to similar measures.

C-13b Regarding Distributed Energy, Renewable Distributed Solar Generation is technically infeasible as a replacement alternative for industrial scale projects for a variety of reasons including, upper limits on integrating distributed generation into the electric grid, lack of electricity storage in most distributed generation systems, and continued dependency of buildings on grid-supplied power for reliability. In order to achieve the 500 MW goal of the project, thousands of acres of rooftops would need to be available in the County for solar use. Hundreds or thousands of installation locations across the County would be required, many of which would require additional discretionary actions and development review processing. Furthermore, neither the County nor the applicant has or can reasonably acquire access and control of the necessary rooftops. Other factors contributing to the infeasibility include:

- There would be difficulties with respect to building of the system within a timeframe that would be similar to the proposed projects;
- Given the distributed nature of such a network of facilities, management and maintenance would not be as efficient, and total capital costs would likely be higher;
- The requirement to negotiate with a large number of individual property owners to permit placement of solar panels on rooftops which would likely add substantial approvals and time to meeting the stated renewable energy goals;
- The difficulty in ensuring proper maintenance of a large number of small solar installations;
- The lack of an effective electricity distribution system for large numbers of small electricity producers.

Furthermore, while the Distributed Energy alternative could avoid the significant impact of the proposed project associated with agricultural use, it would likely result in similar, and in some cases greater impacts than the proposed project to other environmental issue areas.

Regarding Brownfield siting/redevelopment, such an alternative would need to occur at an alternative location. As discussed in the EIR, the evaluation of an alternative location was rejected from further consideration. CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

The proponent does not have control of an alternate site; if control were viable, the proponent would have to re-initiate the application process as a new project. Similar to the proposed project site, an alternate site would require environmental review once the proponent has prepared sufficient project description information. At present, the proponent does not have control of an alternate site. This alternative would be the most complex, costly, and time-consuming alternative to implement. It is unknown if the environmental impacts associated with this alternative would be less than the proposed project because it would be speculative to evaluate an unsecured alternate site. This is primarily due to the fact that the proponent does not have control of an alternate site. Therefore, an alternative site was eliminated from further consideration in this EIR.

C-13c The CEQA Guidelines require an EIR to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines §15126.6(a)). The CEQA Guidelines direct that selection of alternatives focus on those alternatives capable of eliminating any significant environmental effects of the project or of reducing them to a less-than significant level, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. In cases where a project is not expected to result in significant impacts after implementation of recommended mitigation, review of project alternatives is still appropriate. With respect to the proposed project, all identified impacts can be reduced to less than significant with implementation of proposed mitigation measures. Agricultural resources was one resource area that was identified where impacts could potentially be reduced, if the project site were reduced. As such, the alternatives evaluation focused on a reduced footprint alternative. Please also refer to response to comment C-13c.

C-13d A reasonable range of alternatives is provided in the EIR pursuant to CEQA Guidelines §15126.6(a). These alternatives have been identified as technically feasible, and meet the CEQA Guidelines criteria to avoid or substantially lessen any of the significant effects of the project. CEQA does not require that the lead agency consider every potential alternative to the proposed project. The general characteristics of the "Enhanced Community-Driven Alternatives" could also be stated for the proposed project and alternatives addressed in the EIR. The project applicant will be required to enter into a community/public benefit agreement with the County, which provides funding for a variety of County programs that benefit community programs in the County.

C-14 Please refer to preceding responses to comments C-1 through C-13, which provide specific-detailed responses to each of the comments provided in this letter and as summarized in the bulleted list below. Recirculation of the Draft EIR is not required: (1) because recirculation is not required where the new information added to the EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR (CEQA Guidelines, § 15088.5, subd. (b); and

PC ORIGINAL PKG

(2) because no “substantial adverse” impact would result from any of the revisions to the portions of the Draft EIR that were not recirculated (CEQA Guidelines, § 15088.5, subd. (e)). Having reviewed the information contained in the EIR and in the administrative record as well as the requirements of CEQA and the CEQA Guidelines regarding recirculation of Draft EIRs, there is no new significant information in the Final EIR, and the additional information provided in the Final EIR merely clarifies, amplifies and/or makes insignificant modifications to the adequate Draft EIR, and finds that recirculation of the Draft EIR is not required.

LETTER D

IID
A century of service.

www.iid.com
Since 1911

June 20, 2025

Via E-Mail & Personal Delivery

Imperial County Planning & Development Services Department
c/o Rocio Yee
801 Main Street
El Centro, CA 92243

SUBJECT: Draft Environmental Impact Report for Big Rock 2 Cluster Solar and Storage Project (State Clearinghouse Number 2024090063)

Dear Ms. Yee:

Imperial Irrigation District ("IID") submits these comments to Imperial County on its Draft Environmental Impact Report ("Draft EIR") for the proposed Big Rock 2 Cluster Solar and Storage Project (State Clearinghouse Number 2024090063) ("Project"). Intro

The Project would construct, operate, and eventually decommission a 500-megawatt ("MW") photovoltaic ("PV") solar energy generation facility, a 500 MW battery energy storage system ("BESS") facility, and associated facilities on approximately 1,849 acres of land in unincorporated Imperial County ("County"). The Project would include a new 230 kilovolt ("kV") generation-intertie ("gen-tie") line to connect the Project's substation to IID's Liebert Switchyard, from which the Project will use an existing 230 kV line to connect to San Diego Gas & Electric Company's Imperial Valley Substation. The Project would be sited across 24 assessor parcels located south of Interstate 8, approximately one mile southwest of the townsite (or census-designated place) of Seeley, and approximately six miles north of the U.S./Mexico border.

IID is a responsible agency for the Project because it may have discretionary approval power over the Project and the Project will require modifications to IID's Liebert Switchyard and other IID facilities.

IID previously submitted a comment letter on the Notice of Preparation for the EIR on October 7, 2024, and a comment letter on the Administrative Draft EIR on January 30, 2025, which letters are attached hereto and incorporated herein by reference.

IID submits the following additional comments on the Draft EIR. These comments are intended to help the County revise the Draft EIR to satisfy the goals and requirements of the California Environmental Quality Act ("CEQA").

IMPERIAL IRRIGATION DISTRICT • P.O. BOX 937 • IMPERIAL, CA 92251

PC ORIGINAL PKG

As further discussed below, the Draft EIR has multiple deficiencies that the County must address before certifying it, including: an impermissibly vague and ambiguous Project description; inadequate disclosure and analysis of related projects; inadequate analysis of the Project's effects on the Salton Sea; environmental impact analyses that lack adequate explanation and are unsupported by substantial evidence; mitigation measures that lack specific performance standards or are improperly deferred; and inadequate identification and analysis of a range of reasonable alternatives. After revising the Draft EIR to correct these issues, the County should recirculate the document for additional public review and comment.

Intro cont'd

I. Impacts on IID Facilities and Property

The Project proponent will be required to provide and bear all costs associated with acquisition of land, rights-of-way, easements, and infrastructure relocations and realignments deemed necessary to accommodate the Project. Any street or road improvements imposed by the County shall also be at the Project proponent's cost.

D-1

Public utility easements over all private and public roads and an additional 10 feet in width on both sides of the private and public roads shall be dedicated to IID for the construction, operation, and maintenance of its electrical infrastructure.

The Project proponent will be required to provide rights-of-way and easements for any proposed power line extensions and/or other infrastructure needed to serve the Project, and the necessary access to allow for continued operation and maintenance of any IID facilities located on adjoining properties where no public access exists.

Substations and switchyards shall be located on property that will be transferred to IID in fee simple ownership with legal access.

In Section 2.8.2 of the Draft EIR, it is not accurate to characterize IID's approvals as "not discretionary." Some of IID's approvals are discretionary or can be made discretionary. Therefore, the following phrase on page 2-44 of the Draft EIR needs to be revised as indicated: "The following IID approvals~~, although not discretionary approvals~~, include, but are not limited to: . . . ."

II. Water Supply

In order to obtain a water supply from IID for a non-agricultural project, the Project proponent will be required to comply with all applicable IID policies and regulations and may be required to enter into a water supply agreement. IID has implemented a water apportionment program pursuant to its revised Equitable Distribution Plan. The Project will further be subject to any amendments or superseding policy for the same or similar purposes. IID shall have the right to apportion the Project's water as an industrial water user.

D-2

For more information on how to obtain a water supply agreement, please visit IID's website at https://www.iid.com/water/municipal-industrial-and-commercial-customers or contact Justina Gamboa-Arce at (760) 339-9085 or jgamboaarce@iid.com.

PC ORIGINAL PKG

III. Project Description

D-3a

The Draft EIR's Project description is impermissibly vague, ambiguous, and unclear, thus frustrating the EIR's informational purpose and rendering much of the environmental impact analysis inadequate. The County must revise the Project description in the Draft EIR to meet CEQA's legal requirements.

"An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR. However, a curtailed, enigmatic or unstable project description draws a red herring across the path of public input. Only through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives." (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655.) "The project description must contain sufficient specific information about the project to allow the public and reviewing agencies to evaluate and review its environmental impacts. A project description that omits integral components of the project may result in an EIR that fails to disclose the actual impacts of the project." (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.) "If a final EIR does not adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project, informed decisionmaking cannot occur under CEQA and the final EIR is inadequate as a matter of law." (*RiverWatch v. Olivenhain Municipal Water District* (2009) 170 Cal.App.4th 1186, 1201.)

The description of the Project in the Draft EIR is impermissibly vague, inconsistent, and unstable. Key details of the Project description are undefined in the Draft EIR, including:

- The number, location(s), design(s), and size(s) of the BESS facility (or facilities). (See, e.g., p. 2-14 ("Each individual CUP site may include a . . . BESS . . . ."); p. 2-23 ("The project will include one or more BESS, located at or near the project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite."); Figure 2-4 (proposed site plan depicting a single BESS).)

D-3b

- The number, location(s), design(s), and size(s) of the operations and maintenance building(s) and any associated facilities such as septic systems and leach fields, water storage tanks, parking lots, driveways, and roads. (See, e.g., p. 2-14 ("Each individual CUP site may include . . . an operations and maintenance (O&M) building . . . . [T]he project may share facilities such as O&M facilities . . . and/or other appurtenances"); p. 2-33 ("The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.").)

D-3c

- The number, location(s), design(s), and size(s) of the Project substation(s). (See, e.g., p. 2-14 ("Each individual CUP site may include . . . an on-site substation. . . . It is anticipated that all BESS facilities associated with the project will be developed concurrently with PV componentry and situated in proximity to project sub-station(s) . . . . Likewise, the project may share facilities such as . . . transmission-related facilities, project sub-station(s), and/or other appurtenances."); p. 2-23 (describing a single substation); Figure 2-4 (proposed site plan depicting a single substation).)

PC ORIGINAL PKG

- The number, location(s), design(s), and alignment(s) (aerial or underground) of the gen-tie line. (See, e.g., p. 2-31 ("Portions (or all) of the gen-tie line may be undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County. Alternative gen-tie routing(s) may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley Substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.").) D-3d

- The location(s), design(s), and alignment(s) (aerial or underground) of the collector lines. (See, e.g., p. 2-14 ("Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines which could run overhead and/or underground to a dedicated project substation."); p. 2-21 ("The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the project by Imperial County.").) D-3e

- The location(s), design(s), and size(s) of any stormwater facilities. (See p. 2-37 (sole reference to stormwater management facilities in project description).) D-3f

- The locations and designs of crossings and other encroachments of IID facilities (including canals, drains, power lines, and roads) and other public agencies' facilities and rights-of-way. (See, e.g., p. 2-35 ("Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.").) D-3g

In addition, the Project description needs to include any infrastructure, facilities, equipment, or other physical components of the Project for the interconnection to IID's existing Liebert Switchyard, which then needs to be analyzed as part of the Project. These aspects of the Project that need to be further described may include, but not be limited, to the following: D-3h

- Modifications to the Liebert switching station to allow for a new 230-kV bay for the gen-tie termination. This may include all station electrical infrastructure (circuit breaker, arrestors, switches, grounding, protection systems, instrumentation transformers, etc.) needed for the gen-tie interconnection, as well as necessary telecommunications equipment.

- A control building for all substation relaying, controls, IID Supervisory Control and Data Acquisition system ("SCADA"), metering, communications, and associated equipment will be required at the 230-kV substation. A wall partition or divider shall be installed to separate the IID protection relay panels and SCADA from the rest of the Project's panels. The control building shall have dual air-conditioning units, one primary and one standby. The battery room shall also be climate controlled. All rooms will be equipped with temperature sensors to provide temperature indications to the Transmission Provider monitoring equipment. D-3i

Without this information, the Draft EIR does not adequately disclose to the public and agencies the physical components of the Project. And without this essential information included in the D-3j

PC ORIGINAL PKG

Project description, the Draft EIR cannot provide an adequate evaluation and disclosure of the Project's environmental impacts. The Draft EIR accordingly needs to incorporate the above information into the Project description and address the above deficiencies in the Project description, and then update the analyses throughout the Draft EIR to evaluate the potential environmental impacts based on an updated and accurate Project description. "The adequacy of an EIR's project description is closely linked to the adequacy of the EIR's analysis of the project's environmental effects. If the description is inadequate because it fails to discuss the complete project, the environmental analysis will probably reflect the same mistake." (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 31–32.)

D-3j cont'd

IV. Piecemealing

The Draft EIR does not include a complete description and analysis of the Project and its foreseeable consequences as required by CEQA. Consequently, the Draft EIR does not disclose the full scope of the Project and its potential impacts, depriving agencies and the public from the opportunity to engage in informed decision-making.

D-3k

The CEQA Guidelines define a "project" as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (Cal. Code Regs., tit. 14, § 15378(a).) An EIR must include the effects of a future expansion or other related action when "(1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." (*Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 396 (internal citations omitted).)

The Draft EIR improperly excludes description and analysis of the Project's relationship to other actions that may need to be analyzed as a single project under CEQA. The Draft EIR contains vague references to the Project's potential sharing of facilities "with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County or with any future proposed renewable energy projects nearby." (p. 2-39; see also, e.g., pp. 3.4-16, 3.4-18, 3.8-13.) Further, as identified above in Section III, the Draft EIR states that several Project components will be determined at a later date, such as prior to the issuance of building permits (see p. 2-14, 2-21, 2-31, 2-35.) In addition to violating CEQA's standards for an accurate, stable, and finite project description discussed in the preceding section, this may constitute improper piecemealing, thus depriving the public and agencies of an accurate explanation of the true scope of the Project and the resulting environmental effects. CEQA prohibits "chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences." (*Bozung v. Ventura County Local Agency Formation Commission* (1975) 13 Cal.3d 263, 284.)

V. Project Objectives

One of the purported objectives of the project—"Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in the County an alternative to the economic losses associated with limiting their agricultural production" (p. 2-13)—lacks substantial evidence.

D-3l

PC ORIGINAL PKG

There are no current water shortages in the County to farmers and/or agricultural landowners. Water conservation programs implemented by IID are entirely voluntary and compensated. The efficiency-based conservation program requires continued agricultural production. The fallowing-based conservation program is for a single 45- or 60-day period during the months of June through September and only goes through 2026. IID has not implemented a 12-month fallowing program since 2017, and that program was entirely voluntary and compensated as well. D-3l cont'd

This purported objective is improper and misrepresents the conditions of the agricultural industry within Imperial Valley and the options available to local farmers and/or agricultural landowners to simultaneously participate in voluntary, compensated conservation programs and keep their land in agricultural production. There has not ever been an imposed water shortage that caused fallowing of farmland in the Imperial Valley. Moreover, nearly the entirety of the Project's 1,849 acres is comprised of prime farmland, unique farmland, and farmland of statewide importance that would not ordinarily be fallowed. This objective must be deleted from the Draft EIR and the environmental analysis in the Draft EIR needs to be updated as appropriate.

VI. Indirect and Cumulative Effects on the Salton Sea

D-4

To fulfill CEQA's requirements, the Draft EIR must analyze the Project's potential indirect and cumulative impacts to the Salton Sea.

An EIR must discuss direct, indirect, and cumulative effects. (Cal. Code Regs., tit. 14, § 15064(d).) Indirect effects "are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable." (Cal. Code Regs., tit. 14, § 15358(a)(2).) A cumulative impact is "an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." (Cal. Code Regs., tit. 14, § 15130(a)(1).) "An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable," meaning "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (Cal. Code Regs., tit. 14, §§ 15065(a)(3), 15130(a).)

The Draft EIR does not adequately analyze the Project's indirect and cumulative effects on the Salton Sea. The Salton Sea is maintained by agricultural irrigation runoff from the Imperial Valley. The Draft EIR (p. 5-12) incorrectly states that the Project "would provide a benefit to IID's water budget and available supply for the Salton Sea." In fact, by converting agricultural land to non-agricultural use, the Project would have the opposite effect of what is stated in the Draft EIR. There would not be a benefit to the water budget or to available water supplies for the Salton Sea. The Project will *reduce* the amount of agricultural irrigation runoff water in IID's drain system, Fig Lagoon, the New River, and, ultimately, the Salton Sea. This, in turn, will contribute to the decline of the Salton Sea's elevation and exposure of the Salton Sea lakebed and playa. As a back-of-the-envelope calculation, converting approximately 2,000 acres of irrigated agricultural land to non-agricultural use would be expected to receive water deliveries of approximately 11,000 acre-feet/year; this equates to approximately 3,600 acre-feet/year of runoff/tilewater and approximately 110,000 acre-feet of runoff/tilewater over 30 years that

PC ORIGINAL PKG

would not enter the Salton Sea as a result of the Project. If this water does not flow to the Sea as agricultural irrigation runoff water as a result of agricultural production, IID cannot otherwise deliver this water to the Salton Sea. The Draft EIR must analyze the Project's contribution to declining water levels in the Salton Sea and the associated environmental impacts including on biological resources, air quality, hydrology and water quality, and aesthetics. D-4 cont'd

As further detailed below in Section VII, several of the environmental analyses also have insufficient cumulative impact studies.

VII. Environmental Analysis, Impacts, and Mitigation D-5

The Draft EIR's environmental analyses contain material shortcomings including inadequate explanations and unsupported conclusions. In addition, multiple mitigation measures in the Draft EIR lack a specific performance standard or are improperly deferred. As detailed below, an EIR's analysis and conclusions must be based on reasoned explanation and substantial evidence rather than conjecture, and mitigation measures must be described in the EIR rather than deferred for subsequent development after the Project has been approved.

"The purpose of an [EIR] is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project." (Cal. Pub. Res. Code § 21061.) "An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences." (*Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014) 227 Cal.App.4th 1036, 1045.) The lead agency must use its "best efforts to find out and disclose all that it reasonably can." (Cal. Code Regs., tit. 14, § 15144.) "[T]here must be a disclosure of the analytic route the agency traveled from evidence to action. . . . To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions. An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404–05 (internal citations omitted).)

An EIR's "conclusions, findings, and determinations, . . . the scope of an EIR's analysis of a topic, the methodology used for studying an impact, and the reliability or accuracy of the data upon which the EIR relied" must be supported by substantial evidence. (*Town of Atherton v. California High-Speed Rail Authority* (2014) 228 Cal.App.4th 314, 349.) Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (Cal. Code Regs., tit. 14, § 15384(b).) "Argument, speculation, unsubstantiated opinion or narrative…do[] not constitute substantial evidence." (*Id.* at (a).)

"An EIR shall describe feasible measures which could minimize significant adverse impacts." (Cal. Code Regs., tit. 14, § 15126.4(a)(1).) A lead agency may not defer formulation of the specific details of a mitigation measure until after project approval, unless "it is impractical or infeasible to include those details during the project's environmental review" and "the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation

PC ORIGINAL PKG

will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will [be] considered, analyzed, and potentially incorporated in the mitigation measure." (Cal. Code Regs., tit. 14, § 15126.4(a)(1)(B).)

D-5 cont'd

A. Aesthetics

D-5a

1. The Draft EIR's analysis of aesthetic impacts, and the conclusions that Impacts 3.2-1 and 3.2-3 are less than significant, lack substantial evidence because the Draft EIR does not adequately consider impacts on visual character in the vicinity of the Project. The western Imperial Valley in the vicinity of the Project has a rural and agrarian character, with sweeping vistas toward Mount Signal in the distance with productive farmland in the foreground and middle ground. These views of Mount Signal (including the farmland in the foreground and middle ground) are iconic. The Project would substantially alter these views by converting verdant farmland to black solar panel arrays, thereby eliminating essential aesthetic qualities of the Imperial Valley. The analysis for Impact 3.2-1 is further flawed because it is based only on views of distant mountains without considering the Project's adverse changes to the foreground and middle ground of those views (where the Project would convert farmland to solar panel arrays).

2. The Draft EIR's analysis of aesthetic impacts, and the conclusions that Impacts 3.2-1 and 3.2-3 are less than significant, lack substantial evidence because the Draft EIR does not adequately consider impacts on views from Interstate 8. Interstate 8 in the vicinity of the Project is the gateway to the Imperial Valley. The uninterrupted views of verdant farmland on both sides of Interstate 8 east of the Westside Main Canal give significant meaning to the Imperial Valley's agricultural character as eastbound drivers leave the desert and enter the Imperial Valley. The Project would substantially alter these views over a two-mile stretch of Interstate 8 by converting verdant farmland to black solar panel arrays.

3. The Draft EIR's analysis of aesthetic impacts, and the conclusions that Impacts 3.2-1 and 3.2-3 are less than significant, lack substantial evidence because the Draft EIR does not consider views from Rio Bend RV and Golf Resort and Storm's Crossings Mobile Estates. To adequately analyze the Project's aesthetic impacts, the Draft EIR needed to evaluate a Key Observation Point located at Rio Bend RV and Golf Resort or Storm's Crossings Mobile Estates, looking west toward Fig Lagoon, the New River, and the Project. This Key Observation Point is critical to properly evaluating the Project's aesthetic impacts because Rio Bend and Storm's Crossing have the highest concentration of stationary (i.e., not driving) viewers in the vicinity of the Project. In evaluating the Project's aesthetic impacts from this Key Observation Point, the analysis must consider the Rio Bend Specific Plan. The Project is inconsistent with the Specific Plan's objective to "[d]esign land uses that will maximize enjoyment of visual amenities, including Rio Bend Lake, Drew Lake, Lakeview Golf Course, New River open space, Fig Lagoon (evaporation pond), and Signal Mountain." It is also inconsistent with the Specific Plan's Design Principle 3.e, which states that "[t]he mobile home park spaces and single family residential lots will be designed to take advantage of distant views of Signal Mountain, intermediate

PC ORIGINAL PKG

views of the New River Valley and Fig Lagoon, and near views of Rio Bend Lake, Drew Lake, and Lakeview Golf Course." These provisions of the Rio Bend Specific Plan identify important views and visual features in the vicinity of the Project that must be analyzed. D-5a cont'd

B. Agricultural Resources

1. The Draft EIR's conclusion with respect to the significance of Impact 3.3-1 and the effectiveness of mitigation is unsupported by substantial evidence. (See Cal. Code Regs., tit. 14, § 15384.) To analyze Impact 3.3-1 (whether the Project would convert Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to non-agricultural uses), the Draft EIR relies upon the California Land Evaluation Site Assessment ("LESA") Model. Based on the LESA Model's scoring methodology, the Draft EIR concludes that the impact would be significant without mitigation. The Draft EIR further concludes that Mitigation Measures AG-1a and AG-1b would reduce this impact to a less than significant level. The Draft EIR does not explain how Mitigation Measures AG-1a and AG-1b would be effective at reducing Impact 3.3-1 to a less than significant level; it does not provide an analytic link between the chosen threshold of significance (i.e., the LESA Model's scoring methodology), the significance of the impact, and the effect of the mitigation measures. For example, the Draft EIR does not explain why the in-lieu mitigation fee options (20% or 30% of the fair market value per acre of comparable non-prime and prime farmland, respectively) or a to-be-negotiated public benefit agreement would be effective at mitigating the impact to a less than significant level. "[T]here must be a disclosure of the analytic route the agency traveled from evidence to action. . . . To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).) D-5b

2. Mitigation Measure AG-1b—which requires approval of a reclamation plan prior to issuance of a grading permit—constitutes improperly deferred formulation of mitigation. The Draft EIR does not explain why it is impractical or infeasible to develop a reclamation plan now, what specific performance standards the reclamation plan will achieve, and the types of potential actions that can feasibly achieve a (here, non-existent) specific performance standard. (See Cal. Code Regs., tit. 14, § 15126.4(a)(1)(B).) While the discussion under Impact 3.3-1 asserts that "[t]he reclamation plan will provide guidance and performance criteria to ensure that no net reduction in Important Farmland occurs," CEQA requires that the performance criteria be identified in the text of the mitigation measure itself, not merely in the future to-be-developed plan. "An EIR is inadequate if the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR. . . . The fact that [the lead agency and other regulatory agencies] must ultimately approve the . . . plan does not cure these informational defects." (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 (internal citations omitted).)

PC ORIGINAL PKG

3. The Draft EIR's conclusion with respect to the Project's consistency with Imperial County General Plan Goal 1 (see Table 3.3-3) is unsupported by substantial evidence. (See Cal. Code Regs., tit. 14, § 15384.) General Plan Goal 1 states that all important farmland "should be reserved for agricultural uses." The Draft EIR concludes that the Project would be consistent with this policy because the Project would result in a temporary conversion of agricultural land to non-agricultural uses and implementation of the reclamation plan required by Mitigation Measure AG-1b would restore the site to pre-Project conditions. However, Mitigation Measure AG-1b merely requires the reclamation plan to include "procedures by which the project site will be returned to its current agricultural *condition*." There is no guarantee that agricultural *use* would be economically viable at that time and would continue on the site after the Project is decommissioned and the site is reclaimed. Furthermore, with technological advancements over the next three decades, it is quite possible that the Project equipment could be replaced/repowered to continue operating well beyond the 30 years currently contemplated. Thus, there is no guarantee that the Project's conversion of agricultural land to non-agricultural use would be temporary. In any event, by allowing the site to be used for the Project's non-agricultural energy generation and storage use, even temporarily, the County would not be reserving the Project site for agricultural uses.

4. For all the reasons identified above, the Draft EIR should conclude that the Project would have a significant impact on agricultural resources by converting nearly 1,849 acres of high-quality and valuable farmland to non-agricultural use for at least 30 years (and quite possibly much longer). This could result in roughly $12 million of lost agricultural productivity annually.

5. The Draft EIR must consider indirect effects to surrounding farmland resulting from the Project's conversion of agricultural land to solar panel arrays, which will create what is referred to as a "heat island effect." The heat island effect may impact any people or uses in and around the Project, such farmworkers in adjacent fields or buildings. The Project may result in displacement of farmworkers and farmworker housing from the area. The Draft EIR thus needs to address whether the heat island effect will result in displacement of people or housing resulting in construction of replacement housing elsewhere, as required by CEQA Appendix G's Population and Housing provisions. (Cal. Code Regs., tit. 14, Appendix G, Sec. XIV.) The Draft EIR concludes, based on an analysis in the Initial Study, that the Project would not have Population and Housing impacts and thus does not evaluate these topics in the Draft EIR. (p. 6-4.) However, given heat island effects on people and uses within and adjacent to the Project, such as farmworkers and farmworker housing, the Draft EIR needs to include an analysis of Population and Housing.

6. The Imperial County Board of Supervisors resolutions referenced in Mitigation Measure AG-1a should be discussed in the Regulatory Setting subsection (Section 3.3.2).

D-5b cont'd

PC ORIGINAL PKG

C. Air Quality

1. The Regulatory Setting subsection (Section 3.4.2) incorrectly discusses the Southern California Association of Government's ("SCAG") 2020 Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS"). However, SCAG's most recent RTP/SCS was adopted in April 2024. The Draft EIR needs to be revised to discuss SCAG's 2024 RTP/SCS.

2. The Draft EIR (p. 3.4-18) incorrectly states that "[n]o mitigation measures are required" for Impact 3.4-1. The discussion of Impact 3.4-1 (p. 3.4-17) is clear that Mitigation Measures AQ-1 through AQ-5 are required to reduce Impact 3.4-1 to a less than significant level: "[T]he thresholds of significance adopted by the air district (ICAPCD), determine compliance with the goals of the attainment plans in the region. . . . As shown in Table 3.4-8 under Impact 3.4-2, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissions. As shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant." The "Mitigation Measure(s)" subsection for Impact 3.4-1 needs to identify Mitigation Measures AQ-1 through AQ-5 as required to reduce the impact to a less than significant level.

3. The discussion of Impacts 3.4-1 and 3.4-2 must explain the nature and extent of human health effects of the Project's impacts on air quality. "The EIR must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must adequately explain what the agency does know and why, given existing scientific constraints, it cannot translate potential health impacts further. . . . Basic CEQA principles dictate there must be a reasonable effort to put into a meaningful context the conclusion that the air quality impacts will be significant." (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 521–22.)

4. The discussion of Impact 3.4-2 must explain why implementation of Mitigation Measures AQ-1 through AQ-5 would *increase* the Project's carbon monoxide emissions (see Tables 3.4-8, 3.4-9).

5. Mitigation Measure AQ-1 constitutes improperly deferred formulation of mitigation. Mitigation Measure AQ-1 lists numerous dust control measures, some of which are required to be implemented and others of which are required only if "feasible." "[T]his language merely reiterates the legal obligation imposed on [Imperial County] by CEQA—to mitigate significant environmental effects to the extent feasible—without providing any guide as to how that obligation must be satisfied in particular circumstances." (*East Oakland Stadium Alliance v. City of Oakland* (2023) 89 Cal.App.5th 1226, 1275.) The Draft EIR does not explain why it is impractical or infeasible to analyze and determine now which dust control measures are feasible and must be implemented, nor are there specific performance standards for

D-5c

PC ORIGINAL PKG

determining which dust control measures will be required. Furthermore, the "enhanced" dust control measures ("Curtail construction during periods of high ambient pollutant concentrations" and "Implement activity management") are impermissibly vague: they do not define what constitutes a period of "high ambient pollutant concentration," the extent to which construction must be curtailed, and when and how "activity management" would be implemented.

D-5c cont'd

6. Mitigation Measures AQ-4 and AQ-6—which require future approval of a dust suppression management plan and an operational dust control plan, respectively—constitute improperly deferred formulation of mitigation. The Draft EIR does not explain why it is impractical or infeasible to develop these dust control plans now, what specific performance standards the dust control plans will achieve, and what types of potential actions can feasibly achieve a (here, non-existent) specific performance standard. (See Cal. Code Regs., tit. 14, § 15126.4(a)(1)(B).) "An EIR is inadequate if the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR. . . . The fact that [the lead agency and other regulatory agencies] must ultimately approve the . . . plan does not cure these informational defects." (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281. Internal citations omitted.)

7. The analyses of Impacts 3.4-1 and 3.4-2 are inadequate because Mitigation Measures AQ-1 through AQ-5 are too vague and lack performance standards (as discussed above). Because the Draft EIR does not identify the actual measures that would be implemented or the performance standards that they must achieve, it is not clear how (if at all) those ill-defined measures would reduce emissions as reflected in Table 3.4-9. "[T]here must be a disclosure of the analytic route the agency traveled from evidence to action." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).)

8. Impact 3.4-3 needs to analyze the Project's potential air quality impacts on sensitive receptors in the event of a BESS facility fire that releases hazardous air pollutants and toxic air contaminants.

9. Impact 3.4-3 needs to analyze impacts on sensitive receptors at the Rio Bend RV and Golf Resort and Storm's Crossing Mobile Estates, including analysis of dust and other pollutant impacts during west winds.

10. As explained above, reduced agricultural runoff/tilewater may result in drying of bodies of water and IID's drainage system that typically collect runoff/tilewater, including the Salton Sea. The air quality analysis needs to address potential air quality impacts resulting from increased exposure of land, shorelines, river banks, river beds, and lakebeds that would result from decreases in runoff/tilewater.

PC ORIGINAL PKG

D. Biological Resources

1. The discussion of Impact 3.5-3 incorrectly references Mitigation Measure BIO-3, when instead Mitigation Measure BIO-8 would be implemented to reduce this impact to a less than significant level. D-5d

2. The Draft EIR's analysis of biological resources impacts and conclusions of less than significant impacts lack substantial evidence because the Draft EIR does not adequately consider the indirect impacts on habitat and species resulting from converting agricultural land to non-agricultural use. By converting agricultural land to non-agricultural use, the Project would reduce the amount of agricultural irrigation runoff water in IID's drain system, the New River, Fig Lagoon, and the Salton Sea.

E. Geology and Soils

1. The description of the Imperial County General Plan (p. 3.7-7) needs to be revised to reference that IID has a Local Hazard Mitigation Plan. IID does not have a Disaster Readiness Standard Operating Procedure. D-5e

F. Greenhouse Gas Emissions

1. The Potential Effects of Climate Change subsection (p. 3.8-4) presents a misleading characterization of the impacts on water supply from projected changes in snowpack in California. The projected decline in California snowpack levels and associated projected decline in water supply do not affect the Imperial Valley. The Draft EIR should be revised to recognize that the sole source of water for IID, and the Project, is the Colorado River, which is not affected by California snowpack. D-5f

2. The Regulatory Setting subsection (Section 3.8.2) incorrectly states that "CARB adopted the latest update to the Climate Change Scoping Plan in December 2017." In fact, CARB's most recent Scoping Plan for Achieving Carbon Neutrality was adopted in December 2022. This subsection needs to be revised to discuss CARB's most recent Scoping Plan.

3. The Regulatory Setting subsection (Section 3.8.2) and Impact 3.8-2 incorrectly discuss SCAG's 2020 RTP/SCS. However, SCAG's most recent RTP/SCS was adopted in April 2024. The Draft EIR needs to be revised to discuss SCAG's 2024 RTP/SCS and analyze the Project in relation to SCAG's 2024 RTP/SCS.

G. Hazards and Hazardous Materials

1. The discussions of Impacts 3.9-1 and 3.9-2 improperly rely on a vague "fire protection plan" to support the conclusions that the impacts would be less than significant. This is inadequate under CEQA for three reasons: D-5g

    a. First, the fire protection plan appears to be a mitigation measure that is improperly considered a feature of the Project. The Draft EIR states: "Fire protection is achieved through project design features, such as monitoring,

PC ORIGINAL PKG

diagnostics and a fire suppression system." (p. 3.9-10.) But the fire protection plan is not discussed in the Project description, and it functions like a mitigation measure to avoid or minimize potentially significant impacts. "The failure of the EIR to separately identify and analyze the significance of the impacts . . . before proposing mitigation measures is not merely a harmless procedural failing. . . . [T]his shortcutting of CEQA requirements subverts the purposes of CEQA by omitting material necessary to informed decisionmaking and informed public participation. It precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences." (*Lotus v. California Department of Transportation* (2014) 223 Cal.App.4th 645, 658.)

D-5g cont'd

b. Second, the fire protection plan appears to be improperly deferred mitigation. (See Cal. Code Regs., tit. 14, § 15126.4(a)(1)(B).) The Draft EIR does not explain why it is impractical or infeasible to develop the details of the fire suppression plan now, nor does it identify any performance standard that the fire suppression plan must meet or explain how the plan would be enforced. While the Draft EIR lists fire suppression agents and other measures that may be implemented, it does not specify, for instance, volumes of potential suppression agents necessary given the Project scope, other measures that would be implemented as part of the fire suppression plan, or how potential measures could achieve performance standards.

c. Third, because the Draft EIR does not include adequate details about the fire protection plan, the analyses of Impacts 3.9-1 and 3.9-2 lack substantial evidence. "[T]here must be a disclosure of the analytic route the agency traveled from evidence to action." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).) "An EIR is inadequate if the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR." (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 (internal citations omitted).)

2. The "Decommissioning/Restoration and Residual Impacts" discussion in Section 3.9.4 is similarly vague and conjectural; it also improperly defers mitigation. This Section states: "At the end of a lithium-ion module's useful life (typically estimated to be 10 to 20+ years) and final project decommissioning, the batteries would be decommissioned and recycled per manufacturer guidelines. Certain manufacturers allow for the batteries to be returned to the manufacturing facility or a third-party recycling facility where the batteries are disassembled, and certain materials are recovered from the battery for reuse." (p. 3.9-14.) This analysis improperly defers the analysis of future disposal and recycling of key battery components for the Project. The Draft EIR does not explain why it is impractical or infeasible to develop a decommissioning plan now, what specific performance standards the plan will achieve, and the types of potential actions that can feasibly achieve a specific

PC ORIGINAL PKG

performance standard. (See Cal. Code Regs., tit. 14, § 15126.4(a)(1)(B).) To this end, the analysis does not even detail current recycling and disposal requirements for hazardous materials to establish the minimum performance standards that would be achieved under current regulations. The analysis and conclusion are devoid of substantial evidence and inadequate for CEQA purposes.

D-5g cont'd

H. Hydrology/Water Quality

D-5h

1. In the Imperial Irrigation District subsection (pp. 3.10-13–14), the bulleted list of policy documents governing IID operations should be modified as follows:

   a. Third bullet: Delete reference to Definite Plan and System Conservation Plan. Replace with IID's Water Conservation Plan.

   b. Fourth bullet: Modifications as follows: "The Equitable Distribution Plan, which defines how IID will apportion its available water supply in order to prevent overruns and stay within the 3.1 million acre-feet annual consumptive use cap ~~on the~~ of Colorado River water ~~rights~~."

   c. Add a new bullet: IID's Interim Water Supply Policy for Non-Agricultural Water Users to provide a mechanism to address new water supply requests for proposed projects being developed within the IID water service area.

2. The Integrated Water Resources Management Plan subsection (p. 3.10-14) should be revised to reflect that IID is not a stormwater district. It should be noted that although municipalities and other point source dischargers are allowed to discharge into IID's drain facilities, the IID drainage system is not intended to, nor designed to, collect or convey, urban or stormwater runoff. The following sentence should be modified as follows: "In relation to the Project, IID maintains regulation over the drainage of water into their drains~~, including the design requirements of stormwater retention basins. IID requires that retention basins be sized to handle an entire rainfall event in case the IID system is at capacity~~."

3. The discussion of mitigation measures in Impact 3.10-1 is impermissibly vague, as is Mitigation Measure HYD-1. This hydrology analysis relies on unspecified Best Management Practices ("BMPs") intended to address and/or mitigate potentially significant impacts. The discussion of Impact 3.10-1 explains that "[t]he utilization of proper erosion and sediment control BMPs is critical in preventing discharge to surface waters/drains." (p. 3.10-15.) However, in describing these BMPs, the analysis proposes to use BMPs such as: "Activity Restrictions: Restrict activities that have the potential to create adverse impacts on water quality." (Table 3.10-3.) Items 2 through 6 in Table 3.10-3 are similarly vague, and hollow tautological descriptions are inadequate for CEQA purposes. "To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).)

PC ORIGINAL PKG

4. The discussion of Impact 3.10-3 is similarly conclusory and lacking in substantial evidence. The construction analysis (p. 3.10-19) does not specify what will be constructed as part of the Project, but claims that Mitigation Measure HYD-1, including unspecified, deferred BMPs, will adequately address potential impacts from the unspecified scope of construction. The analysis concludes, without support, that "project construction would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial on- or off-site erosion or siltation. This is considered a less than significant impact after mitigation has been incorporated." (*Id.*) But this statement is conclusory—the analysis does not include substantial evidence, nor does it even specify the duration of construction or scope of proposed Project construction improvements necessary to evaluate whether the Project's construction would result in substantial on- or off-site erosion or siltation.

5. The operations analysis for Impact 3.10-3 is similarly conjectural. The analysis asserts: "After construction is complete, all existing roads would be left in a condition equal to or better than their pre-construction condition." (p. 3.10-19.) However, there is no discussion of the condition of existing roads and how their surface informs current drainage patterns. Moreover, there is no explanation of what leaving existing roads "in a condition equal to or better than their pre-construction condition" means regarding surface cover materials and acreage, drainage, and hydrology. Indeed, the analysis does not provide any metrics or comparative measures that could be used to substantiate this operations analysis, which concludes without evidence that no additional mitigation measures beyond HYD-1 are required. (p. 3.10-19.) "An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences." (*Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014) 227 Cal.App.4th 1036, 1045.)

6. Impact 3.10-4 and Mitigation Measure HYD-2 improperly rely on deferred mitigation. The Draft EIR (p. 3.10-20) states: "[I]mplementation of Mitigation Measure HYD-2 requires that the project's Drainage Plan adhere to the County's Engineering Guidelines Manual, IID 'Draft' Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. As such, infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary." As explained above, this type of speculative, deferred analysis of mitigation measures does not meet CEQA's requirements.

7. Impact 3.10-4 and Mitigation Measure HYD-2 improperly identify the County and the County Engineer as the agency and person responsible for review and approval of the drainage of the site and the Project. However, IID is the owner and operator of the drainage system. The Draft EIR needs to be revised to accurately reflect the role

D-5h cont'd

PC ORIGINAL PKG

and authority of Imperial County and the role and authority of IID for the drainage of the site and the Project.

8. Section 3.10 also includes a material error in describing the Project's existing condition that renders the analysis and conclusions regarding hydrology and water quality inadequate for CEQA purposes. "The fundamental goal of an EIR is to inform decision makers and the public of any significant adverse effects a project is likely to have on the physical environment. To make such an assessment, an EIR must delineate environmental conditions prevailing absent the project, defining a baseline against which predicted effects can be described and quantified." (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 447 (internal citations omitted).) The analysis in Section 3.10 includes inconsistent characterizations of ground permeability. The analysis asserts that the Project site's approximately 1,849 acres are "impervious" (not allowing water to pass through), but also claims that water will continue to percolate into the ground. Because this error is repeated, it does not appear to simply be a typo; instead, it is a material error that prevents the reader from understanding the Project's existing conditions and the Project's potential effects. For example, the hydrology analysis includes the following conflicting statements: D-5h cont'd

    a. Impact 3.10-4. "[D]aily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that flooding (on- or off-site) increases when compared to existing conditions. Lastly, the project site would remain largely impervious over the operational life of the project. Therefore, the proposed project would result in no significant impacts associated with the alteration of drainage patterns resulting in on- or off-site flooding." (p. 3.10-20.)

    b. Impact 3.10-5. "The project site would remain largely impervious over the operational life of the project. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious. The proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This is considered a less than significant impact." (p. 3.10-21.)

    c. Impact 3.10-6. "Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious." (p. 3.10-22.)

9. Section 3.10.4 (Decommissioning) relies on the flawed hydrological analysis to analyze Project decommissioning and, therefore, needs to be revised as well: "Decommissioning and restoration activities would result in similar impacts on hydrology and water quality as would occur during construction of the proposed project." (p. 3.10-23.)

10. The analyses of Impacts 3.10-3 to 3.10-6 all conclude that Mitigation Measure HYD-2 is sufficient to address any potential impacts from the Project's alteration of

PC ORIGINAL PKG

drainage patterns. However, the Draft EIR's analyses do not evaluate the consequences or changes that will result from fallowing nearly 1,849 acres of agricultural lands for the Project's estimated duration of up to 30 years. Instead, the analyses simply assume that fallowing agricultural lands, eliminating irrigation, and installing solar panels would not change the drainage patterns that years of farming, irrigation, and drainage have established. The analyses do not provide any substantial evidence corroborating this assumption; there is no explanation of why farmland that was previously used for agriculture would remain unchanged and retain the same levels of permeability throughout three decades of disuse. These Impact analyses thus need to include substantial evidence supporting their assumptions and conclusions to fulfill CEQA's requirements.

D-5h cont'd

11. The cumulative impacts analysis of potential hydrological impacts also contains underlying errors that should be addressed. The cumulative impact analysis asserts: "The project is not expected to result in long-term operations-related impacts related to water quality. The project would mitigate potential water quality impacts by implementing site design, source control, and treatment control BMPs, as outlined in Mitigation Measures HYD-1 and HYD-2." (p. 5-15.) However, as described above, the mitigation measures are insufficient for CEQA purposes. As a result, the cumulative impacts analysis is unable to ascertain whether the Project's "incremental effect is cumulatively considerable." (Cal. Code Regs., tit. 14, § 15130(a).) The current cumulative impact analysis is not based on substantial evidence and thus does not meet CEQA's requirements.

I. Land Use/Planning

1. The Draft EIR's land use and planning analysis omits any discussion of General Plan policies that conflict with the Project, resulting in an inaccurate and misleading analysis that fails to meet CEQA's fundamental goal "to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences." (*Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014) 227 Cal.App.4th 1036, 1045.)

D-5i

2. The CEQA Guidelines provide that "[t]he EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans." (Cal. Code Regs., tit. 14, § 15125(d).) Here, the Draft EIR claims to analyze "General Plan goals and objectives relevant to the project" in Table 3.11-2, which concludes that all relevant General Plan goals and objectives are consistent with the Project. (Pp., 3.11-10-3.11-16.) But this consistency analysis and conclusion are misleading. As summarized below, even a brief analysis of the General Plan shows that there are goals and objectives relevant to, and plainly inconsistent with, the Project that have simply been omitted from the land use and planning analysis in the Draft EIR. For instance, approximately 93% of the Project's acreage (1,727 acres) would convert prime farmland, farmland of statewide importance, and unique farmland to non-agricultural uses, and only about 3% of the Project's acreage occupies non-agricultural land uses. (Draft EIR, p. 3.3-3.) To this end, the Draft EIR's agricultural resources chapter includes mitigation measures to address the potential

PC ORIGINAL PKG

impacts resulting from conversion of prime farmland, unique farmland, and farmland of statewide importance. However, the Draft EIR's land use and planning analysis entirely omits any references to the General Plan goals, policies, and objectives that expressly provide for the preservation of prime farmlands, as summarized below.

D-5i cont'd

a. The Land Use Element includes the following goals and objectives that conflict with the Project and were omitted from the Draft EIR:

- "Goal 1: Preserve commercial agriculture as a prime economic force.
  - Objective 1.1 Encourage the continued agricultural use of prime/productive agricultural lands.
  - Objective 1.2 Discourage the location of incompatible development adjacent to or within productive agricultural lands.
  - Objective 1.3 Identify compatible agriculture-related uses or renewable energy projects appropriate for location in agricultural areas." (General Plan Land Use Element, p. 36.)

b. The Agriculture Element includes the following goals and objectives that conflict with the Project and were omitted from the Draft EIR:

- "Goal 1: All Important Farmland, including the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, as defined by Federal and State agencies, should be reserved for agricultural uses.
  - Objective 1.1 Maintain existing agricultural land uses outside of urbanizing areas and allow only those land uses in agricultural areas that are compatible with agricultural activities.
  - Objective 1.2 Encourage the continuation of irrigation agriculture on Important Farmland.
  - Objective 1.3 Conserve Important Farmland for continued farm related (nonurban) use and development while ensuring its proper management and use.
  - Objective 1.4 Discourage the location of development adjacent to productive agricultural lands.
  - Objective 1.5 Direct development to less valuable farmland (i.e., Unique Farmland and Farmland of Local Importance rather than Prime Farmland or Farmland of Statewide Importance) when conversion of agricultural land is justified.

PC ORIGINAL PKG

- Objective 1.8 Allow conversion of agricultural land to non-agricultural uses including renewable energy only where a clear and immediate need can be demonstrated, based on economic benefits, population projections and lack of other available land (including land within incorporated cities) for such non-agricultural uses. Such conversion shall also be allowed only where such uses have been identified for non-agricultural use in a city general plan or the County General Plan, and are supported by a study to show a lack of alternative sites." (General Plan Agricultural Element, pp. 29-30.)

D-5i cont'd

3. In reviewing an agency's actions, courts do not require strict consistency between a proposed project and a General Plan's goals, objectives and policies, and may defer to an agency's consistency determination. (*Friends of Lagoon Valley v. City of Vacaville* (2007) 154 Cal.App.4th 807, 817.) Here, however, the Draft EIR simply omits all discussion of General Plan objectives and goals that plainly conflict with the Project, thereby subverting CEQA. The lead agency must use its "best efforts to find out and disclose all that it reasonably can." (Cal. Code Regs., tit. 14, § 15144.) By denying decisionmakers and the public the opportunity to understand how the County proposes to reconcile these conflicting policies, the land use and planning chapter fails to meet CEQA's requirements and the conclusions presented for Impact 3.11-12 are based on a flawed, misleading, and incomplete analysis that must be redone. (Cal. Code Regs., tit. 14, § 15125(d).)

4. Where the Draft EIR actually evaluates the Project's consistency with General Plan policies, the analysis is conclusory, inaccurate, and inadequate. For instance, the Draft EIR identifies in Table 3.10-2, Objective 6.3: "Protect and improve water quality and quantity for all water bodies in Imperial County." (p. 3.10-11.) The Draft EIR wrongly concludes that the Project is consistent with this objective focusing solely on water quality. The analysis does not address water quantity. In fact, the Project will result in a substantial decline in the quantity of water to adjacent drains and the Salton Sea. The Draft EIR does not provide any supporting information regarding the projected water usage of the Project or the corresponding quantify runoff water to adjacent drains and to the Salton Sea. There is also no supporting information regarding the reduction of runoff to adjacent drains and to the Salton Sea resulting from the Project, nor of the corresponding decline of the Salton Sea's elevation. CEQA requires substantial evidence, not conclusory speculation. "[T]here must be a disclosure of the analytic route the agency traveled from evidence to action. . . . To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).)

5. The Regulatory Setting subsection (Section 3.11.2) incorrectly discusses SCAG's 2020 RTP/SCS. However, SCAG's most recent RTP/SCS was adopted in April 2024. The Draft EIR should be revised to discuss SCAG's 2024 RTP/SCS.

PC ORIGINAL PKG

J. Noise and Vibration

D-5j

1. The description of existing conditions (Section 3.12.1) asserts, without evidence, that the noise study prepared for the unrelated Campo Verde Solar Project EIR is adequate for the Project's EIR. The Campo Verde Solar Project EIR was prepared and certified in 2012. The analysis does not explain why the noise study for a nearby project site that was conducted over a decade ago is "representative of existing conditions and appropriate for use in this EIR." (p. 3.12-3.) Indeed, even if the Campo Verde Solar Project is adjacent to the Project site, the Project site spans 1,849 acres, is adjacent to Interstate 8 and framed by a different set of roads and land uses, and encompasses a distinct area and topography. This suggests that the Campo Verde Solar Project's noise study would not necessarily be representative of the Project site's existing noise conditions, particularly given the number of years that have passed since that study was completed. To this end, the noise analysis also does not address whether the conditions that existed when the noise analysis for the Campo Verde Solar Project was performed remain the same today at the Project site. The Draft EIR does not rely on accurate noise analyses and instead relies on conjecture to support its findings of less than significant noise impacts. "To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).)

2. The discussion of Impact 3.12-1 lacks adequate evidentiary support. "An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404–05 (internal citations omitted).)

    a. The Draft EIR asserts that "the average distance from the construction activities to these sensitive land uses is approximately 250 feet. Construction noise will attenuate with increased distance from the noise sources. As such, noise levels would not exceed the County's 75 dBA Leq construction noise threshold." (p. 3.12-13.) However, the associated table does not corroborate this assertion, and instead only shows that the composite noise level at 50 feet is 87 dBA Leq. (Table 3.12-3.) The EIR should present the specific analysis supporting its conclusions, including some type of analysis showing that the noise levels would fall below 75 dBA Leq at 250 feet.

    b. The Draft EIR states that "[t]raffic noise is not greatly influenced by lower levels of traffic, such as those associated with the proposed project's construction effort. For example, traffic levels would have to double in order for traffic noise on area roadways to increase by 3 dBA. The proposed project's construction traffic on area roadways would increase hourly traffic volumes by much less than double; therefore, the increase in construction related traffic noise would be less than 3 dBA and is not significant." (p. 3.12-13.) However, the analysis does not actually provide the Project's construction

PC ORIGINAL PKG

traffic volume, increase in volume compared to existing conditions, or anticipated noise levels. The Draft EIR should do more than provide rough guesswork to support its conclusion that there are no significant impacts.

c. The Draft EIR states that "noise associated with the O&M building or energy storage area do not represent a significant noise source, and would involve less intensive activities and operation of equipment as compared to existing agricultural operations in the area. Therefore, impacts would be less than significant." (p. 3.12-14.) However, the analysis does not state the noise levels of the Project's operations and maintenance building or BESS facility, nor how these noise levels compare to the noise levels of existing agricultural operations in the area. The absence of metrics and analysis makes this statement conclusory and based on conjecture instead of substantial evidence.

D-5j cont'd

3. These errors affect the cumulative noise impact analysis, which needs to be revised.

   a. The cumulative impact analysis states: "As discussed in Section 3.12, Noise and Vibration, the project's noise levels would not exceed the County's 75 dBA Leq construction noise threshold. Therefore, impacts from construction noise are considered less than significant." (p. 5-16.) However, as explained above, the Draft EIR does not establish this point using substantial evidence, thus preventing the Draft EIR from relying on this argument to reach the conclusion that there is no cumulative noise impact.

   b. The cumulative impact analysis also states that "Stationary-source and vehicular noise from the aforementioned related projects would be similar in nature and magnitude to those discussed for the projects in Section 3.12, Noise and Vibration. For the proposed project, no noise impacts have been identified. Operation of the other cumulative projects listed in Table 5-1 could result in the long-term stationary source noise levels that exceed applicable standards at nearby sensitive receptors and/or result in substantial increases in ambient noise levels. However, given that the project facilities would be constructed within the A-2, A-2-R, and A-3 zones, and components of the project associated with noise during operation would be located at appropriate distances from the residential uses scattered in this portion of the County, long-term operational noise levels are not expected to exceed normally acceptable noise levels for these zones (e.g., 70 dBA Ldn)." However, neither the cumulative impact analysis or the noise analysis actually establish the Project's noise levels or cumulative noise levels, thus resulting in a cumulative impact analysis based on conjecture rather than substantial evidence. As explained above, "the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions." (*Laurel Heights Improvement Association v. Regents of the University of California* (1989) 47 Cal.3d 376, 404 (internal citations omitted).)

PC ORIGINAL PKG

K. Utilities and Service Systems

D-5k

1. In the California Water Code subsection (p. 3.16-3), the discussions of water supply assessments and urban water management plans should be separated into two separate paragraphs for clarity. The EIR should discuss the applicability and non-applicability, respectively, of the California Water Code provisions related to water supply assessments and urban water management plans, in relation to this Project.

2. The Imperial Integrated Regional Water Management Plan subsection (p. 3.16-3) should be updated for accuracy. The Imperial Integrated Regional Water Management Plan is not a governing document. The 2012 plan no longer meets the basic requirements of the Department of Water Resources. The plan's non-agricultural demand projections are substantially higher than actual demand over the last decade, largely attributed to the aggressive water conservation goals the State is enforcing on jurisdictions.

3. The Equitable Distribution Plan subsection (p. 3.16-4) should be updated to reference the most current Equitable Distribution Plan (dated July 2023). This paragraph needs to be modified as follows: "IID's Equitable Distribution Plan distributes ~~apportions~~ available water supply by Water Users Category (Agricultural Water Users, Potable Water Users, and Industrial/Commercial Water Users) and then apportions the water within each Water Users Category among the water users within that category. The Equitable Distribution Plan provides ~~a framework~~ for: (1) receiving Colorado River water apportionment, (2) aggregating apportionment between farm units, and (3) transferring ~~agricultural~~ water between water ~~agricultural~~ users within the same Water Users Category~~, and (4) receiving IID On-Farm Efficiency Conservation Program or Fallowing Program benefits~~. Implementation of this program is ~~a~~ critical for IID's management of its water supply within its annual entitlement and a component of IID's implementation of on-farm conservation and temporary fallowing programs."

4. The Interim Water Supply Policy for Non-Agricultural Projects subsection (p. 3.16-4) needs to be modified as follows: "The IWSP identifies ~~designates~~ up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply consumptive use cap, for new non-agricultural projects."

5. Under Impact 3.16-1 (p. 3.16-6) it is incorrectly stated that the Project will be supplied water "under an existing water agreement with IID." This statement must be deleted because there is no existing water agreement for the Project.

6. Impact 3.16-1 (p. 3.16-7) also incorrectly applies the IWSP to the Project. The IWSP identifies up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects as described in the Regulatory Setting in section 3.16.2. This paragraph (p. 3.16-7) needs to be modified as follows: "In the event that IID determines that the proposed project is subject to the ~~utilize~~ IWSP for Non-Agricultural Projects ~~water~~, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID

PC ORIGINAL PKG

has adopted an IWSP for non-agricultural projects under ~~from~~ which water supplies can be contracted to serve new non-agricultural developments within IID's water service area. The IWSP identifies ~~sets aside~~ 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, to serve new non-agricultural projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID."

D-5k cont'd

VIII. Alternatives

The Draft EIR does not satisfy CEQA's requirements to describe a range of reasonable alternatives to the Project (including alternative locations and technologies), to identify alternatives considered but rejected as infeasible, and to provide a meaningful analysis and comparison of alternatives with the Project.

D-6

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (Cal. Code Regs., tit. 14, § 15126.6(a).) "The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination." (Cal. Code Regs., tit. 14, § 15126.6(c).) "The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (Cal. Code Regs., tit. 14, § 15126.6(d).)

"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives." (Cal. Code Regs., tit. 14, § 15126.6(f)(1).)

"The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location." (Cal. Code Regs., tit. 14, § 15126.6(f)(2)(A).) "If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR." (Cal. Code Regs., tit. 14, § 15126.6(f)(2)(B).)

The Draft EIR does not analyze a sufficient range of reasonable alternatives that would avoid or substantially lessen any of the Project's significant effects.

The Draft EIR must evaluate potential alternative locations for the Project. The Draft EIR (Section 7.3.1) avoids considering alternative locations for the Project because the Project proponent "does not have control of an alternate site." But lack of control alone is not an adequate reason to deem this alternative infeasible. (See Cal. Code Regs., tit. 14, § 15126.6(f)(1).) The Draft EIR should instead identify potential alternative locations for the

PC ORIGINAL PKG

Project that would attain most of the Project objectives and avoid or substantially lessen any of the Project's significant effects, and then consider whether those locations are feasible. As part of that feasibility analysis, the Draft EIR should consider not just whether the Project proponent *currently* controls the alternative sites, but also whether the Project proponent "*can reasonably* acquire, control or otherwise have access to the alternative site." (Cal. Code Regs., tit. 14, § 15126.6(f)(1).)

D-6 cont'd

In addition, the Draft EIR should evaluate potential alternatives of the project technologies that would attain most of the Project objectives and avoid or substantially lessen any of the Project's significant effects, including a BESS-only alternative and alternative generation and storage technologies.

Finally, the analysis of Alternative 2 (Reduced Project Site) should evaluate and explain whether any of this alternative's impacts would be less than significant without implementation of mitigation measures (i.e., whether this alternative would avoid any of the Project's significant impacts before mitigation). Without this information, the alternatives analysis in the Draft EIR does not "include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (Cal. Code Regs., tit. 14, § 15126.6(d).)

IX. Recirculation

D-7

The above issues and shortcomings indicate that the Draft EIR requires significant revisions, which merit recirculation of a revised Draft EIR so that the public and decision-makers can evaluate the revisions.

"A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review . . . but before certification." (Cal. Code Regs., tit. 14, § 15088.5(a).) These circumstances include changes in the project or environmental setting as well as additional data or other information, including a disclosure showing that "(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented[;] (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance[;] (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it[; or] (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." (Cal. Code Regs., tit. 14, § 15088.5(a).)

The changes required to address all of the issues noted in this comment letter are so substantial that the Draft EIR should be revised and then recirculated for an additional opportunity for public review and comment.

Conclusion

D-8

In submitting this letter, IID provides these comments to ensure that the Draft EIR will satisfy the goals and requirements of CEQA for the benefit of the County, the Project proponent and

PC ORIGINAL PKG

the communities within the Imperial Valley. Thank you for your consideration of these comments. If you have any questions, please contact me at jshoff@iid.com or (760) 339-9530. D-8 cont'd

Sincerely,

Joanna Smith Hoff
Deputy General Counsel

cc: Jamie Asbury, General Manager
Geoff Holbrook, General Counsel
Mike Pacheco, Manager, Water Department
Tina Shields, Manager, Water Department
Matt Smelser, Manager, Power Department

Attachments
1. IID Comment Letter re Notice of Preparation, dated October 7, 2024
2. IID Comment Letter re Administrative Draft EIR, dated January 30, 2025

IID

A century of service.

www.iid.com

Since 1911

October 7, 2024

Ms. Rocio Yee
Planner I
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: NOP of a DEIR for the Big Rock 2 Cluster Solar and Battery Storage Project

Dear Ms. Yee:

On September 4, 2024, the Imperial Irrigation District received from the Imperial County Planning & Development Services Department, the Notice of Preparation of a Draft Environmental Impact Report for the Big Rock 2 Cluster Solar and Battery Storage Project. The project proposes the construction and operation of a 500 MW solar generation and 500 MW battery energy storage facility on 1,849 acres of land located west of Drew Road and east north of Mandrapa Road, approximately one mile southwest of Seeley, California in unincorporated Imperial County. The project would connect to the IID electrical system with a 230 kV gen-tie line linking the project's substation to the IID Liebert Switching Station and from there would connect to the SDG&E Imperial Valley Substation via a subsequent 230 kV gen-tie line.

The Imperial Irrigation District has reviewed the information and has the following comments:

1. For electrical service for the future development of the resulting parcel, the applicant should be advised to contact Ignacio Romo, IID project development planner, at 760-482-3426 or e-mail Mr. Romo at IGRomo@IID.com to initiate the customer service application process. In addition to submitting a formal application (available at http://www.iid.com/home/showdocument?id=12923), the applicant will be required to submit an AutoCAD file of site plan, approved electrical plans, electrical panel size and panel location, operating voltage, electrical loads, project schedule, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to a project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to a project.

2. Electrical capacity is limited in the project area. A circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the

PC ORIGINAL PKG

provision of electrical service to the project shall be the financial responsibility of the applicant.

3. Applicant shall provide a surveyed legal description and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID as necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

4. There are several IID water facilities. The applicant may not use IID's canal or drain banks to access the project site. Any abandonment of easements or facilities shall be approved by IID based on systems (Irrigation, Drainage, Power, etc.) needs.

5. To insure there are no impacts to IID water facilities, applicant should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services section for review and comment prior to final project design and CUP approval. IID WDES can be contacted at (760) 339-9265 for further information on this matter.

6. The project may impact IID drains with project site runoff flows draining into IID drains. To mitigate impacts, the project may require a comprehensive IID hydraulic drainage system analysis. IID's hydraulic drainage system analysis includes an associated drain impact fee.

7. A construction storm water permit from the California Regional Water Quality Control Board is required before commencing construction and an industrial storm water permit from CRWQCB is required for the operation of the proposed facility. The project's Storm Water Pollution Prevention Plan and storm water permits from CRWQCB should be submitted to IID for review.

8. For information on procuring construction water, the applicant should contact IID South End Division at (760) 482-9800.

9. The impacts to the Salton Sea, due to loss or reduction of agricultural runoff caused by agricultural land conversion to urban use shall require discussion in the EIR. Due to the potential loss or reduction of inflow to the Salton Sea and to IID drains with its concurrent environmental impacts, the applicant should address this issue as well as provide analysis that the project does not negatively impact the IID Water Conservation and Transfer Draft Habitat Conservation Plan, the existing Section 7 Biological Opinion and the California Endangered Species Act Permit 2081. The documents are available at https://www.iid.com/water/library/qsa-water-transfer/environmental-assessments-permits.

PC ORIGINAL PKG

10. An assessment or discussion of cumulative impacts considering other non-agricultural facilities whose water use (or potential water use) would reduce the inflow conveyed to IID drains and the Salton Sea is necessary. It is advisable that the applicant present a cumulative impact analysis on inflow to IID drains and the Salton Sea.

11. In order to obtain a water supply from IID for a non-agricultural project, the project proponent will be required to comply with all applicable IID policies and regulations and may be required to enter into a water supply agreement. Such policies and regulations require, among other things, that all potential environmental and water supply impacts of the project be adequately assessed, appropriate mitigation developed if warranted, including any necessary approval conditions adopted by the relevant land use and permitting agencies.

12. If IID implements a water allocation or apportionment program pursuant to the IID Equitable Distribution Plan, or any amending or superseding policy for the same or similar purposes, during all or any part of the term of said water supply agreement, IID shall have the right to apportion the project's water as an industrial water user. Information on how to obtain a water supply agreement can be found at the IID website https://www.iid.com/water/municipal-industrial-and-commercial-customers or by contacting Justina Gamboa-Arce, Water Resources Planner at (760) 339-9085 or jgamboaarce@iid.com.

13. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains, and receive drainage service form IID. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards. A construction storm-water permit from the California Regional Water Quality Control Board is required before commencing construction. An industrial storm water permit from CRWQCB is required for operation of the proposed facility. The project's storm-water permit from CRWQCB are to be submitted to IID.

14. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). A copy of the IID encroachment permit application and instructions for its completion are available at https://www.iid.com/about-iid/department-directory/real-estate. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.

PC ORIGINAL PKG

15. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities

16. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains and receive drainage service from the district. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards.

17. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and distribution lines, water deliveries, canals, drains, etc.) need to be included as part of the project's CEQA and/or NEPA documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully analyzed. **Any and all mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent**.

18. Dividing a project into two or more pieces and evaluating each piece in a separate environmental document (Piecemealing or Segmenting), rather than evaluating the whole of the project in one environmental document, is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation strategies. In general, if an activity or facility is necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approving the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The project description should include all project components, including those that will have to be approved by responsible agencies. The State CEQA Guidelines define a project under CEQA as "the whole of the action" that may result either directly or indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. CEQA case law has established general principles on project segmentation for different project types. For a project requiring construction of offsite infrastructure, the offsite infrastructure

PC ORIGINAL PKG

must be included in the project description. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App. 4th 713.

19. When the project goes through the CEQA compliance process, it is important to bear in mind that to address the project impacts to the electrical utility (i.e., the IID electrical grid), considered under the environmental factor "Utilities and Services" of the Environmental Checklist/Initial Study, to determine if the project would require or result in the relocation or construction of new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects; a circuit study/distribution impact study, facility study, and/or system impact study must be performed.

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Power Dept.
Paul Rodriguez – Deputy Mgr. Power Dept.
Geoffrey Holbrook – General Counsel
Michael P. Kemp – Superintendent General, Fleet & Compliance Services
Laura Cervantes. – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

PC ORIGINAL PKG

IID
A century of service
Since 1911

January 30, 2025

Ms. Diana Robinson
Planning Division Manager
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: Administrative Draft EIR for the Big Rock 2 Cluster Solar and Battery Storage Project

Dear Ms. Robinson:

On January 24, 2025, the Imperial Irrigation District received from the Imperial County Planning & Development Services Department, a request for agency comments on the Administrative Draft Environmental Impact Report for the Big Rock 2 Cluster Solar and Battery Storage Project. The project proposes the construction and operation of a 500 megawatts solar generation and 500 MW battery energy storage facility on 1,849 acres of land located west of Drew Road and east and north of Mandrapa Road, approximately one mile southwest of Seeley, California in unincorporated Imperial County. The project plans to connect to the IID electrical system with a 230 kilovolts gen-tie line linking the project's substation to the IID Liebert Switching Station and from there connect to the SDG&E Imperial Valley Substation via a subsequent 230 kV gen-tie line.

The IID has reviewed the Administrative Draft EIR and in addition to the comments provided in the district's October 7, 2024 letter (see attached letter) has the following remarks:

1. With regards to the transmission of the project's electrical energy generation, the facility impact study has not been completed, consequently, findings have not been determined. However, since the project is being proposed as a 225 MW photo-voltaic/battery energy storage hybrid facility that will interconnect to the existing Liebert Switching Station, IID upgrades outside of the Liebert Switching Station are not anticipated.

2. The project proponent will be required to provide and bear all costs associated with acquisition of land, rights of way, easements, and infrastructure relocations and realignments deemed necessary to accommodate the project. Any street or road improvements imposed by the local governing authority shall also be at the project proponent cost.

3. Public utility easements over all private and public roads and additional ten (10) feet in width on both side of the private and public roads shall be dedicated to IID for the construction, operation, and maintenance of its electrical infrastructure.

4. The applicant will be required to provide rights of ways and easements for any proposed power line extensions and/or any other infrastructure needed to serve the project. In addition, the necessary access to allow for continued operation and maintenance of any IID facilities located on adjoining properties where no public access exists.

5. Substations and switchyards shall be located on property that will transferred to IID in fee simple ownership with legal access.

6. Appendix J has been rejected by IID as it does not follow the format approved by IID and the County of Imperial. The applicant is working on a resubmission and the Draft EIR should not circulate until the adequate format is used and replaced. Please note there were a number of inconsistencies in the original Appendix J:

   Page viii – Appendix J – The water supply assessment referenced needs to be replaced with the IID/Imperial County approved format and template. Please replace with correct version and update narrative in all sections that reference Appendix J for consistency.

   Page 2-13 Section 2.2 Project Objectives, last bullet, please strike: "~~Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.~~" There are no current water shortages in Imperial County to farmers and/or agricultural landowners. Water conservation efforts are efficiency based and voluntary, requiring continued agricultural production without limits.

   Page 3.7-7 County of Imperial General Plan: The following statement needs to be modified to reference that IID has a Local Hazard Mitigation Plan. There is no Disaster Readiness Standard Operating Procedure.

PC ORIGINAL PKG

County of Imperial General Plan

The County of Imperial General Plan, Seismic and Public Safety Element identifies potential natural and human-induced hazards and provides policy to avoid or minimize the risk associated with hazards. The Seismic and Public Safety Element identifies 'lifelines and critical facilities' whose disruption could endanger the public safety. Lifelines are defined as networks of services that extend over a wide area and are vital to the public welfare, and can be classified into four categories: energy, water, transportation, and communications. The IID has a formal Disaster Readiness Standard Operating Procedure for the Water Department, Power Department, and the entire District staff for response to earthquakes and other emergencies.

Page 3.8-4 Potential Effects of Climate Change

Snowpack- The projected decline in California snowpack levels and projected water supply decline in California do not directly affect the Imperial Valley. Please note that IID's sole source of water, and thus the project, is Colorado River water.

Page 3.10-3 Table 3.10-2, Project Consistency with Applicable General Plan Policies. The project is not consistent with some of that policy under Objective 6.3 "Protect and improve water quality and quantity for all water bodies in Imperial County." The project will result in a substantial decline in the quantity of water to adjacent drains and the Salton Sea. Please incorporate an analysis.

Page 3.10-13 and 3.10-14, Imperial Irrigation District. Bulleted policy documents should be modified as follows:

- **third bullet**: Delete reference to Definite Plan and System Conservation Plan. Replace with IID's Water Conservation Plan.
- **fourth bullet:** modifications as follows: "The Equitable Distribution Plan, which defines how IID will apportion its available water supply in order to prevent overruns and stay within the cap on the Colorado River water rights"
- **add a new bullet:** IID's Interim Water Supply Policy for Non-Agricultural Water Users to provide a mechanism to address new water supply requests for proposed projects being developed within the IID service area.

Page 3.10-14, Integrated Water Resources Management Plan. IID is not a stormwater district. It shall be noted that although municipalities and other point source dischargers are allowed to discharge into IID's drain facilities, the IID drainage system is not intended to, nor designed to, collect or convey, urban or stormwater runoff. Please delete the following: "In relation to the project, IID maintains regulation over the drainage of water into their drains~~, including the design requirements of stormwater retention basins. IID requires that retention basins be sized to handle an entire rainfall event in case the IID system is at capacity~~."

PC ORIGINAL PKG

Page 3.16-1, Section 3.16 Utilities and Service Systems. Paragraph one, second to last sentence: please label the Water Supply Assessment (WSA) as "Draft." Until the Board of Supervisors takes actions on the required findings, the document circulates as a draft.

Page 3.16-3, California Water Code section. For clarity, separate urban water management plan discussion from the water supply assessment discussion into two separate paragraphs as well as their non-applicability and applicability for this project.

Page 3.16-3, Local, Imperial Integrated Regional Water Management Plan. Please update this section. The IRWMP is not a governing document. The 2012 IRWMP no longer meets the basic requirements of the Department of Water Resources. The plan's non-agricultural demand projections are substantially higher than actual demand over the last decade, largely attributed to the aggressive water conservation goals the State is enforcing on jurisdictions.

Page 3.16-4, Local, Equitable Distribution Plan. Please update this section referencing the most current EDP Update (July 2023). Modify paragraph item (3): "transferring ~~agricultural~~ offered water between ~~agricultural~~ water users within the same water user category, and"

Page 3.16-4, Local, Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects. Please update this section referencing the most current water supply assessment template provided by IID (January 2025) and modify the quote as follows:

"[…] designates up to 25,000 ~~acre-feet~~ AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for ~~any~~ new non-agricultural projects. The IWSP provides a mechanism to develop a water supply agreement for any appropriately permitted project, and establishes the framework and set of fees necessary to ensure the supplies used to meet any new demands do not adversely affect existing users by funding water conservations or augmentation projects as needed to offset the new demand. (Appendix J of this EIR)."

Page 3.16-8, Local, Comparison of Projected Water Demand to Historical Usage on The Project Site. Once Appendix J is updated to the approved format consistent with the template provide, actually water use history will replace the "estimated historical annual water usage." Please update this section for consistency.

PC ORIGINAL PKG

Page 3.16-8 and 3.16-9, Local, Water Supply Availability. Once Appendix J is updated to the approved format and consistent with the template provided, this paragraph will need to be updated. Delete the following sentence as there is no existing water supply agreement and add the concluding narrative as per the water supply assessment template: ~~These projections indicate that IID will be able to serve the project water under the project's existing water supply agreement with IID.~~

Please note and incorporate the following:

In order to obtain a water supply from IID for a non-agricultural project, the project proponent will be required to comply with all applicable IID policies and regulations and may be required to enter into a water supply agreement. IID has implemented a water allocation or apportionment program pursuant to its revised Equitable Distribution Plan. The Project will further be subject to any amendments or superseding policy for the same or similar purposes, during all or any part of the term of said water supply agreement. IID shall have the right to apportion the Project's water as an industrial water user.
For more information on how to obtain a water supply agreement, please visit IID's website at https://www.iid.com/water/municipal-industrial-and-commercial-customers or contact Justina Gamboa-Arce at (760) 339-9085 or jgamboaarce@iid.com.

Please delete the following sentence and replace it as indicated below:

~~Furthermore, as a senior water rights holder to the Colorado River, IID does not anticipate any reductions in their water rights to the Colorado River and maintains sufficient supplies to meet the proposed project water demands.~~ Should reductions to IID's water supply be ordered or directed from a governmental authority having appropriate jurisdiction, the project may be required to reduce its water supply demand by a proportionate reduction of the total volume of water available to IID.

7. **Page 2-42** Section 2.8.2 Imperial Irrigation District. The phrase "although not discretionary approvals" should be deleted from this section (see below). Some of IID's approvals are discretionary or can be made discretionary.

"Various approvals may be required from IID in conjunction with implementation of the proposed project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the project, an encroachment would occur as the proposed project would cross IID facilities with access points and electrical crossings. The proposed project may also drain into IID drain facilities. Due to the preliminary nature of the project and the

rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals~~, although not discretionary approvals,~~ include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement"

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Enclosure

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Power Dept.
Paul Rodriguez – Deputy Mgr. Power Dept.
Geoffrey Holbrook – General Counsel
Joanna Smith-Hoff – Deputy General Counsel
Laura Cervantes. – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

PC ORIGINAL PKG

IID October 7, 2024 Comment Letter on the NOP of Draft EIR for the Big Rock 2 Cluster Solar and Battery Storage Project

PC ORIGINAL PKG

IID
A century of service.
www.iid.com
Since 1911

October 7, 2024

Ms. Rocio Yee
Planner I
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: NOP of a DEIR for the Big Rock 2 Cluster Solar and Battery Storage Project

Dear Ms. Yee:

On September 4, 2024, the Imperial Irrigation District received from the Imperial County Planning & Development Services Department, the Notice of Preparation of a Draft Environmental Impact Report for the Big Rock 2 Cluster Solar and Battery Storage Project. The project proposes the construction and operation of a 500 MW solar generation and 500 MW battery energy storage facility on 1,849 acres of land located west of Drew Road and east north of Mandrapa Road, approximately one mile southwest of Seeley, California in unincorporated Imperial County. The project would connect to the IID electrical system with a 230 kV gen-tie line linking the project's substation to the IID Liebert Switching Station and from there would connect to the SDG&E Imperial Valley Substation via a subsequent 230 kV gen-tie line.

The Imperial Irrigation District has reviewed the information and has the following comments:

1. For electrical service for the future development of the resulting parcel, the applicant should be advised to contact Ignacio Romo, IID project development planner, at 760-482-3426 or e-mail Mr. Romo at IGRomo@IID.com to initiate the customer service application process. In addition to submitting a formal application (available at http://www.iid.com/home/showdocument?id=12923), the applicant will be required to submit an AutoCAD file of site plan, approved electrical plans, electrical panel size and panel location, operating voltage, electrical loads, project schedule, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to a project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to a project.

2. Electrical capacity is limited in the project area. A circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the

IMPERIAL IRRIGATION DISTRICT · P.O. BOX 937 · IMPERIAL, CA 92251

PC ORIGINAL PKG

provision of electrical service to the project shall be the financial responsibility of the applicant.

3. Applicant shall provide a surveyed legal description and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID as necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

4. There are several IID water facilities. The applicant may not use IID's canal or drain banks to access the project site. Any abandonment of easements or facilities shall be approved by IID based on systems (Irrigation, Drainage, Power, etc.) needs.

5. To insure there are no impacts to IID water facilities, applicant should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services section for review and comment prior to final project design and CUP approval. IID WDES can be contacted at (760) 339-9265 for further information on this matter.

6. The project may impact IID drains with project site runoff flows draining into IID drains. To mitigate impacts, the project may require a comprehensive IID hydraulic drainage system analysis. IID's hydraulic drainage system analysis includes an associated drain impact fee.

7. A construction storm water permit from the California Regional Water Quality Control Board is required before commencing construction and an industrial storm water permit from CRWQCB is required for the operation of the proposed facility. The project's Storm Water Pollution Prevention Plan and storm water permits from CRWQCB should be submitted to IID for review.

8. For information on procuring construction water, the applicant should contact IID South End Division at (760) 482-9800.

9. The impacts to the Salton Sea, due to loss or reduction of agricultural runoff caused by agricultural land conversion to urban use shall require discussion in the EIR. Due to the potential loss or reduction of inflow to the Salton Sea and to IID drains with its concurrent environmental impacts, the applicant should address this issue as well as provide analysis that the project does not negatively impact the IID Water Conservation and Transfer Draft Habitat Conservation Plan, the existing Section 7 Biological Opinion and the California Endangered Species Act Permit 2081. The documents are available at https://www.iid.com/water/library/qsa-water-transfer/environmental-assessments-permits.

PC ORIGINAL PKG

10. An assessment or discussion of cumulative impacts considering other non-agricultural facilities whose water use (or potential water use) would reduce the inflow conveyed to IID drains and the Salton Sea is necessary. It is advisable that the applicant present a cumulative impact analysis on inflow to IID drains and the Salton Sea.

11. In order to obtain a water supply from IID for a non-agricultural project, the project proponent will be required to comply with all applicable IID policies and regulations and may be required to enter into a water supply agreement. Such policies and regulations require, among other things, that all potential environmental and water supply impacts of the project be adequately assessed, appropriate mitigation developed if warranted, including any necessary approval conditions adopted by the relevant land use and permitting agencies.

12. If IID implements a water allocation or apportionment program pursuant to the IID Equitable Distribution Plan, or any amending or superseding policy for the same or similar purposes, during all or any part of the term of said water supply agreement, IID shall have the right to apportion the project's water as an industrial water user. Information on how to obtain a water supply agreement can be found at the IID website https://www.iid.com/water/municipal-industrial-and-commercial-customers or by contacting Justina Gamboa-Arce, Water Resources Planner at (760) 339-9085 or jgamboaarce@iid.com.

13. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains, and receive drainage service form IID. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards. A construction storm-water permit from the California Regional Water Quality Control Board is required before commencing construction. An industrial storm water permit from CRWQCB is required for operation of the proposed facility. The project's storm-water permit from CRWQCB are to be submitted to IID.

14. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). A copy of the IID encroachment permit application and instructions for its completion are available at https://www.iid.com/about-iid/department-directory/real-estate. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.

PC ORIGINAL PKG

15. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities

16. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains and receive drainage service from the district. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards.

17. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and distribution lines, water deliveries, canals, drains, etc.) need to be included as part of the project's CEQA and/or NEPA documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully analyzed. **Any and all mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent.**

18. Dividing a project into two or more pieces and evaluating each piece in a separate environmental document (Piecemealing or Segmenting), rather than evaluating the whole of the project in one environmental document, is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation strategies. In general, if an activity or facility is necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approving the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The project description should include all project components, including those that will have to be approved by responsible agencies. The State CEQA Guidelines define a project under CEQA as "the whole of the action" that may result either directly or indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. CEQA case law has established general principles on project segmentation for different project types. For a project requiring construction of offsite infrastructure, the offsite infrastructure

PC ORIGINAL PKG

must be included in the project description. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App. 4th 713.

19. When the project goes through the CEQA compliance process, it is important to bear in mind that to address the project impacts to the electrical utility (i.e., the IID electrical grid), considered under the environmental factor "Utilities and Services" of the Environmental Checklist/Initial Study, to determine if the project would require or result in the relocation or construction of new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects; a circuit study/distribution impact study, facility study, and/or system impact study must be performed.

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Power Dept.
Paul Rodriguez – Deputy Mgr. Power Dept.
Geoffrey Holbrook – General Counsel
Michael P. Kemp – Superintendent General, Fleet & Compliance Services
Laura Cervantes, – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

Imperial Irrigation District

June 20, 2025

PC ORIGINAL PKG

Intro This comment is an introductory comment that summarizes the proposed project characteristics, IID's role as a Responsible Agency, and more detailed comments contained in the letter. Please refer to responses to comments D-1 through D-8 for more detailed responses to each of the specific comments provided in this comment letter.

D-1 The County ac knowledges that the project applicant is responsible for its portion of costs associated with any improvements, land acquisition, rights-of-way, easements and infrastructure relocations and realignments that are necessary to implement the proposed project. Such responsibilities are required as a General Condition of Approval as part of the Conditional Use Permit (CUP). Additionally, as a General Condition of Approval, the County requires that (all conditions of IID are met and responsibility of the applicant).

The County agrees that the various approvals that may be required from IID in conjunction with implementation of the proposed project, as described on EIR page 2-44, may involve discretionary approvals by IID. As such, EIR page 2-44 has been revised as follows:

> The following IID approvals, ~~although not discretionary approvals~~, include, but are not limited to:

D-2 The County acknowledges the projects requirements to comply with all applicable IID policies and regulations, and that the project applicant may be required to enter into a water supply agreement with IID. As discussed on EIR page 3.16-10, untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). In the event that IID determines that the proposed project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID.

D-3a EIR Section 2 Project Description provides a detailed description of the proposed project including the whole of the action and all of the integral components of the project. The project description provides detailed information regarding project construction, project components and operational characteristics to which the environmental analysis is based, which in term is adequate with respect to agencies ability to evaluate and review its environmental impacts.

The proposed BESS components of the project will be located within the project limits and area of disturbance as identified in the site plan, and to which is the basis of assumptions and corresponding analysis in the EIR. The specific location of BESS facilities within the project site will be determined as appropriate and applicable based on the optimal location for such facility, and the specific location within the project site would not alter or affect the environmental analysis contained in the EIR.

D-3b The proposed operations and maintenance components of the project will be located within the project limits and area of disturbance as identified in the site plan, and to which is the basis of assumptions and corresponding analysis in the EIR. The specific location of proposed operations and maintenance facilities within the project site will be determined as appropriate and applicable based on the optimal location for such facility, and the specific location within the project site would not alter or affect the environmental analysis contained in the EIR.

D-3c The proposed project substation(s) will be located within the project limits and area of disturbance as identified in the site plan, and to which is the basis of assumptions and corresponding analysis in the EIR. The specific location of proposed project substation(s) will be determined as appropriate and applicable based on the optimal location for such facility,

and the specific location within the project site would not alter or affect the environmental analysis contained in the EIR.

D-3d EIR Figure 2-4 Proposed Site Plan, depicts the proposed gen-tie alignment, which extends from the eastern boundary of Big Rock 2 at the project substation, east approximately ½ mile to the Liebert Substation. EIR Figure 2-4 also depicts the potential alternative gen-tie line, which would connect from the southern boundary of Big Rock 2, southward to the Liebert Substation. Both the proposed gen-tie line and the alternative gen-tie line alignment have been evaluated in the EIR (e.g.'s refer to EIR Figures 3.5-1 and 3.5-2, which depict the proposed and alternative gen-tie alignments, and locations of burrowing owl observations and burrows (both active and inactive/unknown) in relation to the gen-tie alignments). As it relates to proposed gen-tie(s), the EIR states that the structure type(s), height and final location(s) would be determined prior to issuance of building permits. These specifications will be determined as part of the final design efforts for the gen-tie, which are dependent on which gen-tie route is implemented. Regardless, the EIR discloses the driving factors that are necessary to address potential impacts – structure heights and potential gen-tie alignments.

D-3e Collector lines would be located within the project site boundaries and their locations would be determined as part of final project design. The locations, designs and alignments of collector lines would not affect the environmental analysis contained in the EIR as potential construction impacts have been assessed and considered as part of the project footprint and construction characteristics.

D-3f The project site is relatively flat, and construction of the project would not involve a significant change in topographical conditions and corresponding drainage patterns. As such, stormwater facilities associated with the project are anticipated to be minimal due to the fact that the project site will largely remain impervious and existing drainage patterns will remain. As described in the EIR (see EIR page 3.10-20), after construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that flooding (on- or off-site) increases when compared to existing conditions. Lastly, the project site would remain largely impervious over the operational life of the project.

D-3g The project applicant anticipates further coordination with IID and the County Department of Public Works will be required as part of final design of project components.

D-3h The Liebert Substation is located in a disturbed area void of biological or cultural resources. Improvements, if necessary, to the Liebert Substation would be very limited and confined to the limits of the existing substation that was evaluated in prior environmental documents. As such, any upgrades to the Liebert Substation as a result of the Big Rock 2 project are not anticipated to result in a significant impact to any environmental resource area.

D-3i Please refer to response to comment D-3h.

D-3j As discussed in the preceding responses to comments D-3a, the EIR Project Description, provides the level of detail regarding project construction and operational characteristics to allow a detailed impact analysis as provided in the EIR.

D-3k The comment claims that because the EIR describes that facilities may be shared .that the whole of the action is not contemplated. The evaluation of impacts is based on the

fundamental characteristics of the project with is up to 500 MW of photovoltaic energy system, 500 MW of battery storage, located on 1,849 acres of land. By nature of how these uses may be optimized, the applicant is proposing potential sharing of facilities which is fully disclosed in the EIR. The project applicant proposes the potential sharing of use of facilities due to the proximity of existing and planned solar facilities, and supporting components, that may be able to be optimized in cases where sharing may occur which would ultimately reduce construction requirements overall, with an incremental reduction of potential environmental impacts – in particular air emissions associated with construction activity. The proximity to other existing and planned solar facilities is illustrated in EIR Figure 2-2 Project Site. Regardless, the EIR contemplates that these facilities could occur anywhere within the project footprint and construction workforce and scheduling which is the basis of evaluation of environmental impacts. The specific location of facilities within the assumed project footprint and corresponding basis of analysis in the EIR does not affect the assessment of impacts. For example, biology impacts are based on the footprint of disturbance, of which would not change regardless of where contemplated shared facilities would be located. Therefore, the proposed project, in its entirety is fully described in EIR Section 2 Project Description of which the environmental analysis is based. No piecemealing has occurred as the County has prepared a full Environmental Impact Report that addresses the potential various actions of the project. While in some instances there is a provision of flexibility to allow the sharing of facilities, such contingencies are fully described and contemplated in the EIR Project Description, and the scope of the environmental analysis in the EIR encompasses potential shared facilities.

Additionally, no significant, unmitigated impacts were identified. The piecemealing argument may be more ripe where projects are sectioned to be “smaller” so as to avoid more robust environmental review as would occur under and EIR vs a Negative Declaration or Categorical Exemption.

D-3l EIR Section 2.2 Project Objectives has been revised to remove the last objective related to use of potentially fallowed agricultural lands:

- ~~Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.~~

EIR Section 7.2 Criteria for Alternatives Analysis has also been revised to delete reference to this objective.

D-4 Please refer to response to comment C-7c.

D-5 This comment provides an introductory summary comment of more detailed comments. Please refer to responses to comments D-5a through D-5k.

D-5a **Item 1.** The EIR does consider the impacts on visual character in the vicinity of the project. For example, as discussed in EIR Section 3.2 Aesthetics, “Generally, the project site and the immediately surrounding area comprise a relatively flat agricultural landscape that supports low, green grasses and other agricultural crops, irrigation canals, electrical transmission infrastructure, and solar development. The project’s valley landscape is generally indistinct from other locations in the agricultural belt of Imperial Valley and is submissive to prominent mountain terrain that provides a scenic backdrop of visual interest (Appendix B of this EIR).”

As provided in Section 3.2 Aesthetics, visual simulations demonstrate that the project would not interrupt views to distance mountains identified in this comment (see EIR Figures 3.2-8 and 3.2-10. As discussed in the EIR (see EIR page 3.2-15), "During operations, mobile views to the prominent visual resources in the project area landscape (i.e., rugged hills and distant mountain ranges) would remain available to motorists along I-8 and most local roads and would not be blocked or otherwise encumbered by project components. In addition, views to regional mountains from I-8 would not be blocked by the installation of 7-foot-high perimeter fencing or other project components."

With respect to the "foreground" and "middle ground" views, these views were considered in the environmental analysis. Please refer to EIR Figures 3.2-11 Key Observation Point 4, which is from westbound Vaughn Road. This figure shows the proposed condition, and that the foreground and middle ground views would be of solar photovoltaic PV arrays and proposed chain link fencing. EIR Figure 3.2-12 Key Observation Point 5, which is from southbound Liebert Road. This figure shows the proposed condition, and that the middle ground views would be of the proposed substation. EIR Figure 3.2-13 Key Observation Point 6, which is from eastbound Diehl Road. This figure shows the proposed condition, and that the middle ground view would be of solar photovoltaic PV arrays and proposed chain link fencing. As discussed in the EIR (see page 3.2-18), project operations would convert existing agricultural fields across approximately 1,849 acres to a solar facility with BESS. The primary visual change that would be experienced by viewers in the surrounding area is the introduction of numerous rows of orderly solar panels, and installation of slatted/non-slatted chain-link fencing along the site perimeter. the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) and existing operational Campo Verde Solar Facility that have altered the existing project area landscape. For these reasons, the introduction of a solar facility to the project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Item 2. The visual analysis provided in the EIR does consider views from Interstate 8. Specifically, Key Observation Point (KOP) 1 provides a representative view from westbound Interstate 8. KOP 2 provides a representative view from eastbound interstate 8. During operations, mobile views to the prominent visual resources in the project area landscape (i.e., rugged hills and distant mountain ranges) would remain available to motorists along I-8 and most local roads and would not be blocked or otherwise encumbered by project components. In addition, views to regional mountains from I-8 would not be blocked by the installation of 7-foot-high perimeter fencing or other project components. As previously discussed, project development would be set back between approximately 1,100 feet to up to 2,000 feet from I-8 and thus, solar arrays, perimeter fencing, and all other permanent features would appear small in the landscape and would not block or interrupt existing available views. While perimeter fencing would be visible from the interstate (see EIR Figure 3.2-8 and EIR Figure 3.2-9), the degree of visual change on the project site as experienced from the interstate would be minimal and overall effects to existing views would be minor. As shown in EIR Figure 3.2-8 and EIR Figure 3.2-9, the existing, interrupted view to distant mountains would be maintained and no blockage or significant interruption of existing views from the interstate to regional mountains would occur. As such, impacts would be less than significant.

Item 3. Potential views from the area were considered when identifying appropriate Key Observation Points (KOPs) for the visual analysis. KOPs were selected based on available

views to the project site. Selected viewpoints and visual simulations are appropriate as they are representative of the closest public vantage points to the project site and provide clear viewing angles to visual change associated with Project development. KOPs are representative vantage points offering views to the Project site in the surrounding area. Because as potential vantage points offering views to the analysis area cannot be inventoried, use of representative public vantage points is appropriate, and the typical approach employed for visual analysis prepared pursuant to CEQA. As described in the VIA (EIR Appendix B), as an initial step in identifying and selecting KOPs, aerial imagery was reviewed to identify locations from which the Project would potentially be visible from public accessible vantage points. Following this review, preliminary representative viewpoints for site photography were established. A photographic field survey occurred in September 2023 during which representative viewpoints were visited and existing conditions and views towards the Project site were photo-documented. A subset of five photographed viewpoints were selected as KOPs. Assessments of existing visual conditions were made based on professional judgment that took into consideration sensitive receptors and sensitive viewing areas in the project area.

The Rio Bend RV Resort and Storm's Crossings Mobile Estates were not selected as KOPs for the Project because neither location is truly a publicly-accessible vantage point. Based on desktop mapping and observations made during the visual assessment field investigation, both the RV Resort and Mobile Estates community are located behind an access restricted gate located off of Drew Road. As these developments are essentially private and visual effects to private viewpoints are not expressly protected under CEQA, establishment of a KOP in these developments would not be appropriate. The Rio Bend RV and Golf Resort is located approximately ¼ mile from the project site. As such, low-profile structures associated with the project, such as fencing and solar arrays may be visible from certain locations, but would not obstruct a scenic view. Furthermore, lack of a KOP and visual simulation from these specific developments does not preclude meaningful public review and comment on the Project EIR. Specifically, the EIR included six visual simulations of the Project as anticipated to be experienced from the six KOPs in the surrounding area. The visual simulations present a range of visual change and visual effects that should inform the public's understanding of effects and alteration to the existing landscape.

The project site is not located within the boundaries of the Rio Bend Specific Plan; therefore, development regulations and planning principles that are required for development within the Specific Plan Area, are not applicable to the proposed project.

D-5b **Item 1.** The permanent conversion of agricultural land classified as Prime Farmland and Farmland of Statewide Importance is considered a significant impact under CEQA. However, with respect to the proposed project, the conversion is identified as temporary in nature. As such replacement of agricultural lands is not required in order to mitigate the temporary conversion of agricultural land. Implementation of Mitigation Measure AG-1a would reduce the impact associated with the temporary conversion of important farmlands to non-agricultural uses to a level less than significant.

Specifically, as identified in the EIR, the following program is provided in the Agricultural Element:

The project would temporarily convert land designated as Prime Farmland and Farmland of Statewide Importance to non-agricultural uses, however, the project will be required to provide

a “clear long-term economic benefit to the County” as required, by contributing to the County’s established public benefit agreement.

On March 1, 2011, the County Board of Supervisors adopted the Public Benefit Program. On January 24, 2012, the County Board of Supervisors adopted “Establishing Guidelines for the Public Benefit Program for use with Solar Power Plants in Imperial County.” As identified in these guidelines, “the County should receive an agricultural benefit when the solar project is being located on farmland within the County, which will be used for offsetting temporary negative effects to the community, local economy and agriculture industry. Such uses may include, but are not limited to, stewardship, protection, and enhancement of agricultural lands within Imperial County; tools, technology, and techniques for protection of agriculture commodities or increase of crop yields, and support of programs or projects that increase agriculture industry employment opportunities.” As stated, these are guidelines for negotiating specific agreements with developers of utility-scale solar projects. Further, these guidelines are periodically reviewed and updated, including the monetary assessments associated with the conversion of agricultural acreage. The Public Benefit Program has been in operation for over 10 years, and it has been successful in providing the intended benefits to both agricultural and community projects.

The suite of mitigation options ensure that there will be less than significant impacts to farmland. The Project would abide by the standard DOC process for establishing a conservation easement. If this mitigation option is selected, the Applicant and Imperial County would work together to identify potentially suitable agricultural lands for an ACE. This review process would focus on finding farmland of similar quality and realty value, whereas a DOC requirement is that “[t]he property proposed for easement must have characteristics (e.g., location, soil quality) that make it a priority for the easement holder organization,”[i] which in this instance would be Imperial County. It is recognized that LESA is an available DOC tool to help identify potentially suitable and similar agricultural lands and may be employed for this project. After lands of similar quality are identified, the Applicant would either purchase an available plot of suitable farmland or approach landowners with suitable farmlands to secure purchase of a plot. This farmland would then be deeded to Imperial County as an ACE in perpetuity for agricultural use.

Pursuant to DOC’s response to frequently asked questions, an applicant does not have to submit an ACE application with a formal appraisal “if agricultural conservation easement values in the project area have been well established by other, similar easement purchases”.[ii] The Applicant and County will review any recent ACEs and determine if they offer a representative comparison to the subject project site. If not, a formal appraisal will be prepared. Regardless, the County and Applicant will closely coordinate with DOC throughout this process.

Therefore, the project would abide by the established DOC and ACE process as raised by the comments on the Draft EIR. As provided by DOC, LESA is an available tool if ACE values in the project area are not well-established. It is not a first-cut requirement to use LESA but will be used if deemed appropriate by DOC.

The commenter’s new recommendations regarding the in-lieu mitigation fee and public benefit agreement mitigation options seemingly direct in-lieu mitigation fees and public benefit agreements to ensure that an ACE be instituted, which is included as an option under AG-1a. It is agreed that ACEs are a long-established method used by Imperial County to help abate development pressure on agricultural lands. Accordingly, the County views ACEs as a viable method to reducing potential impacts to farmlands to less than significant levels, and this program does not need to be modified to require an ACE. As requested by the commenter on the Draft EIR, the Final EIR adopts the recommended edit that appraisal be performed in accordance with California Department of General Services guidelines and by a qualified,

licensed professional. Through the application of the identified mitigation measure(s), impacts to agricultural resources would be less than significant, as supported by the County's Agricultural Benefit Program. Therefore, a statement of overriding considerations is not required.

The commenter also questions the effectiveness of Option 4 of Mitigation Measure AG-1a for avoiding prime farmland when similar measures were considered as part of Alternative 2 to the proposed Project. Mitigation Measure AG-1a ensures less than significant impacts to farmland that would be temporarily converted from agricultural use. To clarify, Option 4 of Mitigation Measure AG-1a(B) is just one of the four options for mitigating the impacts of temporary prime farmland conversion to less than significant levels. Any one of the options is sufficient to achieve less than significant impacts and Option 4 is not necessary to uphold this conclusion of less than significant impacts.

Item 2. The Final EIR's conclusion that conversion of agricultural land will be temporary is supported by substantial evidence and clear permit conditions. As provided in the Draft EIR responses to this comment, in accordance with Mitigation Measure AG-1b, "the Project would submit a final Reclamation Plan to the County for approval prior to the issuance of a grading permit. This is also captured as a discretionary approval under Imperial County in Section 2.8 (Required Project Approvals). A bond for the amount equal to the reclamation cost estimate (prepared by a professional engineer or contractor) would be held for the duration of the Project and would be released upon the County's satisfaction with the returned state of the temporarily converted lands. This mechanism will ensure that the agricultural lands temporarily converted by the Project are returned to the agriculturally productive/farmable condition prior to the development of the Project before the bond is released. This will become an enforceable Condition of Approval (COA) in the Conditional Use Permit (CUP) and Mitigation Monitoring and Reporting Plan (MMRP), which will be added to the Final EIR."

The Reclamation Plan relies on the standardized form provided by Imperial County to identify existing conditions, proposed reclamation activities, and a preliminary cost estimate. These Applications serve as the basis for future site reclamation and will be refined and finalized in consultation with the County prior to the issuance of a grading permit. While the County's Reclamation Plan Application is a standardized form, the Draft Applications provide details on the proposed reclamation activities and their potential costs to: 1) establish the standard/conditions that the site must be returned to; 2) the amount to put in bond/trust to ensure that the reclamation activities are performed to the established standards; and 3) identify potential environmental impacts from the reclamation process, as captured in the Draft EIR.

Reclamation activities would be planned and conducted in accordance with County requirements to measure baseline soil conditions and ensure the land will be returned to its current agricultural quality. An agronomic-baseline report (prepared by a professional agronomist) will document baseline conditions of the agricultural portions of the Project site. A schedule of current agricultural operations will also be submitted and include: (1) a land releveling survey with topsoil yardage needs; (2) planned machinery operations, such as removal of rubble and buried pipes and cables, grading, ripping, and other operations to re-establish soil tilth; (3) soil amendments; and (4) revegetation and re-establishment of soil microbiology. In addition, the Applicant will monitor for pests, including insects, vertebrates, weeds, and pathogens, notify the Agricultural Commissioner's office regarding any suspected pest species, maintain records of pests found and treatments used, and obey all pesticide use laws, regulations, and permit conditions.

Again, the purpose of this specific bond is to commit the Applicant to restoring and reclaiming the site to the satisfaction of the County. Therefore, this reclamation bond serves as a mechanism to ensure that the site will be restored to a farmable condition at the end of the project. This has been memorialized in the COAs for the project and is a binding obligation. Therefore, the conversion of agricultural lands will be temporary (up to 30 years). Prospecting that the Applicant may not honor this financial and legal obligation is speculative, although proper abandonment may have not occurred at other energy facilities in California that are not associated with the Applicant. In the event that the Applicant is not able to perform the reclamation, the bond amount would be used to reclaim and restore the site; therefore, the site would be returned to an arable state regardless of the Applicant's ability or desire to do so.

Item 3. Please refer to response to Item 2.

Item 4. The EIR does conclude that the temporary conversion of agricultural lands is a significant impact. Proposed mitigation measures would reduce the impact to a level less than significant.

Item 5. A heat island occurs when changes to the landscape cause areas to become warmer than surrounding areas. The key to understanding urban heat islands is the concept of albedo, which is how much light bounces off a surface versus how much is absorbed. For the proposed project, the amount of light that is absorbed or reflected is dependent on the angle of the light. As the angle of the sun changes, the solar panel would absorb more and more sunlight. At solar noon, the albedo of the solar panel is nearly 0 and all the sunlight is absorbed and converted into electric or heat energy.

However, bare ground and soil absorbs the same amount of sunlight regardless of the solar angle. Consequently, the bare ground around a solar panel would absorb more heat over the course of a day than the solar panel does. Therefore, development of the project would decrease surface temperatures and would not result in a heat island and impacts would be less than significant.

All exposed surfaces (e.g., houses, cars, rocks) absorb heat produced by the sun. A "heat island" effect is generated when land is covered with structures (e.g., concrete buildings and asphalt roads) which absorb and store significantly more heat during the day than the undeveloped earth surface. Additionally, these developed areas are often filled with energy-consuming devices (e.g., engines, appliances, and heating, air-conditioning, and ventilation [HVAC] systems) that generate waste heat.

Solar arrays consist of PV panels mounted on aluminum and steel support structures, restricting sunlight from reaching the ground surface. Additionally, the amount of the sun's heat absorbed by a solar panel is similar to the amount of the sun's heat absorbed by open land. However, solar panels store less heat than the earth because they consist of a thin, lightweight glass that is surrounded by airflow. Therefore, heat dissipates quickly from a solar panel compared with solid earth, which dissipates heat slowly. The project would also include energy-consuming devices (e.g., inverters) that could generate marginal amounts of waste heat. There is nothing in the record to date that would indicate that the project would significantly increase ambient air temperatures outside the project site. Fthenakis and Yu from Columbia University and Brookhaven National Laboratory combined models with field data to determine the extent to which PV facilities altered ambient air temperatures (Fthenakis and Yu 2013). Temperatures surrounding the facility were found to cool completely at night and the researchers determined that the PV facility "did not induce a day-after-day increase in ambient temperatures, and therefore, adverse micro-climate changes from a potential PV plant are not

a concern." This study also concluded that increases in temperatures completely dissipated approximately 5-18 meters above the facility and that thermal energy "promptly dissipated" with distance from the facility. Remote sensing research produced by Edalat and Stephen from UNLV in 2017 supports the conclusions of Fthenakis and Yu (2013), demonstrating that land surface temperatures surrounding a solar facility were not significantly impacted by the solar facility (Edalat and Stephen 2017).

Because there will be no heat island effect, the project would not result in the displacement of farmworkers. Further, no farmworkers currently reside within the project site.

Item 6. Draft EIR Section 3.3.2 Regulatory Setting has been revised as follows as provided in the Final EIR:

> County of Imperial Guidelines for the Public Benefit Program for use with Solar Power Plants in Imperial County
>
> Imperial County has created the Public Benefit Program to address the impacts the utility-scale solar power plants have on the community, local economy, agriculture industry, employment, infrastructure economic development and quality of life. On June 26, 2012 per Minute Order #8, Imperial County Board of Supervisors approved the Renewable Energy Public Benefit Agreement:
>
> - (2) restricted funds were created (Agriculture Benefit and Community Benefit)
> - (2) advisory committees were created (Agriculture and Community Advisory)
> - Seek applications and finalize recommendations
>
> The 2012 adoption of the Public Benefit Program included provisions for the periodic review of the guidelines.
>
> Pursuant to these provisions, the County reviewed and amended the guidelines in May 9, 2023.
>
> Prior to the most recent amendment in 2023, the Public Benefit Program had been in operation for a decade. While the program had been successful in providing benefits to both the agricultural and community projects, the County had also experienced an increase in the development of utility-scale solar power plants. In amending the guidelines, the County acknowledged that the increase in development had not brought the traditional increase in revenue to the County and that over the same time period, the costs of providing public services had continued to climb. These include Sheriff, Public Health and Fire Department, and should benefit the residents in the County.
>
> As such the Public Benefit Program was amended by the Imperial County Board of Supervisors which provides specific guidelines for annual payments for Public Service Benefits, Agriculture Benefits, Community Benefits, and Sales Tax Revenues.
>
> The Public Service Benefits are intended to help offset costs of Imperial County Public Services including law enforcement, fire protection, public works, and other services provided by the County of Imperial. The Agricultural Benefits are intended to offset the temporary negative effects of agricultural conversion to the community, local economy, and agriculture industry. The Community Benefit is

intended for infrastructure improvement, job creation, economic development, enhancement to the quality of life in neighboring communities, and also to off-set the costs of Imperial County Public Services.

D-5c **Item 1.** Draft EIR Section 3.4.2 has been updated as follows as provided in the Final EIR:

Southern California Association of Governments – ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and~~

PC ORIGINAL PKG

~~meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~

Item 2. As discussed on EIR page 3.4-19, because the proposed project complies with local land use plans and population projections and would not exceed ICAPCD's regional mass daily emissions thresholds during construction and operation with mitigation, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

However, Draft EIR page 3.4-19 was modified to clarify that mitigation measures are required under Impact 3.4-2, and provided in the Final EIR as follows:

Mitigation Measure(s)

No mitigation measures are required. <u>With implementation of mitigation measures required under Impact 3.4-2, the construction and operation of the project would not exceed ICAPCD's regional mass daily emissions thresholds.</u>

Item 3. EIR Table 3.4-1 Criteria Air Pollutants – Summary of Common Sources and Effects summarizes the potential nature and extent of human health effects associated with criteria pollutants. Implementation of proposed Mitigation Measures AQ-1 through AQ-6 would reduce potential construction and operational air quality impacts to a level less than significant; therefore, a discussion of the nature and extent of human health effects is not required as air quality impacts will be less than significant.

Item 4. As shown in Draft EIR Tables 3.4-8 and 3.4-9, carbon monoxide emissions would slightly increase with application of proposed mitigation measures as a result of the use of watering trucks. The following note has been added to Table 3.4-9 as provided in the Final EIR:

<u>NOTE: An increase in carbon monoxide emissions as compared to the unmitigated emissions depicted in Table 3.4-8 is attributable to water application/water truck use.</u>

Item 5 As stated in Mitigation Measure AQ-1, pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. Mitigation Measures AQ-1 through AQ-5 provide the specific measures that are required to reduce air quality impacts to a level less than significant, including the framework for a dust control plan as required by the ICAPCD. Further, please refer to the ICAPCD letter (Letter A) and corresponding responses to comments, which indicate the ICAPCDs acceptance of the air quality analysis and proposed mitigation measures as modified in response to their comment letter.

With respect to feasibility of certain mitigation measures required by Regulation VIII – this pertains to whether measures are feasible in the context of the type of construction and construction activities proposed. In other words, certain discretionary measures may not be considered feasible, as they are not considered necessary or appropriate in the context of proposed construction activities, therefore, the application of such measures would not be

effective. The mandatory measures would be required and are the basis for estimating emissions reductions, upon which the conclusion of less than significant is based. The enhanced mitigation measures are required by ICAPCD in addition to mandatory mitigation measures.

Item 6 Preparation of, and implementation of the dust control plan in compliance with Imperial County Air Pollution Control District requirements is required for both the construction phase and the operational phase of the proposed project. EIR Mitigation Measure AQ-3 specify minimum dust suppression measures that would be required in order to reduce the impact to a level less than significant. Mitigation Measures AQ-4 and AQ-6 specify that an Enhanced Dust Control Plan, and an Operational Dust Control Plan are also required to be prepared and approved by the ICAPCD.

The dust control plan involves many inputs including identification of person responsible for implementation of the plan, specific inputs related to project construction including bulk material handling and storage areas, paved and unpaved roads and access points, water source locations, exit point track-out features, listing of sensitive receptors located within ¼ miles of the construction activity, surface area disturbance in total and daily in acres and cubic yards, demolition, pre-activity, phasing, specific proposed stabilization measures, the minimum requirements for limiting visible dust emissions from activities that cause fugitive dust emissions, identification of enhanced measures, water application, other dust control measures. The analysis in the EIR demonstrates that implementation of typical dust control measures will mitigated the potential PM10 impacts to a level less than significant. The Dust Control Plan further memorializes the measures as part of the ICAPCD's review and approval of the plan. As described on EIR pages 3.4-9 and 3.4-10, the ICAPCD is the agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. ICAPCD is responsible for regulating stationary sources of air emissions in Imperial County. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by ICAPCD. ICAPCD is responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. As such, approval of a dust control plan by ICAPCD would ensure that feasible mitigation measures are implement to control construction and operational emissions to less than significant levels.

Item 7 The Draft EIR does identify actual measures that will be implemented. Specifically, these measures are required to be implemented as required by Mitigation Measures AQ-1 through AQ-6. The Draft EIR's conclusions that mitigation measures will be reduced to a level less than significant is based on the assumed implementation of these measures.

Item 8 EIR Section 3.9 Hazards and Hazardous Materials addresses the potential for risk of the proposed BESS system(s).

Additionally, in early October 2024, California's governor signed into law Senate Bill 38, which amends Section 761.3 of the California Public Utilities Code to address safety concerns with the BESS industry in the state. The new law requires that every battery energy storage facility located in California establish an emergency response and emergency action plan that covers the facility. The owner/operator of the facility must coordinate with local emergency management agencies, unified program agencies, and local first responders to develop the

response and action plan and must submit the plan to the County. Specifically, under the new law, the emergency response and action plans shall:

- Be consistent with Sections 142.3 and 6401 of the Labor Code and any related regulations;
- Be consistent with the regulatory requirements applicable to emergency action plans pursuant to Section 3220 of Title 8 and California Code of Regulations;
- Establish response procedures for an equipment malfunction or failure;
- Include procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders, and the environment (procedures to be established in consultation with local emergency management agencies); and
- Establish notification and communication procedures between the battery storage facility and local emergency management agencies.

Additionally, a facility's emergency response and emergency action plan may consider responses to potential offsite impacts (e.g., poor air quality, threats to municipal water supplies, water runoff, and threats to natural waterways) and may include procedures for the local emergency response agency to establish shelter-in-place orders and road closure notifications (where appropriate).

Item 9 As identified on EIR page 3.4-5, the nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby sensitive receptors include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

With implementation of proposed mitigation measures, no impact to sensitive receptors has been identified. As discussed on EIR page 3.4-26, Although sensitive receptors, residential uses, are located onsite and in the project vicinity, construction is relatively short-term, anticipated at 24 months and would result in an overall low level of DPM concentrations at the project site. Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions in the project site and project-related offsite improvements.

As stated in the Air Quality and Greenhouse Gas Emissions Technical Report (EIR Appendix D), all other sensitive receptors are located further and would experience less air quality impacts. The Rio Bend RV and Golf Resort and the Storm's Crossing Mobile Estates are located further east of the project site than the sensitive receptors identified above. Because no impact to sensitive receptors has been identified for the receptors in closest proximity to the project site, no impact to the Rio Bend RC and Golf Resort and the Storm's Crossing Mobile Estates is anticipated due to the further distance of these areas as compared to the sensitive receptors.

Item 10 The proposed project is not anticipated to significantly impact the Salton Sea, including any associated impacts with respect to air quality. Please refer to response to comment C-7c.

D-5d **Item 1.** The Draft EIR correctly references both Mitigation Measure BIO-3 and Mitigation Measure BIO-8. Mitigation Measure BIO-3 is simply not repeated from what was originally introduced in prior impact discussion. As such, no revision the Draft EIR is required in response to this comment.

Item 2. Please refer to response to comment C-7c regarding potential biological impacts to the Salton Sea as a result of the temporary conversion of agricultural land to non-agricultural use.

D-5e Draft EIR page 3.7-7 has been revised as provided in the Final EIR as follows:

The County of Imperial General Plan, Seismic and Public Safety Element identifies potential natural and human-induced hazards and provides policy to avoid or minimize the risk associated with hazards. The Seismic and Public Safety Element identifies 'lifelines and critical facilities' whose disruption could endanger the public safety. Lifelines are defined as networks of services that extend over a wide area and are vital to the public welfare, and can be classified into four categories: energy, water, transportation, and communications. The IID has a formal Local Hazard Mitigation Plan ~~Disaster Readiness Standard Operating Procedure~~ for the Water Department, Power Department, and the entire District staff for response to earthquakes and other emergencies.

D-5f **Item 1.** Potential statewide impacts associated with climate change is discussed on EIR page 3.8-4. For clarification purposes, Draft EIR page 3.8-4 has been revised as provided in the Final EIR as follows:

- **Snowpack:** By 2050, the average water supply from snowpack is projected to decline to 2/3 from historical levels. If emissions reductions do not occur, water from snowpack could fall to less than 1/3 of historical levels by 2100. It should be noted that the sole source of water for IID (and the project) is the Colorado River, which is not affected by the California snowpack.

Item 2. The Draft EIR has been revised to reflect the most recent update of the CARB Scoping Plan. Draft EIR page 3.8-8 has been revised as provided in the Final EIR as follows:

CARB adopted the latest update to the Climate Change Scoping Plan in December 2022. ~~in December 2017~~. The *2022 Scoping for Achieving Carbon Neutrality* (2022 Scoping Plan) (CARB 2022) was adopted by CARB in November 2022. The 2022 Scoping Plan lays out a path for California to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

~~The 2017 Scoping Plan is guided by the EO B-30-15 GHG reduction target of 40 percent below 1990 levels by 2030. The 2017 Scoping Plan builds upon the framework established by the initial Scoping Plan and the First Update, while identifying new, technologically~~

PC ORIGINAL PKG

~~feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources (CARB 2017).~~

~~The majority of the Scoping Plan's GHG reduction strategies are directed at the two sectors with the largest GHG emissions contributions: transportation and electricity generation. The GHG reduction strategies for these sectors involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities. The reduction strategies employed by CARB are designed to reduce emissions from existing sources as well as future sources.~~

Item 3. Draft EIR Section 3.8.2 has been updated and provided in the Final EIR as follows:

Southern California Association of Governments – ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-

duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~

As already stated in the EIR, as a solar generation facility, the proposed project would improve air quality by reducing the use of fossil fuels in energy production.

D-5g The fire protection plan is not a mitigation measure, rather it is required by State law through recently passed Senate Bill 38, which amends Section 761.3 of the California Public Utilities Code to address safety concerns with the booming battery energy storage (BESS) industry in the state. Please refer to response to comment D-5c-Item 8.

D-5h **Item 1.** Draft EIR pages 3.10-13 and 3.10-14 have been revised as provided in the Final EIR as follows:

Imperial Irrigation District

The IID is an irrigation district organized under the California Irrigation District Law, codified in Section 20500 et seq. of the California Water Code. Critical functions of IID include diversion and delivery of Colorado River water to the Imperial Valley, operation and maintenance of the drainage canals and facilities, including those in the project area, and generation and distribution of electricity. Several policy documents govern IID operations and are summarized below:

- The Law of the River and historical Colorado River decisions, agreements and contracts
- The Quantification Settlement Agreement and Transfer Agreements
- The ~~Definite Plan, now referred to as the Systems Conservation Plan~~ IID's Water Conservation Plan, which defines the rigorous agricultural water conservation practices being implemented by growers and IID to meet the Quantification Settlement Agreement commitments
- The Equitable Distribution Plan, which defines how IID will apportion its available water supply in order to prevent overruns and stay within the 3.1 million acre-feet annual consumptive use cap ~~on the~~ of Colorado River water ~~rights~~
- Existing IID standards and guidelines for evaluation of new development and define IID's role as a responsible agency and wholesaler of water

PC ORIGINAL PKG

- IID's Interim Water Supply Policy for Non-Agricultural Water Users to provide a mechanism to address new water supply requests for proposed projects being developed within the IID water service area

Item 2. Draft EIR page 3.10-14 has been revised as provided in the Final EIR as follows:

Integrated Water Resources Management Plan

In relation to the project, IID maintains regulation over the drainage of water into their drains~~, including the design requirements of stormwater retention basins. IID requires that retention basins be sized to handle an entire rainfall event in case the IID system is at capacity.~~ Additionally, IID requires that outlets to IID facilities be no larger than 12 inches in diameter and must contain a backflow prevention device (IID 2012).

Item 3. As stated on page 3.10-16 of the EIR, Table 3.10-3 identifies examples of source control BMPs that could be implemented into the proposed project. This table is not intended to show specific project BMPs, rather it shows the types of BMPs that could be implemented on-site and achieve water runoff standards. Water quality BMPs are required through the County's grading ordinance. Further, as required by Mitigation Measure HYD-1, The project applicant or its contractor shall prepare a SWPPP specific to the project and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). Mitigation Measure HYD-1 provides specific performance standards, "Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure."

In addition, Mitigation Measure HYD-2, requires that Post-Construction Runoff BMPs be incorporated into the Project Drainage Plan. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems.

The Imperial Irrigation District drain facilities are intended for agricultural drainage within the Imperial Valley irrigated area withing their service area boundary. However, upon separate application of an IID encroachment permit, IID may accept storm water discharge from a development. If any proposed development discharges to an IID facility, the design shall meet both County and IID standards, and is subject to additional IID review and approval via the IID encroachment permit process.

The developer shall submit a drainage study and specifications for improvements of all drainage easements, culverts, drainage structures, and drainage channels to the Department of Public Works for approval. Unless specifically waived herein, required plans and specifications shall provide a drainage system capable of handling and disposing of all surface waters originating within the subdivision and all surface waters that may flow onto the subdivision from adjacent lands. Said drainage system shall include any easements and III-2 structures required by the Department of Public Works or the affected Utility Agency to properly handle the drainage on-site and off-site. The report should detail any vegetation and trash/debris removal as well as address any standing water.

Item 4. Please refer to response to comment Item 3.

Item 5. Please refer to response to comment Item 3.

Item 6. Please refer to response to comment Item 3.

Item 7. As provided in preceding responses, the County acknowledges that any modifications to the IID drainage system is subject to review and approval by IID. Mitigation Measure HYD-2 has been modified and is provided in the Final EIR as follows:

> **HYD-2 Incorporate Post-Construction Runoff BMPs into Project Drainage Plan.** The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.

Item 8. Draft EIR page 3.10-21 contained a typo, and the text was intended to state that the majority of the project site would remain pervious. This page has been revised and provided in the Final EIR as follows:

> The project site would remain largely ~~im~~pervious over the operational life of the project. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious.

Because the majority of the project site will remain pervious, the statements listed in this comment related to Impact 3.10-4, 3.10-5 and 3.10-6 are correct, and no changes to these statements or conclusions is required.

Item 9. Decommissioning and restoration requires that the project site be restored to its pre-development condition. Therefore, no hydrology impacts would be anticipated.

Item 10. Please refer to response to comment Item 3.

Item 11. Please refer to response to comment Item 3.

D-5i **Item 1.** As stated on EIR page 3.11-1, Section 15125(d) of the CEQA Guidelines states that "[t]he EIR shall discuss any inconsistencies between the project and applicable general plans and regional plans." This section fulfills this requirement for the project. In this context, this section reviews the land use assumptions, designations, and policies of the County General Plan and other applicable federal, state, and local requirements, which governs land use within the project area and evaluates the project's potential to conflict with policies adopted for the purpose of avoiding or mitigating significant environmental effects.

Item 2. The project involves a general plan land use change and zoning change to extend the RE zone to the portions of the project site currently not located within the RE zone. However, no land use amendment or zone change is proposed that would modify the underlying zones. The current underlying zones allow for the development and operation of utility-scale solar energy facilities subject to approval of a Conditional Use Permit.

PC ORIGINAL PKG

Item 3. Please refer to EIR Table 3.3-3 which provides an analysis of the project's consistency with applicable general plan agricultural policies.

Item 4. Please refer to response to comment C-7c.

Item 5. Draft EIR Section 3.11.2 has been revised as provided in the Final EIR as follows:

Southern California Association of Governments – 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and~~

~~meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~
- ~~Goal 10: Promote conservation of natural and agricultural lands and restoration of~~

D-5j **Item 1.** The project area has not changed considerably since the noise measurements were taken in 2012 as part of the Campo Verde EIR. This is further substantiated with more recent noise measurements taken in the project area as part of baseline noise studies conducted in the project area in 2023, which indicate an Leq range of 40.8 dBA to 55.8 dBA (see Final EIR Appendix K).

Item 2a. Table 8 of the Noise study (see Final EIR Appendix K), provides the predicted construction noise levels per activity phase.

Item 2b. As shown in the noise report (Final EIR Appendix K), Project construction would increase off-site traffic noise from commuting construction workers and haul trucks bringing materials to and from the project site. As mentioned previously, project components would be constructed over a 24-month period. This could expose nearby residences to cumulative noise from construction traffic in addition to on-site construction activities. The addition of construction worker commutes and haul truck trips on local roadways could result in increased hourly and daily average traffic noise levels. Project construction has the potential to add up to 716 daily trips between workers, vendors, and haul trucks. However, the 2017 LLG traffic report indicates that the existing average daily traffic on Drew Road is over 860 trips. A doubling of traffic volumes would be needed to result in a 3 dB increase in traffic noise levels, which is the lowest change perceptible to the human ear in ideal listening conditions. The addition of 716 construction trips spread over the workday would not double existing volumes on any roadway in the project vicinity. As an example, adding 716 trips to an existing volume of 860 trips would increase the traffic noise level by approximately 2.6 dB, which would not be perceptible.

Ambient levels at ST1 were approximately 41 dB. Conservatively adding 3 dB to the ambient levels would result in construction traffic levels still well below Imperial County's thresholds. Therefore, given the existing traffic volumes on area roadways, the addition of construction traffic is not expected to result in a perceptible increase in hourly average or daily average traffic noise levels. Off-site construction traffic noise impacts would be less than significant.

- In addition, these construction trips will be spread out through many of the project parcels across many roadways.

Given the existing traffic volumes on project surrounding roadways, the addition of construction traffic is not expected to result in a perceptible increase in hourly average or daily average traffic noise levels; therefore, this impact would be less than significant.

Item 2c. The operation of the O&M building and BESS do not represent uses that are associated with a significant noise source. Draft EIR page 3.12-14 has been revised in the Final EIR to clarify as follows:

> The noise associated with the O&M building or energy storage area do not represent a significant noise source <u>as their operation does not involve the use of external equipment that is considered a significant noise source.</u> ~~and~~

PC ORIGINAL PKG

~~would involve less intensive activities and operation of equipment as compared to existing agricultural operations in the area.~~ Therefore, impacts would be less than significant.

Item 3a. Please refer to preceding response to comments J1 and J2.

Item 3b. Please refer to preceding response to comments J1 and J2.

D-5k **Item 1.** Draft EIR page 3.16-3 has been revised and provided in the Final EIR as follows:

California Water Code

Water Code Sections 10656 and 10657 restrict state funding for agencies that fail to submit their urban water management plan to the DWR. Water Code Section 10631, directs that contents of the urban water management plans include further information on future water supply projects and programs and groundwater supplies.

In addition, Water Code Section 10910 describes the WSA that must be undertaken for projects referred under PRC Section 21151.9, including an analysis of groundwater supplies. Water agencies are given 90 days from the start of consultation in which to provide a WSA to the CEQA lead agency. Water Code Section 10910 also specifies the circumstances under which a project for which a WSA was once prepared would be required to obtain another assessment.

Item 2. Reference to the IIRWMP has been deleted as provided in the Final EIR.

Item 3. Draft EIR page 3.16-7 has been modified and provided in the Final EIR as follows:

Equitable Distribution Plan

IID's Equitable Distribution Plan distributes ~~apportions~~ available water supply by Water Users Category (Agricultural Water Users, Potable Water Users, and Industrial/Commercial Water Users) and then apportions the water within each Water Users Category among the water users within that category. The Equitable Distribution Plan provides ~~a framework~~ for: (1) receiving Colorado River water apportionment, (2) aggregating apportionment between farm units, and (3) transferring ~~agricultural~~ water between water ~~agricultural~~ users within the same Water Users Category~~, and (4) receiving IID On-Farm Efficiency Conservation Program or Fallowing Program benefits~~. Implementation of this program is ~~a~~ critical for IID's management of its water supply within its annual entitlement and a component of IID's implementation of on-farm conservation and temporary fallowing programs.

Item 4. Draft EIR page 3.16-7 has been modified and provided in the Final EIR as follows:

The IWSP identifies ~~designates~~ up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects.

Item 5. The specific text referenced in this comment could not be located in the EIR.

Item 6. The text of Draft EIR page 3.16-10 has been modified and is provided in the Final EIR as follows:

> In the event that IID determines that the proposed project is subject to the ~~utilize~~ IWSP for Non-Agricultural Projects ~~water~~, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID has adopted an IWSP for non-agricultural projects under ~~from~~ which water supplies can be contracted to serve new non-agricultural developments within IID's water service area. The IWSP identifies ~~sets aside~~ 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, to serve new non-agricultural projects.

D-6 This comment does not identify a specific alternative to the proposed project that should have been considered. Rather the comment states that the EIR does not evaluate a reasonable range of alternatives. Please refer to responses to comments C-13a and C-13b.

D-7 Recirculation of the Draft EIR is not required: (1) because recirculation is not required where the new information added to the EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR (CEQA Guidelines, § 15088.5, subd. (b); and (2) because no "substantial adverse" impact would result from any of the revisions to the portions of the Draft EIR that were not recirculated (CEQA Guidelines, § 15088.5, subd. (e)). Having reviewed the information contained in the EIR and in the administrative record as well as the requirements of CEQA and the CEQA Guidelines regarding recirculation of Draft EIRs, there is no new significant information in the Final EIR, and the additional information provided in the Final EIR merely clarifies, amplifies and/or makes insignificant modifications to the adequate Draft EIR, and finds that recirculation of the Draft EIR is not required.

D-8 The County appreciates the review and input provided by IID on the Draft EIR.

[i] California Department of Conservation. Frequently Asked Questions About Agricultural Conservation Easements. Available at: https://www.conservation.ca.gov/dlrp/grant-programs/Pages/FAQ/aboutACE.aspx
[ii] Ibid.

0.4 Mitigation Monitoring and Reporting Program

The County of Imperial will adopt this Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. The purpose of the MMRP is to ensure that the Big Rock 2 Cluster Solar and Storage Project, which is the subject of the Environmental Impact Report (EIR), complies with all applicable environmental mitigation requirements. The mitigation measures for the project will be adopted by the County of Imperial, in conjunction with the certification of the Final EIR. The mitigation measures have been integrated into this MMRP.

The mitigation measures are provided in Table 0.4-1. The MMRP includes a checklist to be used during the mitigation monitoring period. The MMRP includes the following information for each mitigation measure:

- Description of Recommended Mitigation Measures from the CEQA EIR
- Time Frame for Implementation
- Steps to Compliance and Verification
- Responsible Monitoring Agency

The mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or reducing or eliminating impacts over time by maintenance operations during the life of the action.

Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The County of Imperial is the designated CEQA lead agency for the Mitigation Monitoring and Reporting Program. The County of Imperial is responsible for review of all monitoring reports, enforcement actions, and document disposition as it relates to impacts within the County's jurisdiction. The County of Imperial will rely on information provided by the monitor as accurate and up to date and will field check mitigation measure status as required.

A record of the MMRP will be maintained at County of Imperial, Department of Planning and Development Services, 801 Main Street, El Centro, CA 92243. All mitigation measures contained in the EIR shall be made conditions of the project as may be further described below.

This page is intentionally blank.

PC ORIGINAL PKG

Table 0.4-1. Mitigation Measures

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
Agricultural Resources			
AG-1a: Payment of Agricultural and Other Benefit Fees. Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented: **Mitigation for Non-Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.	Prior to the issuance of a grading permit or building permit (whichever is issued first)	Submit documentation for establishment of Agricultural Conservations easements, Enrollment in Agricultural In-lieu Mitigation Fee program or Public Service Agreement	Imperial County Planning & Development Services (ICPDS)

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
Mitigation for Prime Farmland **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project **Option 4:** *Avoid Prime Farmland.* The Permittee must revise their CUP Application/Site Plan to avoid Prime Farmland.			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
AG-1b: Site Reclamation Plan. In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.	Prior to the issuance of a grading permit	Submit Reclamation Plan to the County for Review	ICPDS

PC ORIGINAL PKG

AG-2: Pest Management Plan. Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following: 1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line); 2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows: • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business; • All treatments must be performed by a qualified applicator or a licensed pest control operator; • "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments; • Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation; • Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture; • Obey all pesticide use laws, regulations, and permit conditions;	Prior to the issuance of a grading permit or building permit (whichever is issued first)	Submit Pest Management Plan to the County for Review	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties; • Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current; • Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, Environmental Protection Agency (EPA) Registration numbers, and application rates. A pesticide use report may be used for this; • Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request. 3. A long-term strategy for weed and pest control and management during the operation of the proposed projects. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis. 4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands. 5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.			
Air Quality			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
AQ-1: Fugitive Dust Control. Pursuant to Imperial County Air Pollution Control District (ICAPCD), all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process. <u>ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control</u> • All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover. • All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material. • All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.	Prior to the issuance of a grading permit	Submit construction dust control plan for Imperial County Air Pollution Control District (ICAPCD) approval	ICAPCD

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line. • The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering. ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control • Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust. • Replace ground cover in disturbed areas as quickly as possible. • Automatic sprinkler system installed on all soil piles. • Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site. • Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees. • Implement a shuttle service to and from retail services and food establishments during lunch hours. Standard Mitigation Measures for Construction Combustion Equipment • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). Enhanced Mitigation Measures for Construction Equipment To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures: • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways. • Implement activity management (e.g., rescheduling activities to reduce short-term impacts).			
AQ-2: Construction Equipment. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.	Prior to the issuance of a grading permit	A list of the construction equipment shall be submitted to the ICPDS and ICAPCD	ICPDS and ICAPCD
AQ-3: Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. During the operational life of the project, the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved	Prior to the issuance of a grading permit	Submit construction dust control plan for ICAPCD approval	ICAPCD

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).			
AQ-4: Dust Suppression Management Plan. Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.	Prior to the issuance of a grading permit	Submit construction dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
AQ-5: Speed Limit. During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.	During construction and operations activities	Submit a construction dust control plan and operations dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
AQ-6: Operational Dust Control Plan. Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval. ICAPCD Rule 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.	Prior to issuance of a Certificate of Occupancy	Submit an operations dust control plan for ICPDS and ICAPCD approval	ICPDS and ICAPCD
Biological Resources			
BIO-1: Burrowing Owl Mitigation. Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better	Prior to ground-disturbing activities	Submit report with results of surveys. Submit Burrowing Owl Protection and Mitigation Plan.	ICPDS and California Department of Fish and Wildlife

PC ORIGINAL PKG

<table>
<tr><th>Mitigation Measure</th><th>Time Frame for Implementation</th><th>Steps to Compliance and Verification</th><th>Responsible Monitoring Agency</th></tr>
<tr><td>
than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities.

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

<table>
<tr><th rowspan="2">Location</th><th rowspan="2">Time of Year</th><th colspan="3">Level of Disturbance</th></tr>
<tr><th>Low</th><th>Med</th><th>High</th></tr>
<tr><td>Nesting Sites</td><td>April1 – Aug 15</td><td>200 meters</td><td>500 meters</td><td>500 meters</td></tr>
<tr><td>Nesting Sites</td><td>Aug 16 – Oct 15</td><td>200 meters</td><td>200 meters</td><td>500 meters</td></tr>
<tr><td>Nesting Sites</td><td>Oct 16 – Mar 31</td><td>50 meters</td><td>100 meters</td><td>500 meters</td></tr>
</table>

These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.
</td><td></td><td>If incidental take authorization from CDFW is required, submit a copy of the incidental take authorization permit to ICPDS.</td><td></td></tr>
</table>

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs. Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation. *Burrowing Owl Protection and Mitigation Plan* If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site “replacement burrow site(s)” must			

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant. *Incidental Take Authorization* The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.			
BIO-2: Burrowing Owl Habitat Compensation. The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site. Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.	Prior to ground-disturbing activities	Submit documentation for off-site preservation of foraging habitat through a CDFW-approved conservation easement, or payment of an in-lieu fee. If incidental take authorization from CDFW is required,	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		submit a copy of the incidental take authorization permit to ICPDS.	
BIO-3: Worker Awareness Program and Ongoing Training. Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects: • Biology and status of burrowing owl. • California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations. • Protection measures designed to reduce potential impacts on the species. • The function of flagging designated authorized work areas. • Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Prior to project initiation	Submit a copy of the signed training roster to ICPDS	ICPDS
BIO-4: Speed Limit. During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads. **Perimeter Fencing.** Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall	Prior to ground-disturbing activities and during construction	Submit construction plans showing the inclusion of the speed limit and perimeter fencing as specifications.	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.			
BIO-5: Migratory Birds and Other Sensitive Non-Migratory Bird Species. To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial. Construction conservation measures to be incorporated into the ABPP shall include the following: • Minimizing disturbance to vegetation to the maximum extent practicable. • Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest. • Minimizing wildfire potential. • Minimizing activities that attract prey and predators. • Controlling non-native plants. Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following: • Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities. • Minimizing noise. • Minimizing use of outdoor lighting.	Prior to ground-disturbing activities	Submit ABPP to ICPDS	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
BIO-6: Pre-Construction Bird Surveys and Nest Avoidance. Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species). If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.	Prior to ground-disturbing activities	Submit report with results of surveys, and if necessary Project-specific sensitive species management plan for review.	ICPDS
BIO-7: Focused Bat Surveys and Bat Management Plan. A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors)	Prior to ground-disturbing activities	Submit report with results of surveys to ICPDS. Submit a Bat Management Plan for review and approval to CDFW, and submit documentation of	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.		approved plan to ICPDS.	
BIO-8: Federal and State Agency Permits. Prior to impacts occurring to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.	Prior to impacts occurring to USACE, RWQCB, and CDFW jurisdictional aquatic resources	If permits are required, submit documentation of USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		Agreement to ICPDS.	
Cultural Resources			
CUL-1: Cultural Resources Worker Environmental Awareness Program Training. Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist. The training shall be provided to all personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Prior to construction	Submit a copy of the signed training roster to ICPDS	ICPDS
CUL-2: Archaeological Monitoring. Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards to serve as the principal archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling). In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.	Prior to construction	Submit documentation that the project applicant has retained a qualified professional archaeologist and a traditionally and culturally affiliated Native American Monitor.	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.		Submit monitoring report to ICPDS and South Coastal Information Center.	
CUL-3: Discovery of Human Remains. In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983).If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	During ground-disturbing activities	Discovery of human remains shall result in work stoppage in that area until the coroner and the Native American Heritage Commission are contacted.	ICPDS
Geology and Soils			
GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures. Facility design for all project	Prior to issuance of building permits	A geotechnical and/or civil	Imperial County Public

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: • Site preparation • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Structural foundations • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.		engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval	Works Department, Engineering Division
GEO-2: Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all	Prior to construction and operation	Submit documentation of permits and/or approvals from the Imperial County	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.		Public Health Department, Division of Environmental Health to ICPDS	
GEO-3: Paleontological Resources Monitoring. Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.	Prior to grading	Submit documentation that the project applicant has retained a qualified paleontologist. Submit a report of findings with an appended itemized inventory of specimens to ICPDS.	ICPDS
GEO-4: Paleontological Resources Worker Awareness Program. Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction	Prior to grading	Submit a copy of the signed training roster and training video or transcript to ICPDS	ICPDS

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.			
Hydrology/Water Quality			
HYD-1: Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration. The project applicant or its contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) specific to the project and be responsible for securing coverage under State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and best management practices (BMPs) relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories: • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching) • Sediment control practices (e.g., temporary sediment basins, fiber rolls) • Temporary and post-construction on- and off-site runoff controls • Special considerations and BMPs for water crossings and drainages	Prior to Construction Activities	Submit a SWPPP to the County and SWRCB to review.	Imperial County Planning & Development Services, and SWRCB

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
• Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity • Waste management, handling, and disposal control practices • Corrective action and spill contingency measures • Agency and responsible party contact information • Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.			
HYD-2: Incorporate Post-Construction Runoff BMPs into Project Drainage Plan. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, Imperial Irrigation District (IID) "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.	Prior to issuance of a Certificate of Occupancy	Submit Drainage Plans to the County for Review. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall	Imperial County Public Works Department, Engineering Division Imperial Irrigation District

PC ORIGINAL PKG

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
		be approved by the IID.	
Tribal Cultural Resources			
TCR-1: Discovery of Unidentified Tribal Cultural Resources. If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.	During to ground-disturbing activities	Submit archaeologist treatment plan and evaluation prepared with tribal consultation for review to the County, and relevant Tribes.	Imperial County Planning & Development Services

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Executive Summary

This Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) Public Resources Code [PRC] Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research (OPR). The purpose of this environmental document is to assess the potential environmental effects associated with the Big Rock 2 Cluster Solar and Storage Project (i.e., "project" or "proposed project") and to propose mitigation measures, where required, to reduce significant impacts.

Project Overview

The project applicant, 90FI 8me LLC, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and five variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility"); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

PC ORIGINAL PKG

Purpose of an EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of CEQA is to: (1) inform the public and governmental decision makers of the potential significant environmental impacts of a project; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Eliminated from Further Review in Notice of Preparation

The Initial Study (IS)/NOP completed by the County (Appendix A of this EIR) determined that environmental effects to Forestry Resources, Energy, Mineral Resources, Population/Housing, Public Services (Schools and Parks/Other Public Facilities), Recreation, Utilities (Wastewater, Stormwater, Power, and Solid Waste), and Wildfire would not be potentially significant. Therefore, these impacts are not addressed in this EIR; however, the rationale for eliminating these issues is discussed in Chapter 6.0, Effects Found Not Significant.

Summary of Significant Impacts and Mitigation Measures that Reduce or Avoid the Significant Impacts

Based on the analysis presented in the IS/NOP and the information provided in the comments to the IS/NOP, the following environmental topics are analyzed in this EIR:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

PC ORIGINAL PKG

Table ES-1 summarizes the environmental impacts that were determined to be potentially significant, mitigation measures, and level of significance after mitigation associated with the project.

Areas of Controversy and Issues to be Resolved

Areas of Concern

Section 15123(b)(2) of the CEQA Guidelines requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public as well as issues to be resolved. A primary issue associated with this solar farm project, and other solar facility projects that are proposed in the County, is the corresponding land use compatibility and fiscal/economic impacts to the County. Through the environmental review process for this project, other areas of concern and issues to be resolved include potential impacts related to the conversion of farmland to non-agricultural uses, damage to crops, wildlife, water supply, fire hazards associated with the battery energy storage system, health effects from air pollution, noise and hazardous materials, and change of visual character.

Detailed analyses of these topics are included within each corresponding section contained within this document.

This page is intentionally blank.

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
Agricultural Resources				
Impact 3.3-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use	Potentially Significant	**AG-1a**	**Payment of Agricultural and Other Benefit Fees.** Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented: **Mitigation for Non-Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy. **Mitigation for Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project **Option 4:** *Avoid Prime Farmland.* The Permittee must revise their CUP Application/Site Plan to avoid Prime Farmland. **AG-1b** **Site Reclamation Plan.** In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 3.3-3: Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use	Potentially Significant	Implement Mitigation Measure AG-1b. **AG-2** **Pest Management Plan.** Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following: 1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line); 2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows: • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business; • All treatments must be performed by a qualified applicator or a licensed pest control operator; • "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		include physical/mechanical removal, bio control, cultural control, or chemical treatments; • Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation; • Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture; • Obey all pesticide use laws, regulations, and permit conditions; • Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties; • Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current; • Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		(current and previous if changed), and methods used. For pesticides include the chemical(s) used, Environmental Protection Agency (EPA) Registration numbers, and application rates. A pesticide use report may be used for this; • Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request. 3. A long-term strategy for weed and pest control and management during the operation of the proposed projects. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis. 4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands. 5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.	
Air Quality			
Impact 3.4-2: Result in a cumulatively considerable net	Significant	**AQ-1** **Fugitive Dust Control.** Pursuant to Imperial County Air Pollution Control District (ICAPCD), all construction sites,	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)		regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process. ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control • All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover. • All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material. • All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area. • Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line. • The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering. ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control • Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust. • Replace ground cover in disturbed areas as quickly as possible. • Automatic sprinkler system installed on all soil piles.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site. • Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees. • Implement a shuttle service to and from retail services and food establishments during lunch hours. <u>Standard Mitigation Measures for Construction Combustion Equipment</u> • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use. • Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). <u>Enhanced Mitigation Measures for Construction Equipment</u> To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures: • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Implement activity management (e.g., rescheduling activities to reduce short-term impacts). **AQ-2** **Construction Equipment.** ~~All off-road construction diesel engines not registered under California Air Resources Board's (CARB's) Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression-Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig engines shall meet a minimum of Tier 4 Interim California Emission Standards.~~ A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and ~~expected/~~actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. <u>If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5.</u> The Planning and Development Services Department and ICAPCD shall verify implementation of this measure. **AQ-3** **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. <u>The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS.</u> All unpaved	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of ~~all~~ construction phases. ~~This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant.~~ During the operational life of the project, ~~T~~the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department). **AQ-4** **Dust Suppression Management Plan.** Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval. **AQ-5** **Speed Limit.** During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less. **AQ-6** **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval. ICAPCD Rule ~~301~~ 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Biological Resources			
Impact 3.5-1: Potential impacts on special-status species	Potentially Significant	**BIO-1** **Burrowing Owl Mitigation.** Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. *Focused Burrowing Owl Surveys* To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities. *Pre-Construction Survey and Avoidance Measures* Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table: ~~of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September~~	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

<table>
<tr><th>Environmental Impact</th><th>Significance Before Mitigation</th><th>Proposed Mitigation Measures</th><th>Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>~~through January) and 100 meters (330 feet) t0 250 meters (825 feet) during the breeding season (February through August~~)
<table>
<tr><th rowspan="2">Location</th><th rowspan="2">Time of Year</th><th colspan="3">Level of Disturbance</th></tr>
<tr><th>Low</th><th>Med</th><th>High</th></tr>
<tr><td>Nesting Sites</td><td>April1 – Aug 15</td><td>200 meters</td><td>500 meters</td><td>500 meters</td></tr>
<tr><td>Nesting Sites</td><td>Aug 16 – Oct 15</td><td>200 meters</td><td>200 meters</td><td>500 meters</td></tr>
<tr><td>Nesting Sites</td><td>Oct 16 – Mar 31</td><td>50 meters</td><td>100 meters</td><td>500 meters</td></tr>
</table>
These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved</td><td></td></tr>
</table>

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation. *Burrowing Owl Protection and Mitigation Plan* If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site “replacement burrow site(s)” must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant. *Incidental Take Authorization* The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable. **BIO-2 Burrowing Owl Habitat Compensation.** The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site. Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable. **BIO-3** **Worker Awareness Program and Ongoing Training.** Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects: • Biology and status of burrowing owl. • California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations. • Protection measures designed to reduce potential impacts on the species. • The function of flagging designated authorized work areas. • Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	

PC ORIGINAL PKG

		BIO-4	**Speed Limit.** During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads. **Perimeter Fencing.** Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.	
		BIO-5	**Migratory Birds and Other Sensitive Non-Migratory Bird Species.** To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial. Construction conservation measures to be incorporated into the ABPP shall include the following: • Minimizing disturbance to vegetation to the maximum extent practicable. • Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		biologist determines that the fledglings are independent of the nest. • Minimizing wildfire potential. • Minimizing activities that attract prey and predators. • Controlling non-native plants. Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following: • Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities. • Minimizing noise. • Minimizing use of outdoor lighting. **BIO-6** **Pre-Construction Bird Surveys and Nest Avoidance.** Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species). If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active. **BIO-7 Focused Bat Surveys and Bat Management Plan.** A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		level of survey effort shall be reassessed based on initial survey findings. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.	
Impact 3.5-3: Impact on Jurisdictional Waters	Potentially Significant	Implement Mitigation Measure BIO-3. **BIO-8** **Federal and State Agency Permits.** Prior to impacts occurring to U.S Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
			applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.	
Cultural Resources				
Impact 3.6-2: Impact on archaeological resources	Potentially Significant	**CUL-1**	**Cultural Resources Worker Environmental Awareness Program Training.** Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist. The training shall be provided to all ~~construction supervisors, forepersons, and operators of ground disturbing equipment~~ personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		CUL-2 **Archaeological Monitoring.** Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principal archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the ~~to~~ monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling). In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services. In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
			completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.	
Impact 3.6-3: Impact on Human Remains	Potentially Significant	**CUL-3**	**Discovery of Human Remains.** In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983).If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	Less than Significant
Geology and Soils				
Impact 3.7-2: Strong seismic ground shaking	Potentially Significant	**GEO-1**	**Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures.** Facility design for all project components shall comply with the site-specific design recommendations as	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: • Site preparation • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Structural foundations • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 3.7-3: Possible risks to people and structures caused by seismic-related ground failure, including liquefaction	Potentially Significant	Implement Mitigation Measure GEO-1.	Less than Significant
Impact 3.7-5: Substantial soil erosion or the loss of topsoil	Potentially Significant	Implement Mitigation Measure GEO-1 and Mitigation Measure HYD-1.	Less than Significant
Impact 3.7-6: Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project	Potentially Significant	Implement Mitigation Measure GEO-1.	Less than Significant
Impact 3.7-7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	Potentially Significant	Implement Mitigation Measure GEO-1.	Less than Significant
Impact 3.7-8: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater	Potentially Significant	**GEO-2** **Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements.** The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
			Regional Water Quality Control Board's Anti-Degradation Policy.	
Impact 3.7-9: Impact on paleontological resources	Potentially Significant	**GEO-3**	**Paleontological Resources Monitoring.** Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.	Less than Significant
		GEO-4	**Paleontological Resources Worker Awareness Program.** Prior to any ground disturbance, the qualified paleontologist	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
			shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.	
Hydrology/Water Quality				
Impact 3.10-1: Violation of water quality standards	Potentially Significant	**HYD-1**	**Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration.** The project applicant or its contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) specific to the project and be responsible for securing coverage under State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and best management practices (BMPs) relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories: • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching) • Sediment control practices (e.g., temporary sediment basins, fiber rolls) • Temporary and post-construction on- and off-site runoff controls • Special considerations and BMPs for water crossings and drainages • Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity • Waste management, handling, and disposal control practices • Corrective action and spill contingency measures • Agency and responsible party contact information • Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure. **HYD-2** **Incorporate Post-Construction Runoff BMPs into Project Drainage Plan**. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, Imperial Irrigation District (IID) "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.	
Impact 3.10-3: Alter the existing drainage pattern of the site or area resulting in siltation or on- or off-site erosion	Potentially Significant	Implement Mitigation Measures HYD-1.	Less than Significant
Impact 3.10-4: Alter the existing drainage pattern of the site or area resulting in flooding on- or off-site	Potentially Significant	Implement Mitigation Measures HYD-2.	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 3.10-5: Alter the existing drainage pattern of the site or area such that runoff increases would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Potentially Significant	Implement Mitigation Measures HYD-1.	Less than Significant
Impact 3.10-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	Potentially Significant	Implement Mitigation Measures HYD-1 and HYD-2.	Less than Significant
Tribal Cultural Resources			
Impact 3.15-1: Impact on tribal cultural resources	Potentially Significant	Implement Mitigation Measure CUL-2. **TCR-1** **Discovery of Unidentified Tribal Cultural Resources.** If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.	Less than Significant

PC ORIGINAL PKG

Statement of Overriding Considerations

CEQA Guidelines Section 15093 requires the Lead Agency to balance, as applicable, the economic, legal, social, and technological, or other benefits of the project against its unavoidable environmental risks when determining whether to approve the project. No significant and unmitigated impacts have been identified for the proposed project; therefore, the County would not be required to adopt a Statement of Overriding Considerations pursuant to Section 15093 for this project.

Project Alternatives

Alternatives Considered but Rejected

Alternative Site

Section 15126.6(f)(2) of the CEQA Guidelines addresses alternative locations for a project. The key question and first step in the analysis is whether any of the significant effects of the proposed project would be avoided or substantially lessened by constructing the proposed project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR. Further, CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

The proponent does not have control of an alternate site; if control were viable, the proponent would have to re-initiate the application process as a new project. Similar to the proposed project site, an alternate site would require environmental review once the proponent has prepared sufficient project description information. At present, the proponent does not have control of an alternate site. This alternative would be the most complex, costly, and time-consuming alternative to implement. It is unknown if the environmental impacts associated with this alternative would be less than the proposed project because it would be speculative to evaluate an unsecured alternate site. This is primarily due to the fact that the proponent does not have control of an alternate site. Therefore, an alternative site was eliminated from further consideration in this EIR.

Alternatives Evaluated

The environmental analysis for the proposed project evaluated the potential environmental impacts resulting from implementation of the proposed project, as well as alternatives to the project. The alternatives include: Alternative 1: No Project/No Development and Alternative 2: Reduced Project Size. A detailed discussion of the alternatives considered is included in Chapter 7. Table ES-2 summarizes the impacts resulting from the proposed project and the identified alternatives.

Alternative 1: No Project/No Development Alternative

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e), “the specific alternative of ‘no project’ shall also be evaluated along with its impacts. The ‘no project’ analysis shall discuss the existing conditions at the time the Notice of Preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.”

PC ORIGINAL PKG

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be developed.

The No Project/No Development Alternative would not meet any of the objectives of the project. Additionally, the No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of Senate Bill 32.

Alternative 2: Reduced Project Site

The purpose of this alternative is to reduce impacts on Prime Farmland within the project site. As discussed in Section 3.3, Agricultural Resources, implementation of the project would result in the temporary conversion of 973.24 acres of Prime Farmland to non-agricultural uses. A majority of the Prime Farmland occurs within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would reduce the overall size of the solar facility by avoiding the Prime Farmland occurring within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would avoid developing parcels that contain large areas of Prime Farmland. (NOTE: this alternative would not avoid several pockets of Prime Farmland, as these represent small, isolated pockets of land, which would likely not remain economically viable or practically feasible to farm as they would be surrounded by solar uses). Therefore, the project site would be reduced by approximately 788 acres from a total of 1,849 acres to 1,061 acres.

As shown in Table ES-2, this alternative would reduce impacts to agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced.

Environmentally Superior Alternative

Table ES-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. The No Project/No Development Alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” As shown in Table ES-2, Alternative 2 would be the environmental superior alternative because it would reduce impacts for the following environmental issue areas as compared to the proposed project: agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

PC ORIGINAL PKG

Table ES-2. Comparison of Alternative Impacts to Proposed Project

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Aesthetics	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Agricultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Air Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Biological Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Geology and Soils	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Similar Impact
GHG Emissions	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hazards and Hazardous Materials	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hydrology/ Water Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Land Use/Planning	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Noise and Vibration	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Public Services	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Transportation	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Tribal Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Utilities/Service Systems	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

1 Introduction

This environmental impact report (EIR) has been prepared to meet the requirements of the California Environmental Quality Act (CEQA) for purposes of evaluating the potential environmental impacts, mitigation measures, and alternatives associated with the proposed Big Rock 2 Cluster Solar and Storage Project. This EIR describes the existing environment that would be affected by, and the environmental impacts which could potentially result from the construction and operation of the proposed project as described in detail in Chapter 2.0 of this EIR.

1.1 Overview of the Proposed Project

The project applicant, 90FI 8me, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and ~~five~~ four variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The project would generate up to a combined 500 megawatt (MW) of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-0007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as “solar energy facility”); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District’s (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the “proposed project” or “project.”

1.1.1 Agency Roles and Responsibilities

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

County of Imperial

Implementation of the project would involve the following approvals by the County of Imperial:

1. **General Plan Amendment (#24-0002).** An amendment to the County’s General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE

Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

2. **Zone Change (#24-0003).**

- **Big Rock 2 Cluster North**. As shown in Table 1-1, the Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the RE Overlay Zone. As shown in Table 1-1, the applicant is requesting a Zone Change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

Table 1-1. Big Rock 2 Cluster North Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-270-020	A-2-R	A-2-R-RE
2	051-270-028	A-2	A-2-RE
3	051-270-036	A-2	A-2-RE
4	051-270-041	A-2-R	A-2-R-RE
5	051-280-054	A-2	A-2-RE
6	051-300-011	A-2	A-2-RE
7	051-300-016	A-2	A-2-RE
8	051-300-026	A-2	A-2-RE
9	051-300-035	A-3	A-3-RE
10	051-300-037	A-3	A-3-RE
11	051-300-032 (northern portion)	A-2	A-2-RE
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	N/A
13	051-300-036 (to be re-entitled)	A-3-RE	N/A

- **Big Rock 2 Cluster South**. As shown in Table 1-2, the Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). As shown in Table 1-2, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-3-RE).

PC ORIGINAL PKG

Table 1-2. Big Rock 2 Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-330-003	A-3	A-3-RE
2	051-350-004	A-3	A-3-RE
3	051-350-006	A-3	A-3-RE
4	051-350-007	A-3	A-3-RE
5	051-350-008	A-3	A-3-RE

- **Big Rock 2 Cluster East.** As shown in Table 1-3, the Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.

Table 1-3. Big Rock 2 Cluster East Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-310-027	A-2-R-RE	N/A
2	051-310-028	A-2-R-RE	N/A

Big Rock Cluster West. As shown in Table 1-4, the Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). As shown in Table 1-4, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

Table 1-4. Big Rock 2 Cluster West Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-290-018	A-2-R	A-2-R-RE
2	051-290-019	A-3	A-3-RE
3	051-320-005	A-3	A-3-RE
4	051-320-006	A-3	A-3-RE
5	051-320-007	A-3	A-3-RE

3. **Approval of the following CUPs:**
    - **Big Rock 2 Cluster North: #24-0006**
    - **Big Rock 2 Cluster South: #24-0007**
    - **Big Rock 2 Cluster East: #24-0008**
    - **Big Rock 2 Cluster West: #24-0009**

Implementation of the project would require the approval of the four CUPs listed above by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. With approval of the zone change, the project site would

PC ORIGINAL PKG

be zoned General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone (A-2-RE, A-2-R-RE and A-3-RE).

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

4. **Variance (#24-0002 through 24-0005~~6~~).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by

PC ORIGINAL PKG

the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project.

Subsequent ministerial approvals may include, but are not limited to:

- Grading and clearing permits
- Building permits
- Reclamation plan
- Encroachment permits
- Transportation permit(s)

Other Agencies Reviews and/or Consultations

The following agencies may be involved in reviewing and/or consultations with the project proponent as it relates to construction of the project:

Federal

UNITED STATES FISH AND WILDLIFE SERVICE

- The United States Fish and Wildlife Service (USFWS) enforces compliance with regulations related to special-status species or their habitat as required under the Federal Endangered Species Act (ESA).

UNITED STATES ARMY CORPS OF ENGINEERS

- Section 404 Permit (Clean Water Act [CWA]). The CWA establishes a program to regulate the discharge of dredge and fill material into waters of the U.S. including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. Either an individual 404b permit or authorization to use an existing USACE Nationwide Permit will need to be obtained if any portion of the construction requires fill into a river, stream, or stream bed that has been determined to be a jurisdictional waterway.

State

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (TRUSTEE AGENCY)

- The California Department of Fish and Wildlife (CDFW) is a Trustee Agency and enforces compliance with regulations related to California special-status species or their habitats as required under the California Endangered Species Act (CESA). Agencies and/or project proponents must consult with CDFW regarding, when applicable, compliance with Section 1602 of the California Department of Fish and Game (CDFG) Code.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

- **National Pollution Discharge Elimination System Construction General Permit Order No. 2009-009-DWQ.** Requires the applicant to file a public Notice of Intent to discharge stormwater and to prepare and implement a stormwater pollution prevention plan (SWPPP).

PC ORIGINAL PKG

- **Jurisdictional Waters.** Agencies and/or project proponents must consultant with the California Regional Water Quality Control Board (RWQCB) regarding, when applicable, regarding compliance with the CWA Section 401 Water Quality Certification or permitting under California Porter-Cologne Act.

Local

IMPERIAL COUNTY FIRE DEPARTMENT

- Review as part of the EIR process including the final design of the proposed fire system.

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT

- Review as part of the EIR process regarding consistency with the Imperial County Air Pollution Control District (ICAPCD) CEQA Air Quality Handbook, the final "Modified" 2009 8-hour Ozone Air Quality Management Plan, the State Implementation Plan for particulate matter less than 10 microns in diameter (PM_{10}) in the Imperial Valley, the State Implementation Plan (SIP) for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and verification of Rule 801 compliance.

IMPERIAL IRRIGATION DISTRICT

- Review as part of the EIR process and issue an Interim Water Supply Policy (IWSP) water supply agreement (if IID determines the project is to utilize IWSP for Non-Agricultural Projects water) and other permits such as encroachment permits

1.2 Relationship to Statutes, Regulations, and Other Plans

1.2.1 County of Imperial General Plan and Land Use Ordinance

The General Plan provides guidance on future growth in the County of Imperial. Any development in the County of Imperial must be consistent with the General Plan and Land Use Ordinance (Title 9, Division 10).

1.2.2 Renewables Portfolio Standard Program

Established in 2002 under Senate Bill (SB) 1078, California's Renewables Portfolio Standard (RPS) was accelerated in 2006 under SB 107 by requiring that 20 percent of electricity retail sales be served by RE resources by 2010. RE sources include wind, geothermal, and solar. Subsequent recommendations in California energy policy reports advocated a goal of 33 percent by 2020. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order (EO) S-14-08 requiring that "... all retail sellers of electricity shall serve 33 percent of their load with RE by 2020." The following year, EO S-21-09 directed the California Air Resources Board (CARB), under its Assembly Bill (AB) 32 authority, to enact regulations to achieve the goal of 33 percent renewables by 2020.

In the ongoing effort to codify the ambitious 33 percent by 2020 goal, SB X12 was signed by Governor Brown, in April 2011. This new RPS preempts the CARB's 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities had to

PC ORIGINAL PKG

adopt the new RPS goals of 20 percent of retails sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020.

Governor Brown signed into legislation SB 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible RE resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

1.2.3 Senate Bill 32

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by Executive Order (EO) B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

1.2.4 Title 17 California Code of Regulations, Subchapter 10, Article 2, Sections 95100 et seq.

These CARB regulations implement mandatory GHG emissions reporting as part of the California Global Warming Solutions Act of 2006.

1.2.5 Federal Clean Air Act

The legal authority for federal programs regarding air pollution control is based on the 1990 Clean Air Act (CAA) Amendments. These are the latest in a series of amendments made to the CAA. This legislation modified and extended federal legal authority provided by the earlier Clean Air Acts of 1963 1970, and 1977.

The Air Pollution Control Act of 1955 was the first Federal legislation involving air pollution. This Act provided funds for federal research in air pollution. The CAA of 1963 was the first Federal legislation regarding air pollution control. It established a federal program within the U.S. Public Health Service and authorized research into techniques for monitoring and controlling air pollution. In 1967, the Air Quality Act was enacted in order to expand Federal government activities. In accordance with this law, enforcement proceedings were initiated in areas subject to interstate air pollution transport. As part of these proceedings, the Federal government for the first time conducted extensive ambient monitoring studies and stationary source inspections.

The Air Quality Act of 1967 also authorized expanded studies of air pollutant emission inventories, ambient monitoring techniques, and control techniques.

1.2.6 Imperial County Air Pollution Control District

The ICAPCD enforces rules and regulations regarding air emissions associated with various activities, including construction and farming, and operational activities associated with various land uses, in order to protect the public health.

PC ORIGINAL PKG

1.2.7 Federal Clean Water Act (33 United States Code Section 1251-1387)

The Federal Water Pollution Control Act (33 United States Code [USC] §§1251-1387), otherwise known as the CWA, is a comprehensive statute aimed at restoring and maintaining the chemical, physical and biological integrity of the nation's waters. Enacted originally in 1948, the Act was amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost every year. Primary authority for the implementation and enforcement of the CWA rests with the U.S. Environmental Protection Agency (EPA). In addition to the measures authorized before 1972, the Act authorizes water quality programs, requires federal effluent limitations and state water quality standards, requires permits for the discharge of pollutants into navigable waters, provides enforcement mechanisms, and authorizes funding for wastewater treatment works construction grants and state revolving loan programs, as well as funding to states and tribes for their water quality programs. Provisions have also been added to address water quality problems in specific regions and specific waterways.

Important for wildlife protection purposes are the provisions requiring permits to dispose of dredged and fill materials into navigable waters. Permits are issued by the United States Army Corps of Engineers (USACE) under guidelines developed by EPA pursuant to Section 404 of the CWA.

1.2.8 Federal Clean Water Act and California Porter-Cologne Water Quality Control Act

The project is located within the Colorado River Basin RWQCB, Region 7. The CWA and the California Porter-Cologne Water Quality Control Act require that Water Quality Control Plans (more commonly referred to as Basin Plans) be prepared for the nine state-designated hydrologic basins in California. The Basin Plan serves to guide and coordinate the management of water quality within the region.

1.2.9 Federal Endangered Species Act

The ESA (16 USC 1531-1544) provides protection for plants and animals whose populations are dwindling to levels that are no longer sustainable in the wild. The Act sets out a process for listing species, which allows for petition from any party to list a plant or animal. Depending on the species, USFWS or the National Marine Fisheries Service (NMFS) will determine whether listing the species is warranted. If it is warranted, the species will be listed as either threatened or endangered. The difference between the two categories is one of degree, with endangered species receiving more protections under the statute.

1.2.10 National Historic Preservation Act

Federal regulations (36 Code of Federal Regulations [CFR] Part 800.2) define historic properties as "any prehistoric or historic district, site, building, structure, or object included, or eligible for inclusion in, in the National Register of Historic Places (NRHP)." The term "cultural resource" is used to denote a historic or prehistoric district, site, building, structure, or object, regardless of whether it is eligible for the NRHP.

1.2.11 California Endangered Species Act

CESA is enacted through Government Code Section 2050. Section 2080 of the California Fish and Game Code (FGC) prohibits "take" of any species that the commission determines to be an

PC ORIGINAL PKG

endangered species or a threatened species. Take is defined in Section 86 of the FGC as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

CESA allows for take incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-caused losses of listed species populations and their essential habitats.

1.2.12 California Lake and Streambed Program (Fish and Game Code Section 1602)

CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the FGC (Section 1602) requires an entity to notify CDFW of any proposed activity that may substantially modify a river, stream, or lake.

1.3 Purpose of an EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of CEQA is to: (1) inform the public and governmental decision makers of the potential, significant environmental impacts of a project; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.4 EIR Process

1.4.1 Availability of Reports

This Draft EIR ~~has been~~ was distributed to various federal, state, regional, local agencies and interested parties for a 50-day public review period in accordance with Section 15087 of the CEQA Guidelines. This Draft EIR and documents incorporated by reference ~~are~~ were available for public review at the County of Imperial Planning and Development Services Department, 801 Main Street, El Centro, California 92243. Documents ~~may be~~ were available for review~~ed~~ during regular business hours.

Rocio Yee, Planner II

County of Imperial, Planning and Development Services Department

801 Main Street

El Centro, California 92243

Comments received during the public review period of the Draft EIR ~~will be~~ have been reviewed and responded to in ~~the~~ this Final EIR. The Final EIR will ~~then~~ be reviewed by the Imperial County Planning Commission and Board of Supervisors as a part of the procedure to adopt the EIR. Additional information on this process may be obtained by contacting the County of Imperial Planning and Development Services Department at (442) 265-1736.

PC ORIGINAL PKG

1.4.2 Public Participation Opportunities/Comments and Coordination

Notice of Preparation

The County of Imperial issued a notice of preparation (NOP) for the preparation of an EIR for the Big Rock 2 Solar and Storage Project on September 3, 2024. The NOP was distributed to city, county, state, and federal agencies, other public agencies, and various interested private organizations and individuals in order to define the scope of the EIR. The NOP was also published in the Imperial Valley Press on September 3, 2024. The purpose of the NOP was to identify public agency and public concerns regarding the potential impacts of the project, and the scope and content of environmental issues to be addressed in the EIR. Correspondence in response to the NOP was received from the following entities and persons:

- California Department of Conservation
- California Department of Fish and Wildlife
- Imperial Irrigation District
- Imperial County Air Pollution Control District

The comments submitted on the NOP during the public review and comment period are included as Appendix A to this EIR.

Scoping Meeting and Environmental Evaluation Committee

During the NOP public review period, the Big Rock 2 Solar and Storge Project was discussed as an informational item at the County's Environmental Evaluation Committee meeting on September 26, 2024.

Additionally, a scoping meeting (held in-person and virtually) for the general public as well public agencies was held on September 26, 2024 at 6:00 p.m., to further obtain input as to the scope of environmental issues to be examined in the EIR. The NOP, which included the scoping meeting date and location, was published in the Imperial Valley Press on September 3, 2024. A virtual meeting was held by the Imperial County Planning & Development Services Department. At the scoping meeting, members of the public were invited to ask questions regarding the proposed project and the environmental review process, and to comment both verbally and in writing on the scope and content of the EIR. No comment letters were received during the scoping meeting.

1.4.3 Environmental Topics Addressed

Based on the analysis presented in the NOP and the information provided in the comments to the NOP, the following environmental topics are analyzed in this EIR:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils

PC ORIGINAL PKG

- Greenhouse Gas (GHG) Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

Eliminated from Further Review in Notice of Preparation

The initial study (IS)/NOP completed by the County (Appendix A of this EIR) determined that environmental effects to Forestry Resources, Energy, Mineral Resources, Population/Housing, Public Services (Schools and Parks/Other Public Facilities), Recreation, Utilities (Wastewater, Stormwater, and Solid Waste), and Wildfire would not be potentially significant. Therefore, these impacts are not addressed in this EIR; however, the rationale for eliminating these issues is discussed in Chapter 6.0, Effects Found Not Significant.

1.4.4 Areas of Controversy and Issues to be Resolved

Section 15123(b)(2) of the CEQA Guidelines requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public as well as issues to be resolved. A primary issue associated with this solar farm project, and other solar facility projects that are proposed in the County, is the corresponding land use compatibility and fiscal/economic impacts to the County. Through the environmental review process for this project, other areas of concern and issues to be resolved include potential impacts related to the conversion of farmland to non-agricultural uses, damage to crops, wildlife, water supply, fire hazards associated with the battery energy storage system, health effects from air pollution, noise and hazardous materials, and change of visual character.

1.4.5 Document Organization

The structure of the ~~Draft~~ Final EIR is identified below. The ~~Draft~~ Final EIR is organized into ~~10~~ 14 chapters, including the Executive Summary.

- **Chapter 0.1 Introduction and Summary** describes the CEQA requirements and content of the Final EIR.
- **Chapter 0.2 Responses to Comment Letters Received on the Draft EIR** provides copies of the comment letters received and individual responses to written comments.
- **Chapter 0.3 Errata to the Draft EIR** identifies the location of, or contains revisions to, information included in the Draft EIR dated May 2025, based upon additional or revised information required to prepare a response to a specific comment.

PC ORIGINAL PKG

  - **Chapter 0.4 Mitigation Monitoring and Reporting Program** identifies the mitigation measures, timing, and responsibility for implementation of the measures.

- The **Executive Summary** provides a summary of the proposed project, including a summary of project impacts, mitigation measures, and project alternatives.
- **Chapter 1 Introduction** provides a brief introduction of the proposed project; relationship to statutes, regulations and other plans; the purpose of an EIR; public participation opportunities; availability of reports; and comments received on the NOP.
- **Chapter 2 Project Description** provides a description of the Big Rock 2 Solar and Storage Project. This chapter also defines the goals and objectives of the proposed project, provides details regarding the individual components that together comprise the project, and identifies the discretionary approvals required for implementation of the project.
- **Chapter 3 Environmental Analysis** provides a description of the existing environmental setting and conditions, an analysis of the environmental impacts of the project for the following environmental issues: aesthetics; air quality; biological resources; cultural resources; geology and soils; GHG emissions; hydrology/water quality; land use and planning; noise and vibration; public services, transportation; tribal cultural resources; and utilities/service systems. This chapter also identifies mitigation measures to address potential impacts to the environmental issues identified above.
- **Chapter 4 Analysis of Long-Term Effects** provides an analysis of growth inducing impacts, significant irreversible environmental changes, and unavoidable adverse impacts.
- **Chapter 5 Cumulative Impacts** discusses the impact of the proposed project in conjunction with other planned and future development in the surrounding areas.
- **Chapter 6 Effects Found Not to be Significant** lists all the issues determined to not be significant as a result of the preparation of this EIR.
- **Chapter 7 Alternatives** analyzes the alternatives to the proposed project.
- **Chapter 8 References** lists the data references utilized in preparation of the EIR.
- **Chapter 9 EIR Preparers and Organizations Contacted** lists all the individuals and companies involved in the preparation of the EIR, as well as the individuals and agencies consulted and cited in the EIR.

PC ORIGINAL PKG

2 Project Description

Chapter 2 provides a description of the Big Rock 2 Cluster Solar and Storage Project. This chapter also defines the goals and objectives of the proposed project, provides details regarding the individual components that together comprise the project, and identifies the discretionary approvals required for project implementation.

The project applicant, 90FI 8me, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and ~~five~~ four variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility. The project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active conditional use permits (CUP) known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project.

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as “solar energy facility”); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District’s (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the “proposed project” or “project.”

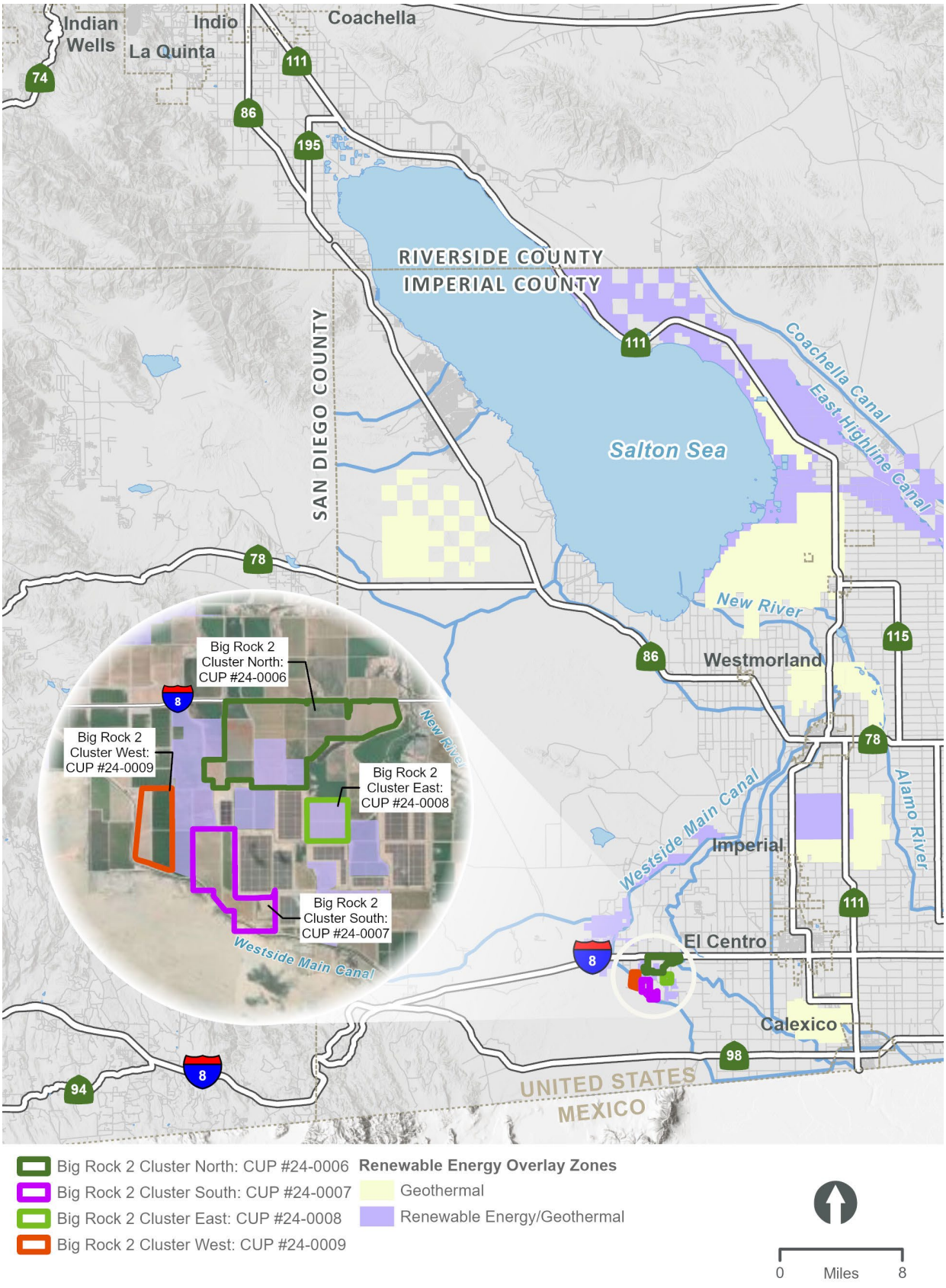
2.1 Project Location

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California (Figure 2-1). The proposed project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately-owned land, comprising 24 assessor parcels.

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Figure 2-1. Regional Location



PC ORIGINAL PKG

As previously mentioned above, the project applicant is seeking approval of four separate CUPs associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility, which together define the project site. The four CUP applications or individual site locations consist of the following and are shown in Figure 2-2.

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

Each of these four individual site locations are described in detail below.

2.1.1 Big Rock 2 Cluster North: CUP #24-0006

The Big Rock 2 Cluster North site is located on 13 parcels comprising approximately 1,030 acres. Table 2-2 identifies the individual APNs associated with the Big Rock 2 Cluster North site with their respective acreage and zoning. As shown in Table 2-1, of the 1,030 acres, approximately 120.3 acres are associated with the previously-approved CUP for Laurel Cluster 2 North. Approximately 80 acres of APN 051-300-032 and 40.3 acres of APN 051-300-036 associated with the previously-approved CUP for Laurel Cluster 2 North would be re-entitled as part of the proposed project.

The Big Rock 2 Cluster North site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

Table 2-1. Big Rock 2 Cluster North Assessor Parcel Numbers, Zoning, and Acreage

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	85.5
Sub-total			***910.0***
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
13	051-300-036 (to be re-entitled)	A-3-RE	40.3

PC ORIGINAL PKG

Sub-total	***120.3***
TOTAL ACRES	**1,030**

2.1.2 Big Rock 2 Cluster South: CUP #24-0007

The Big Rock 2 Cluster South site is located on five parcels comprising approximately 410 acres. Table 2-2 identifies the individual APNs associated with the Big Rock 2 Cluster South site with their respective acreage and zoning.

The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

Table 2-2. Big Rock 2 Cluster South Assessor Parcel Numbers, Zoning, and Acreage

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
TOTAL ACRES			**410.0**

2.1.3 Big Rock 2 Cluster East/Laurel Cluster South: CUP #24-0008

The Big Rock 2 Cluster East/Laurel Cluster South site is located on two parcels comprising approximately 160 acres. Table 2-3 identifies the individual APNs associated with the Big Rock 2 Cluster East/Laurel Cluster South site with their respective acreage and zoning. The 160-acre site is associated with the previously-approved CUP for Laurel Cluster 2 South and will be re-entitled as part of the proposed project.

The Big Rock 2 Cluster East site/Laurel Cluster South site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

Table 2-3. Big Rock 2 Cluster East/Laurel Cluster South Assessor Parcel Numbers, Zoning, and Acreage

	APN	Zoning	Acres
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
TOTAL ACRES			**160.0**

2.1.4 Big Rock 2 Cluster West: CUP #24-0009

The Big Rock 2 Cluster West site is located on five parcels comprising approximately 249 acres. Table 2-4 identifies the individual APNs associated with the Big Rock 2 Cluster West site with their respective acreage and zoning.

PC ORIGINAL PKG

The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

Table 2-4. Big Rock 2 Cluster West Assessor Parcel Numbers, Zoning, and Acreage

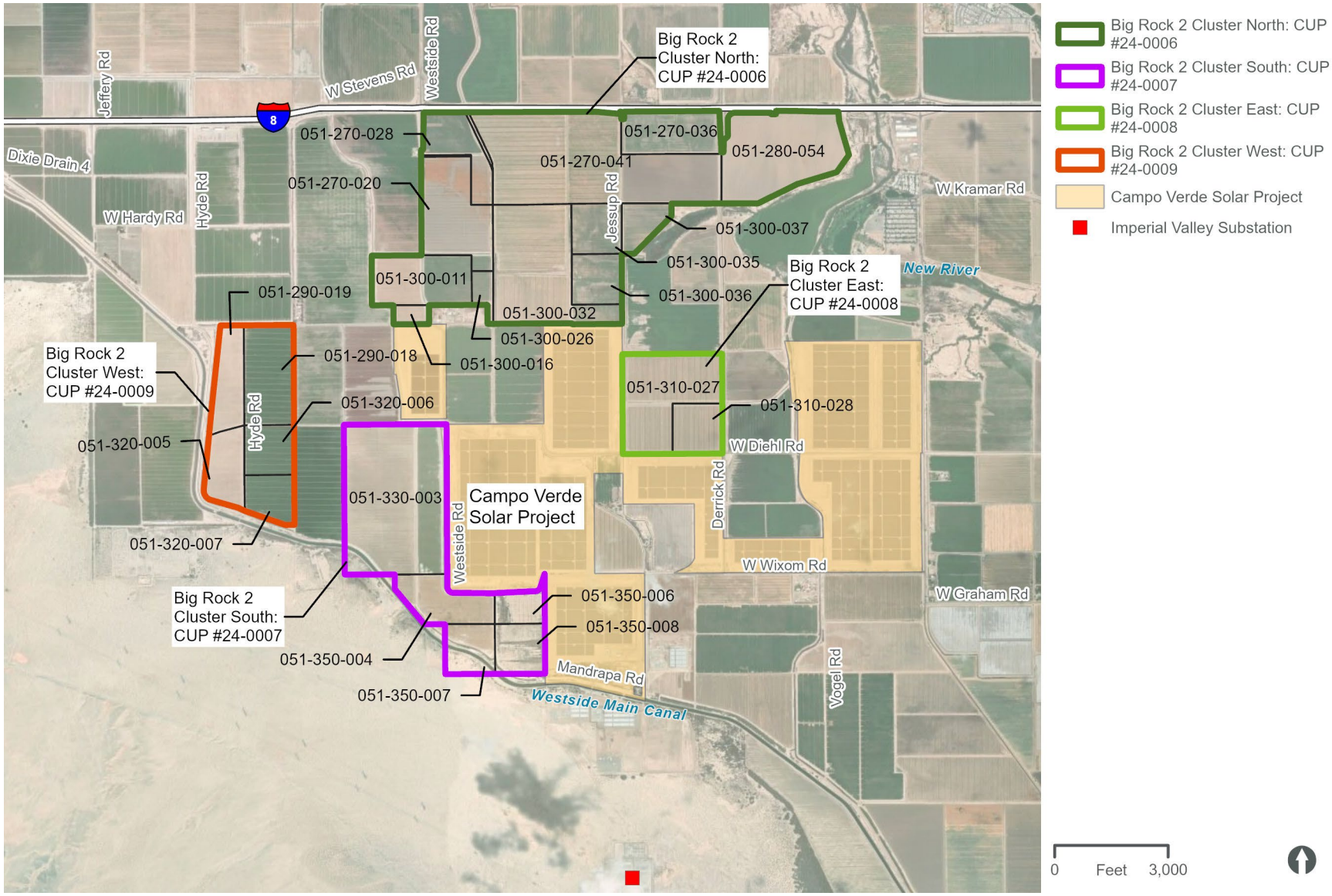
	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
TOTAL ACRES			**249.0**

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-2. Project Site



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Renewable Energy Overlay Zone

In October 2015, the County revised the Imperial County Renewable Energy and Transmission Element, which includes a RE Zone (RE Overlay Map). This General Plan element was created as part of the California Energy Commission Renewable Energy Grant Program to amend and update the County's General Plan to facilitate future development of renewable energy projects.

The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.

The County's General Plan and Land Use Ordinance allows that for renewable energy projects proposed on land classified in a non-RE Overlay zone, that the land on which the project is located may be included/classified in the RE Overlay Zone if the renewable energy project: 1) would be located adjacent to an existing RE Overlay Zone; 2) is not located in a sensitive area; 3) is located in proximity to renewable energy infrastructure; and, 4) and would not result in any significant environmental impacts.

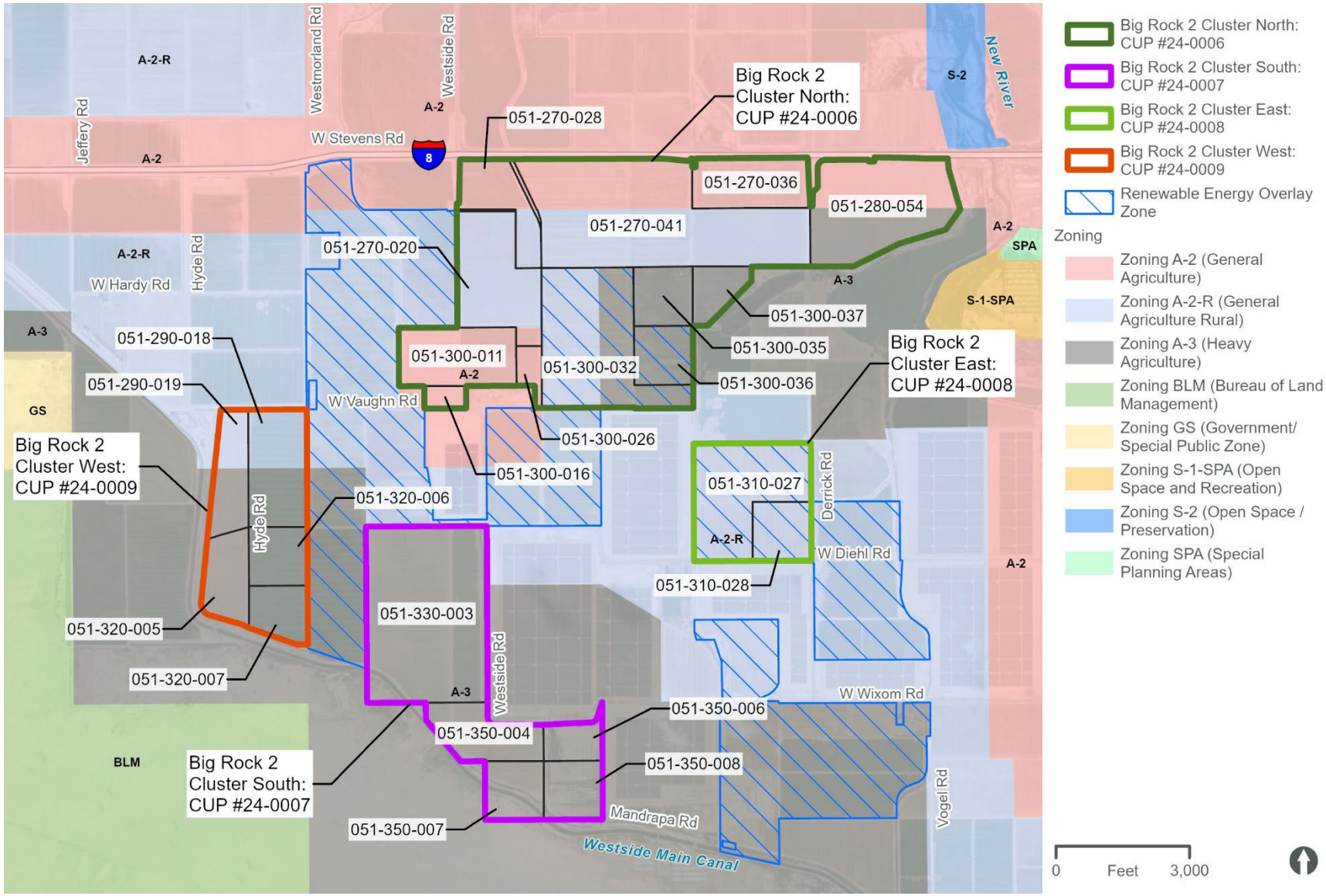
As shown in Figure 2-3, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-3. Zoning Designations



This page is intentionally blank.

PC ORIGINAL PKG

2.2 Project Objectives

The primary project objective is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Renewable Energy and Transmission Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- ~~Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.~~

PC ORIGINAL PKG

2.3 Project Characteristics

The proposed project involves the construction of a utility-scale PV solar and BESS facility on approximately 1,849 acres of privately-owned land. As shown in Table 2-5, the project would generate up to a combined 500 MW of AC on a daily basis and up to 500 MW of battery storage. Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines which could run overhead and/or underground to a dedicated project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the project substation to the existing Liebert Switchyard, which will then be connected via an overhead 230-kV gen-tie line to the existing Mandrapa Switchyard and the San Diego Gas and Electric (SDG&E) Imperial Valley Substation.

Each individual CUP site may include a ground mounted photovoltaic solar power generating system, supporting structures, inverter modules, pad mounted transformers, BESS, access roads and fencing, an operations and maintenance (O&M) building, and an on-site substation. Figure 2-4 depicts the proposed site plan.

It is anticipated that all BESS facilities associated with the project will be developed concurrently with PV componentry and situated in proximity to project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and project needs, by allowing one CUP area to utilize BESS credits of another CUP area. Likewise, the project may share facilities such as O&M facilities, transmission-related facilities, project sub-station(s), and/or other appurtenances.

Table 2-5. Proposed Big Rock 2 Cluster Solar and Storage Project Megawatt (MW) Output

CUP ~~Site~~	Acreage	Proposed PV MW	Proposed BESS MW	Maximum BESS MW
CUP #1: Big Rock 2 Cluster North: CUP 24-0006	1,030	100	40	140
CUP #2: Big Rock 2 Cluster South: CUP 24-0007	410	120	240	240
CUP #3: Big Rock Cluster East: CUP 24-0008	160	60	20	60
CUP #4: Big Rock 2 Cluster West: CUP 24-0009	249	80	20	60
Note: It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production needs, by allowing one CUP area to utilize "BESS allowances and/or credits" of another; however, in total, the overall Project buildout would not exceed up to 500-MW for the PV portion, nor exceed 500-MW of associated BESS. ~~Total PV system is 500 MW. Table depicts Big Rock 2 PV MW only. Does not include those portions of the project that have been previously approved associated with the Laurel Cluster Project and will be re-entitled/renewed (140 MW).~~				

2.3.1 Photovoltaic Panels/Solar Arrays

Solar cells, also called PV cells, convert sunlight directly into electricity. PV cells combine to create solar modules, or panels, and many solar panels combined together to create one system is called a solar (or PV) array.

PC ORIGINAL PKG

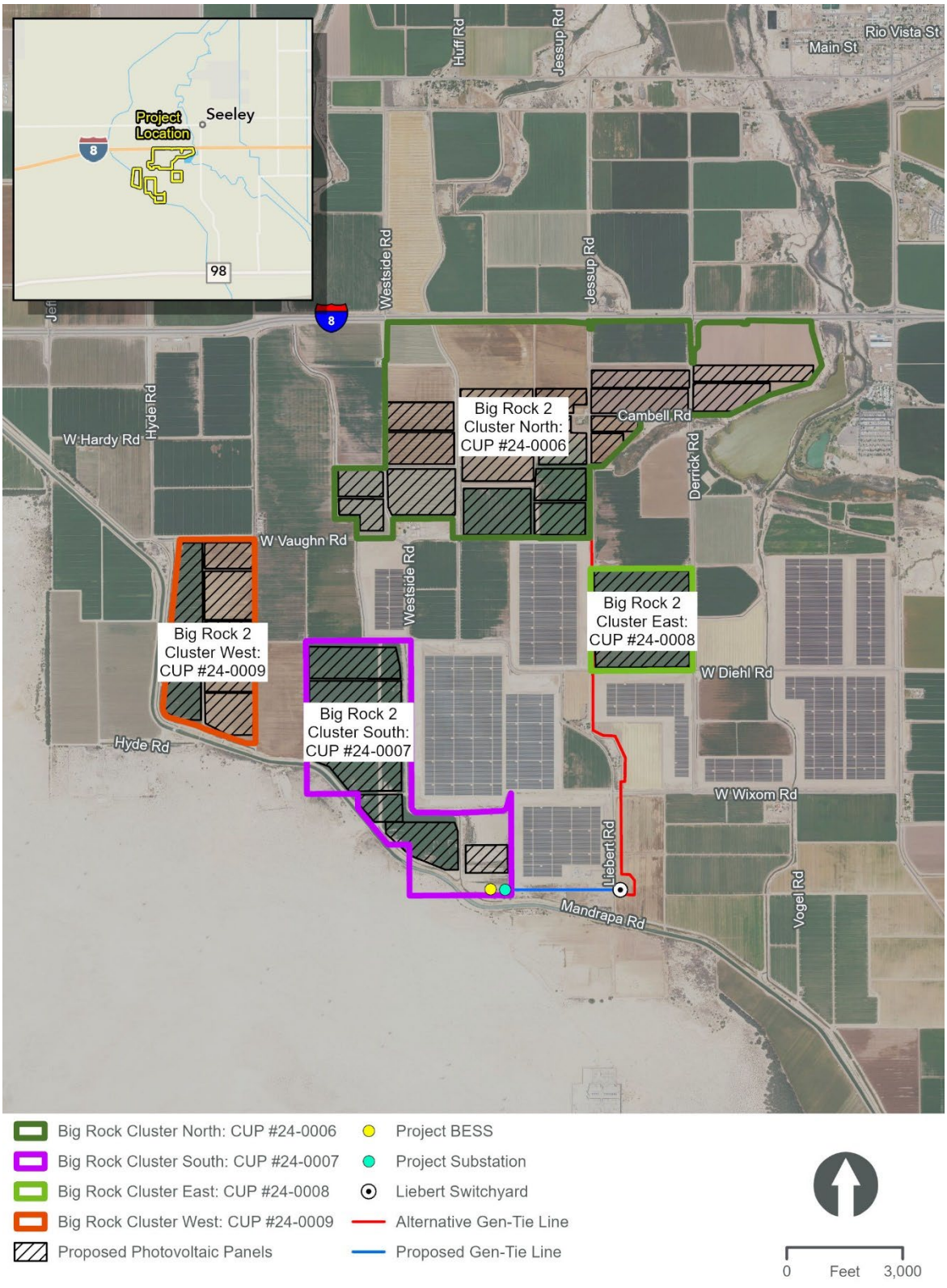
The project would use PV panels or modules on mounting frameworks to convert sunlight directly into electricity. The PV panels or modules would include, but not be limited to, bi-facial or concentrated photovoltaic (CPV) technology. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). Figure 2-5 provides a representative example of these types of systems. If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height, depending on the mounting system used, panels are expected to remain between six and eight feet in height.

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks (Figure 2-6). Blocks would produce direct electrical current (DC), which is converted to alternating current (AC) at the inverter stations.

Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the project area characteristics and the desired energy production profile.

PC ORIGINAL PKG

Figure 2-4. Proposed Site Plan



PC ORIGINAL PKG

Figure 2-5. Representative Examples of Photovoltaic Panel/Mounting Configuration



Typical Fixed-Tilt Solar Panel Rows



Typical Single-Axis Tracking Solar Panels



Typical Dual-Axis Tracking Solar Panels



Typical Fixed-Tilt Mounting Structure



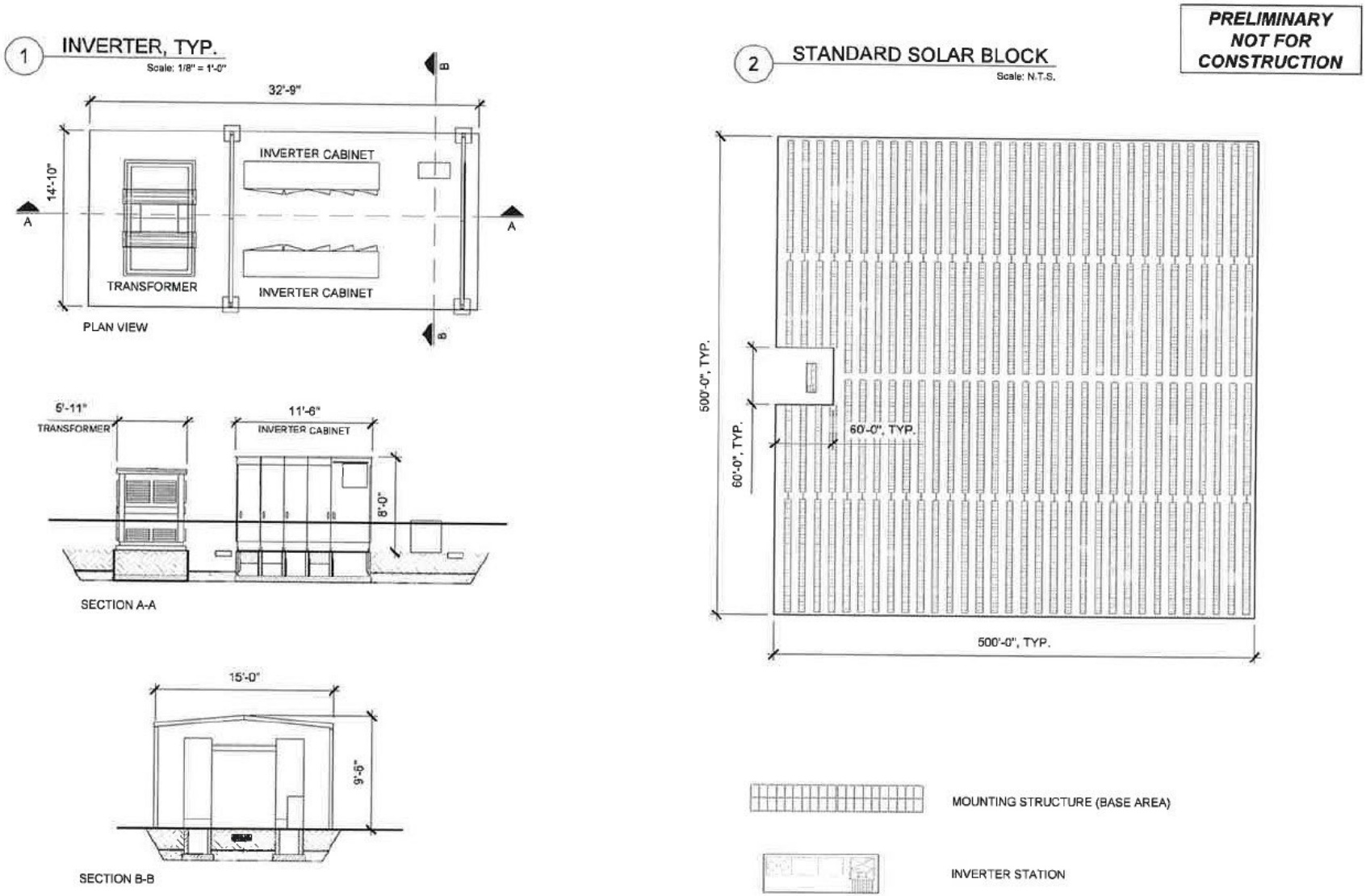
Typical Dual-Axis Mounting Structure

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-6. Standard Solar Block and Typical Inverter Plan and Profile



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

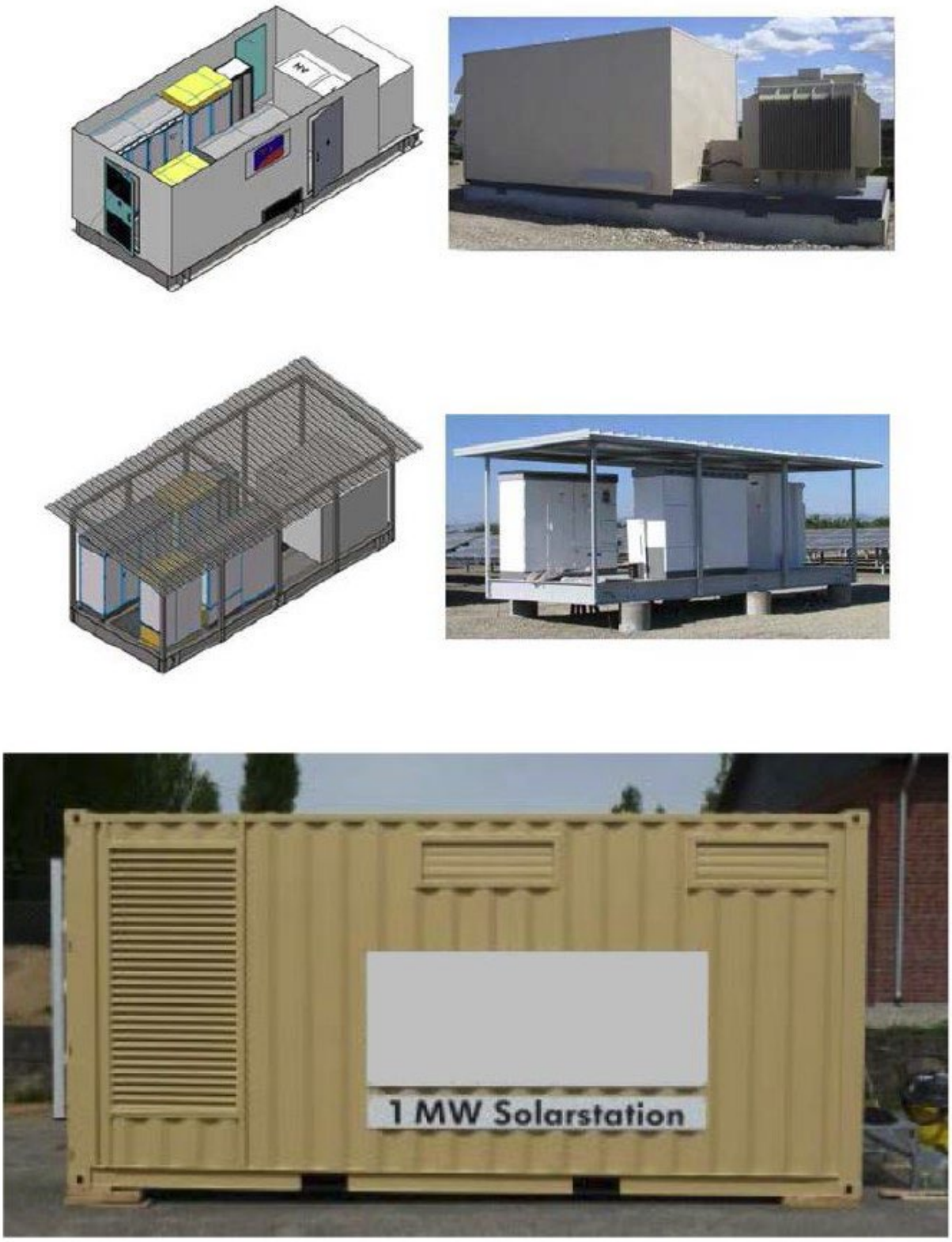
2.3.2 Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad. Figure 2-7 provides representative examples of a typical inverter station.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the project substation bus bar before being stepped up to 230kV for transmission. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the project by Imperial County.

PC ORIGINAL PKG

Figure 2-7. Representative Examples of Typical Inverter Stations



PC ORIGINAL PKG

2.3.3 Battery Energy Storage System

The project will include one or more BESS, located at or near the project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. A conceptual BESS layout is shown in Figure 2-8. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures. The maximum height of a dedicated structure is not expected to exceed 25 feet. Figure 2-9 provides representative examples of a typical energy storage system. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the project. As the BESS facility is intended to remain in service for the life of the project, it may be necessary to augment the batteries at regular intervals during project operations to restore the BESS facility to full capacity due to the life cycle of the battery units. Additional staff may be temporarily brought onsite, as needed, during augmentation installation.

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.

2.3.4 Substation(s)

The proposed project would have its own dedicated substation equipment located within the project footprint. Dedicated equipment may incorporate several components, including high voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s) (Figure 2-10). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures (such as communication towers) for diverse path routing of communications. Substations typically occupy an area of up to approximately five acres and are secured separately by a chain-link fence.

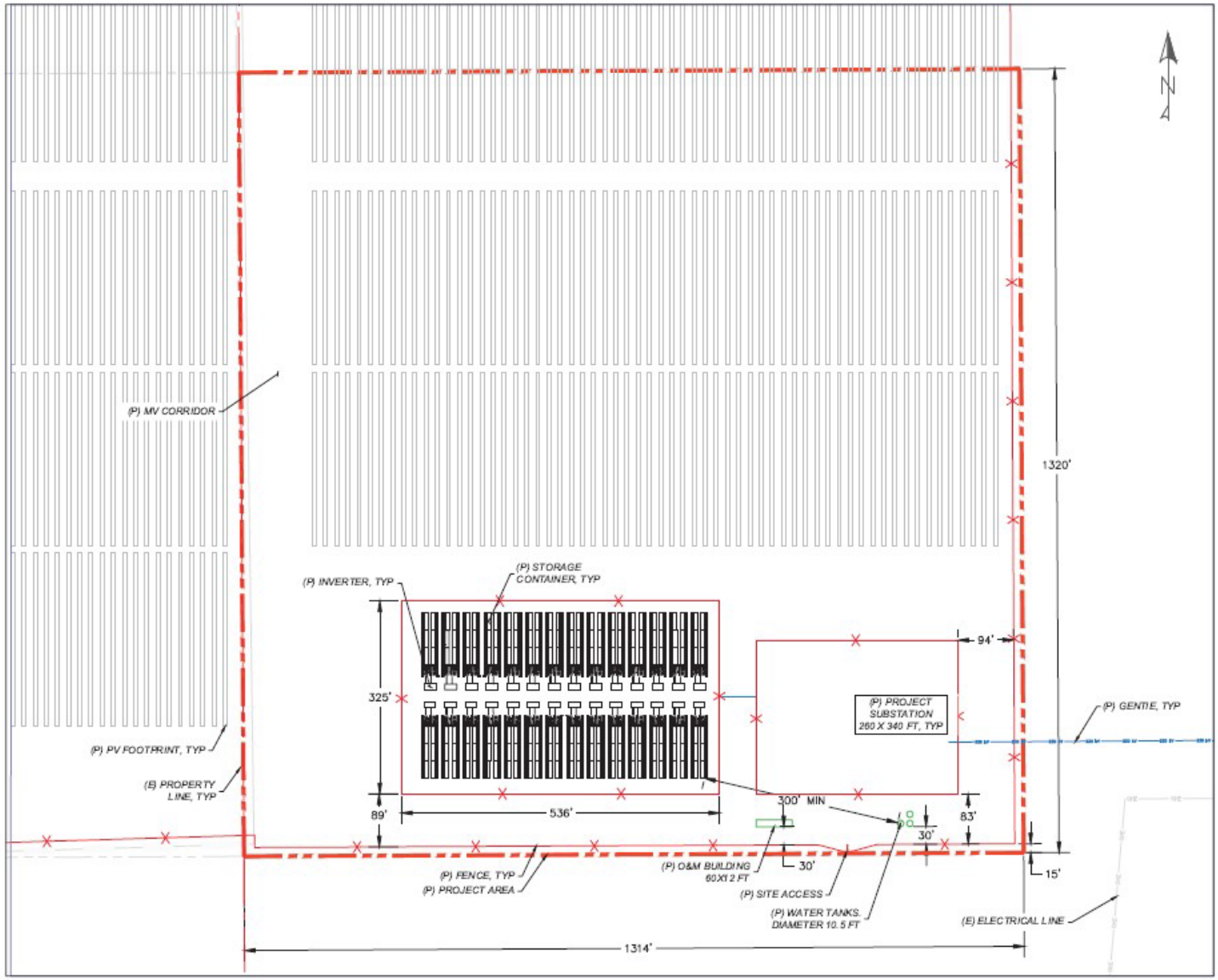
Dedicated project substations typically include a small control building (approximately 500 square feet) standing approximately 10 feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building. A representative example of a substation is presented in Figure 2-11.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-8. Conceptual BESS Layout



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-9. Representative Examples of Typical Energy Storage Systems



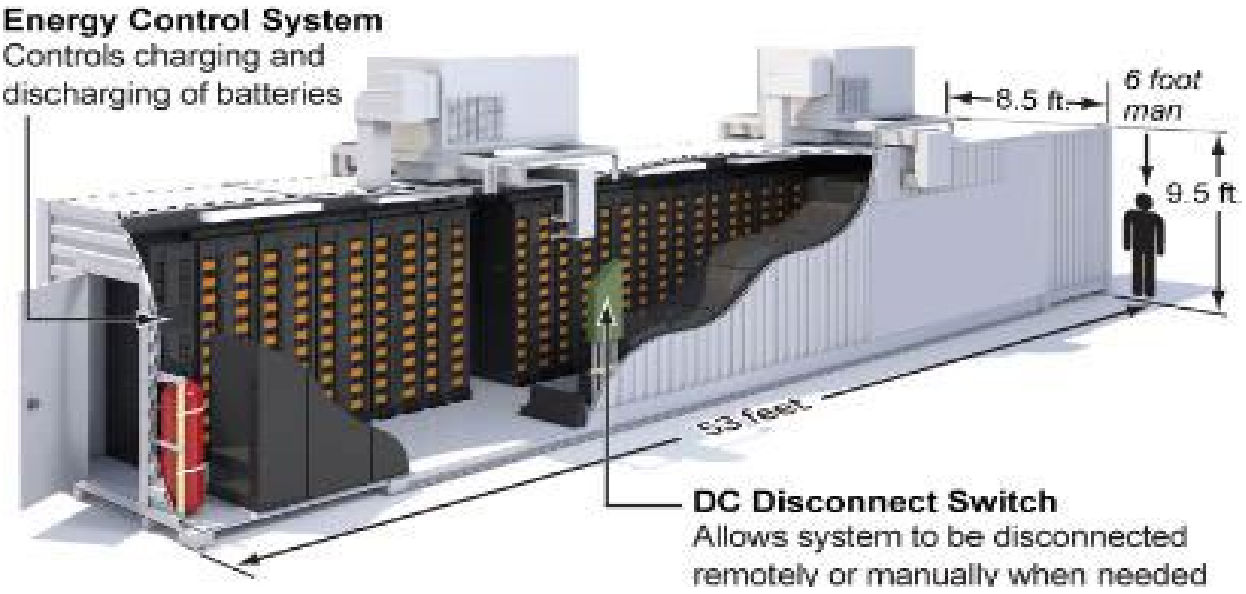
Modular BESS Installed on Concrete Pad



Modular BESS Installed on Multiple Concrete Pads

PC ORIGINAL PKG

Figure 2-9. Representative Examples of Typical Energy Storage Systems (con'td)



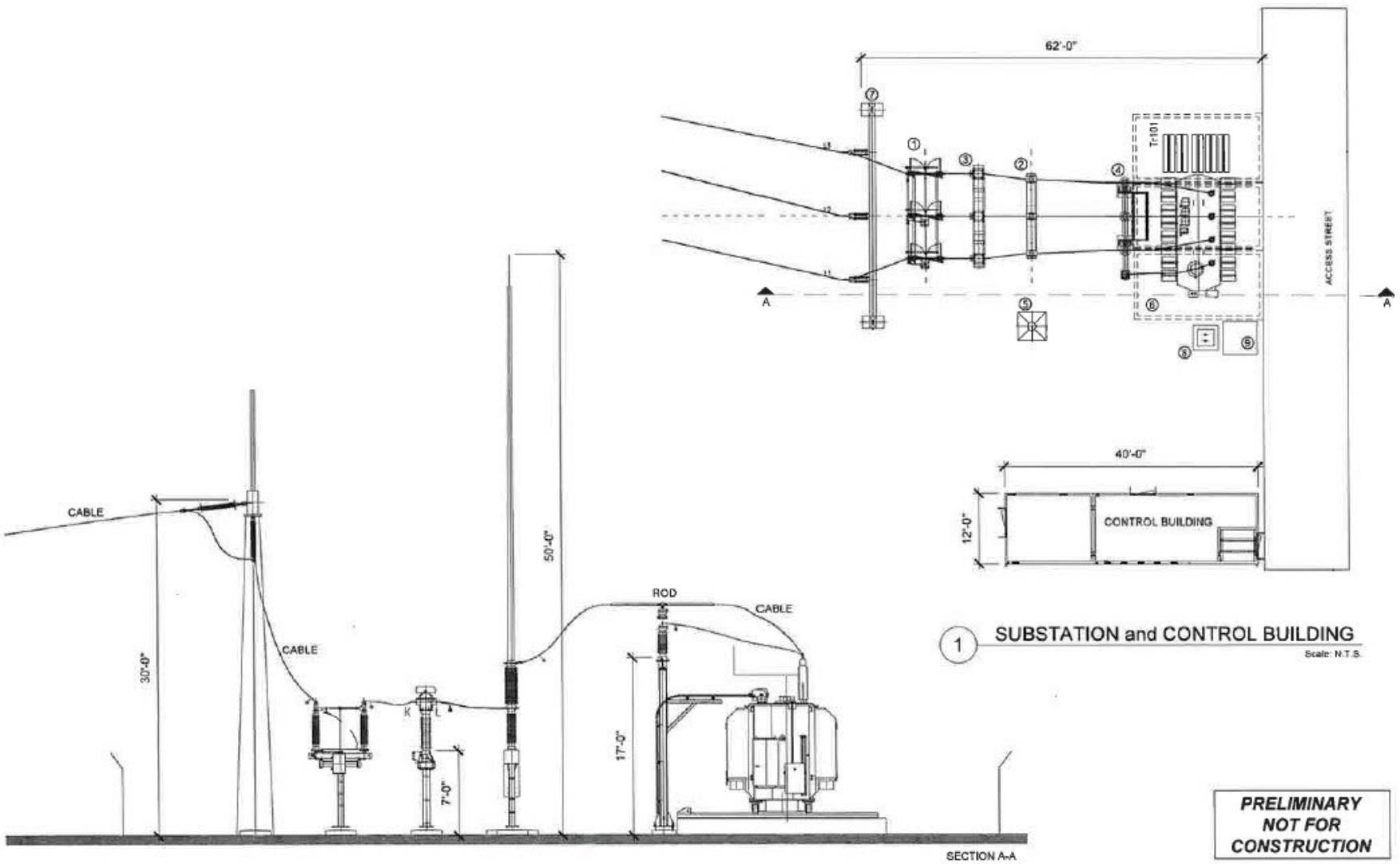
Typical BESS Module Configuration



Typical BESS

PC ORIGINAL PKG

Figure 2-10. Substation Details - Typical



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-11. Representative Example of Typical Substation Design



2.3.5 Transmission Line and Interconnection

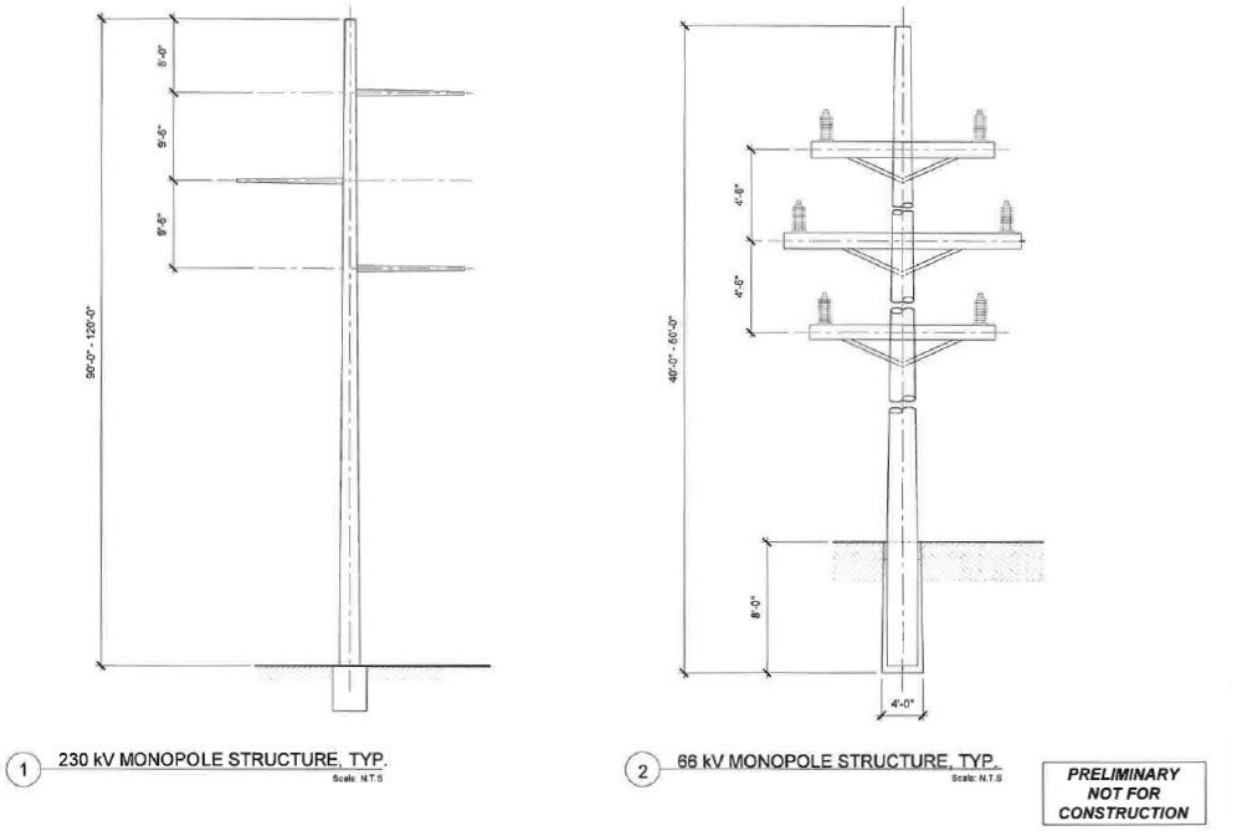
The project's 230kV step-up substation would connect to the existing 230kV Liebert Switchyard/Sub-station via one of the proposed gen-tie line alternatives (Figure 2-4). The proposed gen-tie line alignment would extend approximately 0.62 miles from the southeast corner of the Big Rock 2 Cluster South site then heads east to the Liebert Switchyard. The alternative gen-tie line alignment would extend approximately 2.04 miles from the south-central portion of the Big Rock 2 Cluster North site then heads south to the Liebert Switchyard. The project will transmit electricity to the electric grid via the existing Liebert Switchyard/Sub-station; therefore, a new electric grid switchyard/sub-station will not be required, and thus obviating the need for any real estate conveyance to IID specific to the project. The existing Liebert Switchyard is connected to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line that also passes through the existing Mandrapa Switchyard. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height (Figure 2-12) and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands. The project applicant will be required to submit application(s) to BLM in the event the gen-tie alignment will need to cross BLM lands. The BLM will determine the permits required based on the scope of the application(s).

The maximum height limit for non-residential structures and commercial communication towers in the A-2 and A-3 zones is 120 feet. The proposed project may involve construction of transmission towers up to 200 feet in height, which would exceed the height limit in the A-2 and A-3 zones and a height variance would be required.

PC ORIGINAL PKG

Figure 2-12. Monopole Details - Typical



PC ORIGINAL PKG

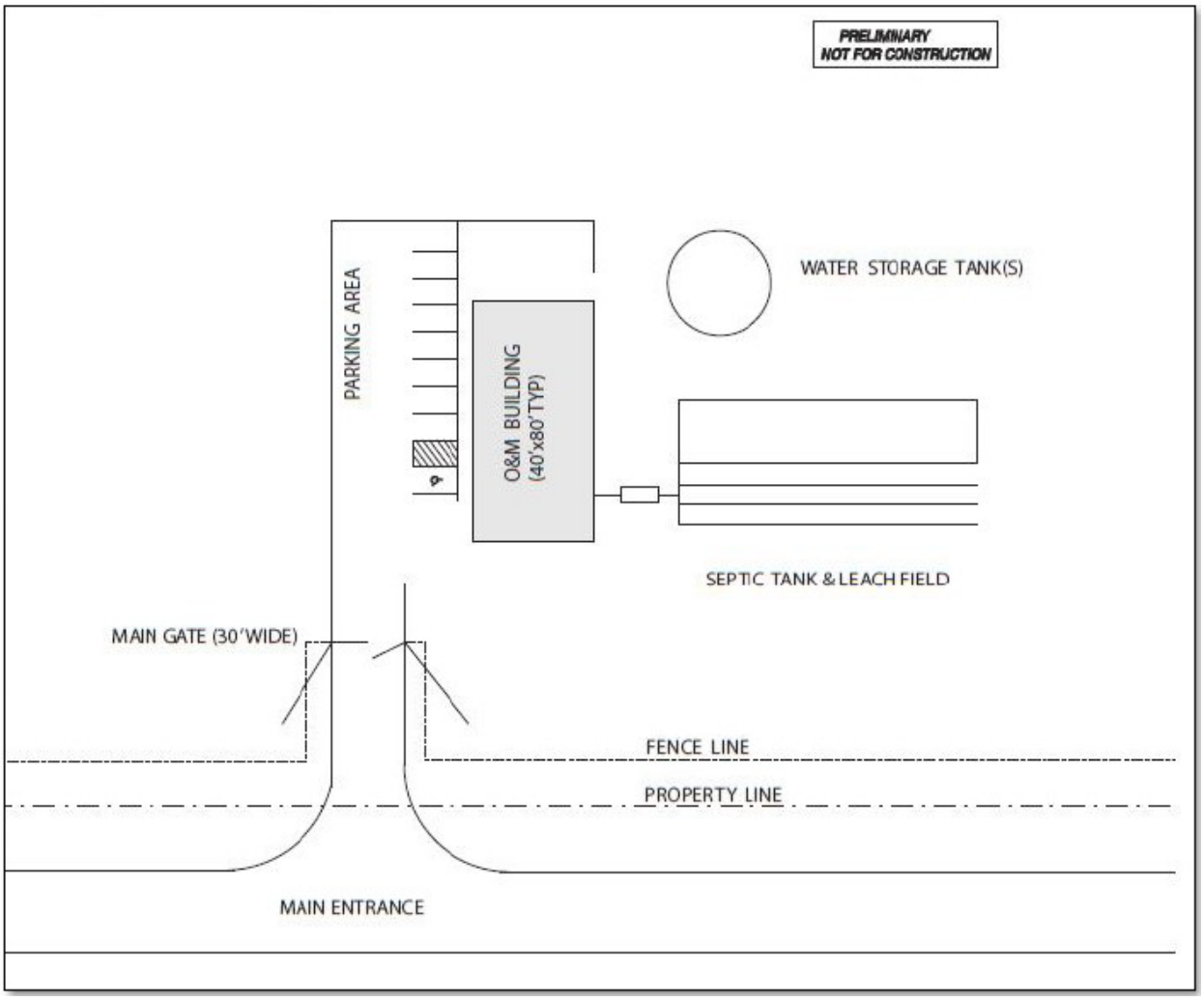
2.3.6 Operations and Maintenance (O&M) Building

Each individual CUP site may include an O&M building of approximately 40’ x 80’ in size, with associated onsite parking. Figure 2-13 depicts a typical O&M building floor plan and elevations. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Figure 2-13. Conceptual Operations and Maintenance Building Area Plan



PC ORIGINAL PKG

2.3.7 Roadway and IID Crossings

The project may require the following crossing types of IID canals and/or drains and unimproved Imperial County roads:

- overhead electric
- underground electric
- vehicular crossings

The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the project crossing or access point would still allow the drain to flow. As required by IID, the project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

2.3.8 Water Usage

The proposed project is anticipated to require approximately 700 acre-feet of water to support construction over a 1.5 to 2-year period. Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for municipal, commercial, industrial (MCI) temporary water use. Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the project Applicant will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which provides IID with the information needed to manage the IID-apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts.

The proposed project is anticipated to require up to 10 acre-feet per year (AFY) to support O&M over a 30-year operational period. The operational water demand would be for the O&M building, fire flow storage, and periodic panel washing. It is assumed that no water for dust control during operation will be necessary. Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). In the event that IID determines that the proposed project is to utilize Interim Water Supply Policy (IWSP) for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID has adopted an IWSP for non-agricultural projects from which water supplies can be contracted to serve new non-agricultural developments within IID's water service area.

A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

2.3.9 Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

PC ORIGINAL PKG

2.3.10 Site Security and Fencing

The project area would be enclosed within a chain link fence measuring six feet in height with 1-foot-tall barbed wire on top of the chain link fence. Slatted chain-link fencing would be installed along the northern perimeter of the project site (portion of the project site adjacent to I-8) and non-slatted chain-link fencing would be installed around the remainder of the project perimeter. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the project.

Controlled access gates would be maintained at the main entrances to the project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

2.3.11 Lighting

Outdoor lighting for the project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

2.3.12 Site Access

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

2.3.13 Fire Protection/Fire Safety Systems

Fire protection systems for battery systems would be designed in accordance with California Fire Code and would take into consideration the recommendations of the National Fire Protection Association (NFPA) 855.

Fire suppression agents such as Novec 1230 or FM 2000, or water may be used as a suppressant. In addition, fire prevention methods would be implemented to reduce potential fire risk, including voltage, current, and temperature alarms. Energy storage equipment would comply with Underwriters Laboratory (UL)-95401 and test methods associated with UL-9540A. The project would include lithium-ion batteries. For lithium-ion batteries storage, a system would be used that would contain the fire

PC ORIGINAL PKG

event and encourage suppression through cooling, isolation, and containment. Suppressing a lithium-ion (secondary) battery is best accomplished by cooling the burning material.

To mitigate potential hazards, redundant separate methods of failure detection would be implemented. These would include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off gas detection would be implemented, as applicable. These are in addition to other potential protective measures such as ventilation, overcurrent protection, battery controls maintaining batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Remote alarms would be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan would be implemented. Additionally, the project applicant would contribute its proportionate share for purchase of any fire-suppression equipment, if determined warranted by the County fire department for the proposed project.

2.4 Project Construction

The construction period for the project is approximately 18 to 24 months. Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the project's construction period.

Construction traffic could access the project site from the north or south via Derrick Road, Jessup Road, Westside Road, and Hyde Road, and from the east via Diehl Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) Evan Hewes Hwy, Westside Road, and Diehl Road for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00

PC ORIGINAL PKG

pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the project area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

Site preparation would be planned and designed to minimize the amount of earth movement required for the project, to the extent feasible. The hydrology design would be given priority to protect the project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

2.4.1 Laydown Areas

At full build-out, most of the project footprint would be disturbed by construction of the project. Therefore, temporary construction laydown and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the project disturbance footprint. Due to the large scale of the project, the laydown areas may be relocated periodically within the solar field acreage as the project is built out.

2.4.2 Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the project.

2.5 Project Operation

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation

PC ORIGINAL PKG

- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

2.5.1 Workforce

It is expected that the project would require an operational staff of 4 to 10 full-time employees. It is possible that the proposed project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

2.6 Utility Grid Upgrades

Certain utility grid upgrades will be performed by the utility to support the interconnection of the project. Upgrades will be limited to areas already within the footprint of the utility. The utility upgrades assigned to the project include, a Remote Terminal Unit (RTU) at Imperial Valley Substation, installation of one or more new 230-kV circuit breakers, two or more 230 kV disconnect switches, one A-frame deadend structure, line deadend hardware, three tiedowns, three surge arrestors, one Potential Transformer (PT) and associated foundations, structures, and relaying at Imperial Valley Substation. Precurser network upgrades that are expected to be in service include 24 230kV circuit breaker upgrades at Imperial Valley Substation identified as the "Short Circuit Mitigation for Imperial Valley 230kV Circuit Breakers" transmission planning project (TPP) Project.

2.7 Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried

by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

The applicant would prepare a project Reclamation Plan that would be implemented at the end of the project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.
- Description of the activities necessary to restore the project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

2.8 Required Project Approvals

2.8.1 Imperial County

The following are the primary discretionary approvals required for implementation of the project:

1. **General Plan Amendment (#24-0002).** An amendment to the County's General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. As shown in Figure 2-3, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.
2. **Zone Change (#24-0003).**
    - **Big Rock 2 Cluster North**. As shown in Table 2-6 and Figure 2-3, the Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the

PC ORIGINAL PKG

RE Overlay Zone. As shown in Table 2-6, the applicant is requesting a Zone Change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

Table 2-6. Big Rock 2 Cluster North Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-270-020	A-2-R	A-2-R-RE
2	051-270-028	A-2	A-2-RE
3	051-270-036	A-2	A-2-RE
4	051-270-041	A-2-R	A-2-R-RE
5	051-280-054	A-2	A-2-RE
6	051-300-011	A-2	A-2-RE
7	051-300-016	A-2	A-2-RE
8	051-300-026	A-2	A-2-RE
9	051-300-035	A-3	A-3-RE
10	051-300-037	A-3	A-3-RE
11	051-300-032 (northern portion)	A-2	A-2-RE
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	N/A
13	051-300-036 (to be re-entitled)	A-3-RE	N/A

- **Big Rock 2 Cluster South**. As shown in Table 2-7 and Figure 2-3, the Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). As shown in Table 2-7, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-3-RE).

Table 2-7. Big Rock Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-330-003	A-3	A-3-RE
2	051-350-004	A-3	A-3-RE
3	051-350-006	A-3	A-3-RE
4	051-350-007	A-3	A-3-RE
5	051-350-008	A-3	A-3-RE

- **Big Rock 2 Cluster East.** As shown in Table 2-8 and Figure 2-3, the Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.

PC ORIGINAL PKG

Table 2-8. Big Rock 2 Cluster East/Laurel Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-310-027	A-2-R-RE	N/A
2	051-310-028	A-2-R-RE	N/A

Big Rock 2 Cluster West. As shown in Table 2-9 and Figure 2-3, the Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). As shown in Table 2-9, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

Table 2-9. Big Rock 2 Cluster West Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-290-018	A-2-R	A-2-R-RE
2	051-290-019	A-3	A-3-RE
3	051-320-005	A-3	A-3-RE
4	051-320-006	A-3	A-3-RE
5	051-320-007	A-3	A-3-RE

3. **Approval of the following CUPs:**
    - **Big Rock 2 Cluster North: #24-0006**
    - **Big Rock 2 Cluster South: #24-0007**
    - **Big Rock 2 Cluster East: #24-0008**
    - **Big Rock 2 Cluster West: #24-0009**

    Implementation of the project would require the approval of the four CUPs listed above by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. With approval of the zone change, the project site would be zoned General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone (A-2-RE, A-2-R-RE and A-3-RE).

    Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

    - *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
    - *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*

PC ORIGINAL PKG

- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

4. **Variance (#24-0002 through 24-005~~6~~).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project.

The project may involve additional ministerial and discretionary approvals as listed below. Ministerial and discretionary approvals may include, but are not limited to the following:

- Grading Permit(s) - Imperial County Planning & Development Services (ICPDS)
- Building Permit(s) - ICPDS
- Dust Control Plan – Imperial County Air Pollution Control District (ICAPCD)
- Rule 310 Exemption (as applicable) - ICAPCD
- Construction Traffic Control Plan – Imperial County Department of Public Works (ICDPW)
- County Road Encroachment Permits, Transportation Permits - ICDPW

PC ORIGINAL PKG

- Vacation of Public Easements (as applicable) - ICDPW
- Site Plan and Architectural Review – ICPDS
- Occupancy Permits - ICPDS
- Fire Safety Plan – Imperial County Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements – Imperial County Fire Department and Office of Emergency Management
- On-site Water Treatment Permit – Imperial County Division of Environmental Health, ICDPW
- Private Sewage Disposal Permit - Imperial County Division of Environmental Health
- Project Decommissioning Plan - ICPDS, ICDPW
- Pest Management Plan **-** Agricultural Commissioner's Office

2.8.2 Imperial Irrigation District

Various approvals may be required from IID in conjunction with implementation of the proposed project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the project, an encroachment would occur as the proposed project would cross IID facilities with access points and electrical crossings. The proposed project may also drain into IID drain facilities. Due to the preliminary nature of the project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, ~~although not discretionary approvals,~~ include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

2.8.3 Discretionary Actions and Approvals by Other Agencies

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of the project. Trustee Agencies are state agencies that have discretionary approval or jurisdiction by law over natural resources affected by a project. These agencies may include, but are not limited to the following:

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- California Endangered Species Act (CESA), Incidental Take Permit (ITP) for Western Burrowing Owl (recently listed by California Department of Fish and Wildlife as a "Candidate" species).

PC ORIGINAL PKG

- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3 Environmental Analysis, Impacts, and Mitigation

3.1 Introduction to Environmental Analysis

This section provides an overview of the environmental analysis and presents the format for the environmental analysis in each topical section.

3.1.1 Organization of Issue Areas

Chapter 3 provides an analysis of impacts for those environmental topics that the County determined could result in "significant impacts," based on preparation of an Initial Study and review by the County's Environmental Evaluation Committee and responses received during the scoping process, including the NOP review period and public scoping meeting. Sections 3.2 through 3.16 discuss the environmental impacts that may result with approval and implementation of the project, and where impacts are identified, recommends mitigation measures that, when implemented, would reduce significant impacts to a level less than significant. Each environmental issue area in Chapter 3 contains a description of the following:

- The environmental setting as it relates to the specific issue
- The regulatory framework governing that issue
- The threshold of significance (from Appendix G of the CEQA Guidelines)
- The methodology used in identifying and considering the issues
- An evaluation of the project-specific impacts and identification of mitigation measures
- A determination of the level of significance after mitigation measures are implemented
- The identification of any residual significant impacts following mitigation

3.1.2 Format of the Impact Analysis

This analysis presents the potential impacts that could occur under the project along with any supporting mitigation requirements. Each section identifies the resulting level of significance of the impact using the terminology described below following the application of the proposed mitigation. The section includes an explanation of how the mitigation measure(s) reduces the impact in relation to the applied threshold of significance. If the impact remains significant (i.e., at or above the threshold of significance), additional discussion is provided to disclose the implications of the residual impact and indicate why no mitigation is available or why the applied mitigation does not reduce the impact to a less than significant level.

Changes that would result from the project were evaluated relative to existing environmental conditions within the project site as defined in Chapter 2. Existing environmental conditions are based on the time at which the NOP was published on September 3, 2024. In evaluating the significance of these changes, this EIR applies thresholds of significance that have been developed using: (1) criteria discussed in the CEQA Guidelines; (2) criteria based on factual or scientific information; and (3) criteria

PC ORIGINAL PKG

based on regulatory standards of local, state, and/or federal agencies. Mechanisms that could cause impacts are discussed for each issue area.

This EIR uses the following terminology to denote the significance of environmental impacts of the project:

- *No impact* indicates that the construction, operation, and maintenance of the project would not have any direct or indirect effects on the environment. It means no change from existing conditions. This impact level does not need mitigation.
- A *less than significant impact* is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.
- A *significant impact* is defined by CEQA Section 21068 as one that would cause "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to the project must be provided, where feasible, to reduce the magnitude of significant impacts.
- An *unmitigable significant impact* is one that would result in a substantial or potentially substantial adverse effect on the environment, and that could not be reduced to a less than significant level even with any feasible mitigation. Under CEQA, a project with significant and unmitigable impacts could proceed, but the lead agency would be required to prepare a "statement of overriding considerations" in accordance with State CEQA Guidelines California Code of Regulations (CCR) Section 15093, explaining why the lead agency would proceed with the project in spite of the potential for significant impacts.

PC ORIGINAL PKG

3.2 Aesthetics

This section provides a description of the existing visual and aesthetic resources within the project area and relevant state and local plans and policies regarding the protection of scenic resources. Effects to the existing visual character of the project area as a result of project-related facilities are considered and mitigation is proposed based on the anticipated level of significance. The information provided in this section is summarized from the *Visual Resources Report* prepared by Dudek. This report is included in Appendix B of this EIR.

3.2.1 Existing Conditions

Project Site and Surrounding Area

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is designated Agricultural in the Imperial County General Plan. The project parcels are zoned Agricultural lands and/or Rural lands. Current land use of the project parcels includes cropland and irrigated grain and hayfields. The project parcels occur adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy, specifically for PV solar and BESS projects that have been approved and entitled by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Nearby land uses include residential, commercial, transportation, military, electric utility, and renewable energy production. Nearby residential land uses include the town of Seely, and commercial land uses include the Rio Bend Golf Course (and associated Specific Plan Area) to the east of the project site. The I-8 and Union Pacific Railroad transportation corridors are located to the north of the project site, and further north the Department of Defense (DOD) Naval Air Facility El Centro. To the south of the project, utility land uses include the SDG&E 230/500 kV Imperial Valley Substation, as well as additional agricultural lands that have been designated for geothermal, PV solar and BESS renewable energy projects (Appendix B of this EIR).

Visual Character and Quality

Generally, the project site and the immediately surrounding area comprise a relatively flat agricultural landscape that supports low, green grasses and other agricultural crops, irrigation canals, electrical transmission infrastructure, and solar development. The project's valley landscape is generally indistinct from other locations in the agricultural belt of Imperial Valley and is submissive to prominent mountain terrain that provides a scenic backdrop of visual interest (Appendix B of this EIR).

Existing character and viewing conditions present in the project site and in the surrounding area are further described through the use of representative vantage points offering views to the project site (also referred to as Key Observation Points [KOPs]). As an initial step in this process, aerial imagery

was reviewed to identify locations from which the project would potentially be visible from publicly accessible vantage points. Following this review, preliminary representative viewpoints for site photography were established. A photographic field survey occurred in September 2023 during which representative viewpoints were visited and existing conditions and views towards the project site were photo-documented. A subset of five photographed viewpoints were selected as KOPs. Assessments of existing visual conditions were made based on professional judgment that took into consideration sensitive receptors and sensitive viewing areas in the project area (Appendix B of this EIR).

Figure 3.2-1 illustrates the photo documented KOPs and the direction to which the photographs were taken. The photographs depicting the existing condition at the project site are presented below, and the visual simulations at each KOP depicting the proposed condition are presented in Section 3.2.3. Descriptions of each KOP are as follows:

KOP 1 – Westbound Interstate 8. Located on the shoulder of the eastbound travel lanes of the I-8 approximately 200 feet from the northern boundary of the project site (Figure 3.2-2). The view from KOP 1 is oriented to the southwest and looks across the paved interstate travel lanes, active agricultural lands marked by low and green, grass-like vegetation (likely alfalfa), the low, raised berm of irrigation canals and drainage ditches, clumped trees that have been erected as windbreaks, and more distant desert lands of western Imperial County. The dark and hazy silhouettes of distant hills and mountains are visible and the long mountain range forms the westerly horizon. The visual character of the scene is influenced by the grass-like vegetation of foreground lands and the lack of prominent vertical development. Electrical transmission infrastructure (i.e., lattice transmission towers) are present in the landscape but due to distance and lattice construction/materials, the structures are not visually dominant.

KOP 2 – Eastbound Interstate 8. Situated approximately 0.6 miles to the east of KOP 1, KOP 2 approximates the view to the project site available from the eastbound travel lanes of I-8 (Figure 3.2-3). Located on the interstate shoulder, KOP 2 looks to the southeast across the project site and a landscape dominated by flat terrain and agricultural uses. The northern project boundary is situated approximately 125 feet away (i.e., beyond the existing post and wire fencing in the foreground). The visible reach of the project site is characterized by a wide, dirt roadway that abuts an expansive field of low, green, grass-like vegetation. The elevated profile of Derrick Road is visible to the west as is a collection of mature trees that are located along Derrick Road to the south of the interstate. A series of thin poles supporting electrical distribution lines run north-south along Derrick Road and then scatter in the landscape to the southeast of KOP 2. Lastly, a collection of rectangular hay bale stacks covered with white tarps/fabric material is located to the southeast (the white of the tarps slightly stand out in a landscape dominated by brown and green tones).

KOP 3 – Southbound Derrick Road. KOP 3 is located atop the elevated bridge profile of Derrick Road as it spans I-8 (Figure 3.2-4). The view is oriented to the south-southwest and due to an elevated vantage point, the landscape is somewhat expansive and visibility extends to prominent albeit somewhat hazy landforms to the south (mounded and pyramidal El Centinela) and southwest (Jacumba Mountains). In the foreground and beyond the deck and railing of the Derrick Road bridge, the landscape is marked by north-south alignment of wood poles supporting a local electrical distribution line. A concrete lined canal generally parallels the distribution line (and Derrick Road) and fronts active agricultural lands covered with low, green, grass-like vegetation. Rectangular hale bay stacks covered with white tarps occur off-center in the KOP 3 scene and isolated or small clustered tree groupings are scattered throughout the landscape. Visible electrical infrastructure

PC ORIGINAL PKG

rises from the valley floor to the southwest and congregates at the existing Imperial Valley Substation that is located nearly 3.7 miles to the south-southwest of KOP 3 (in the KOP 3 view, the substation is marked by a collection of dark and thin, overlapping vertical lines near the northwesterly base of El Centinela). Despite the presence of multiple electrical transmission lines and a large substation, El Centinela and the distant mountain range to the southwest-west are the dominant features in the landscape.

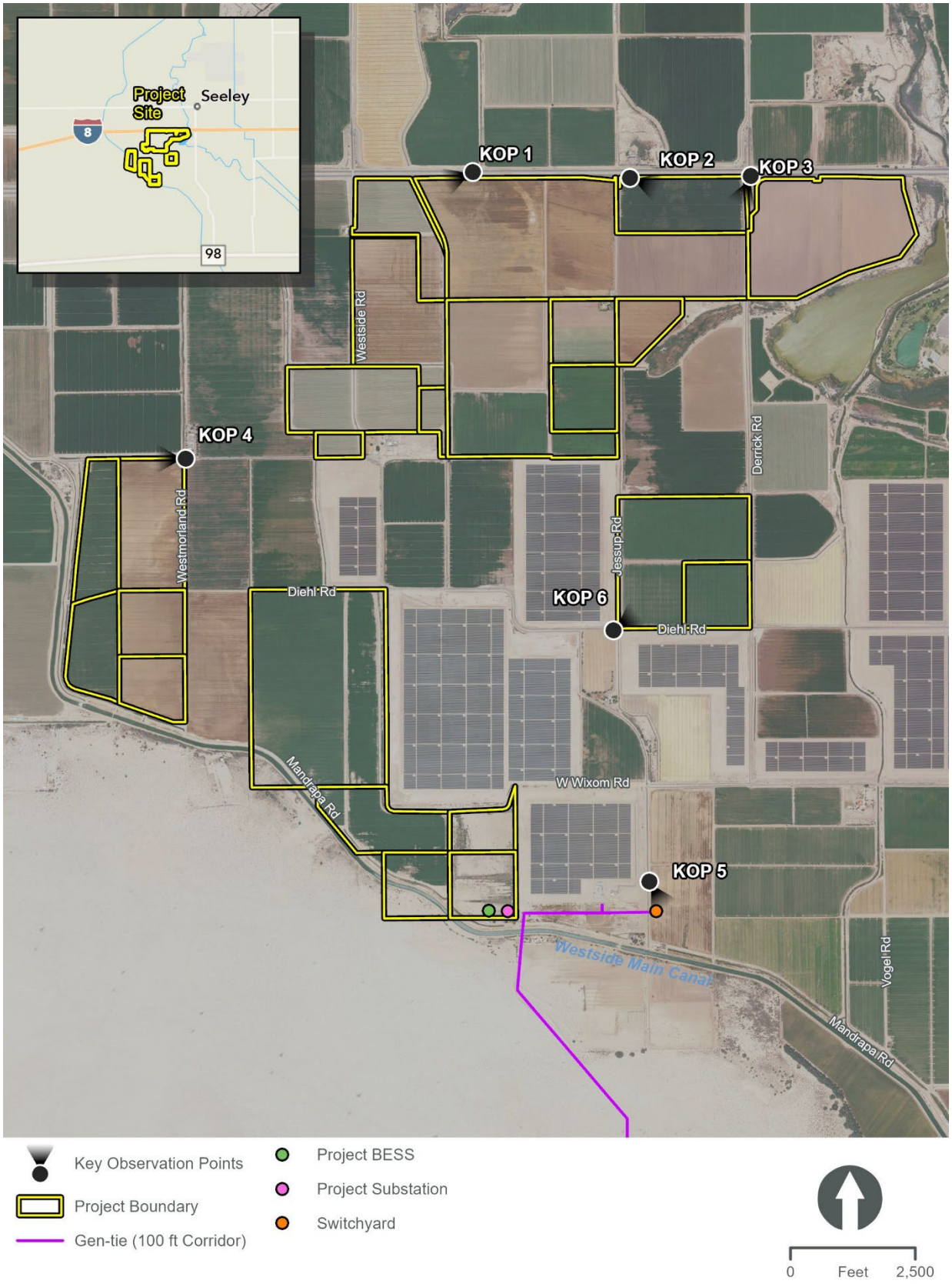
KOP 4 – Westbound Vaughn Road. Located on westbound Vaughn Road adjacent to the project boundary and the Westside Drain, KOP 4 looks southwest towards the southwestern corner of the project site that is currently occupied by low, green, grass-like vegetation (likely alfalfa hay). In Figure 3.2-5, KOP 4 is an unmarked, paved, east-west road (approximately 20 feet wide) that in the KOP 4 landscape, abuts the Westside Drain, rural residential lands, and agricultural lands to the north, and additional irrigation drains, and agricultural fields to the south. Beyond the project site and agricultural lands, a visible, north-south line of mature trees (a planted windbreak) occurs to the west-southwest and several tall and vertical steel lattice towers supporting transmission lines extend from the desert floor and above the tree line. Lastly and as at other KOPs, the background of the KOP 4 landscape is marked by dark, slightly hazy, and rugged hill and mountain terrain.

KOP 5 – Southbound Liebert Road. Situated adjacent to the concrete lined Fern Canal and on the dirt shoulder of Liebert Road (a paved road), the KOP 5 view is oriented to the southeast and looks across active agricultural lands and undeveloped yet vegetated lands occurring to the north and south of the nearby All-American Canal (Figure 3.2-6). The vegetation to the south of the All-American Canal presents as taller and more untamed than the agricultural grasses in the foreground of the KOP 5 view. A small, modest residential structure (assumed to be vacant) is visible to the southwest near the small cluster of palm trees and an assortment of numerous thin, dark, and vertical structures/lines occurs to the south and marks the Imperial Valley Substation (and lines terminating/originating at the substation). A transmission line is aligned along Liebert Road and while located nearly 6 miles away, the dark and mounded form of El Centinela dominates the southern horizon. Additional mountainous terrain is visible to the southeast but due to distance and apparent scale, these features are not visually dominant.

Lastly and while not visible in the KOP 5 view, an existing operational solar facility (Campo Verde Solar Facility) that includes a project substation is located approximately 200 feet to the west of KOP 5 and Liebert Road.

KOP 6 – Eastbound Diehl Road. Located at the intersection of Diehl Road and Jessup Road near the Wixom Drain, KOP 6 is located within 150 feet of the nearest project boundary that is located north of Diehl Road (Figure 3.2-7). As experienced from KOP 6, the local landscape is comprised of flat terrain with visible bermed land in the foreground that parallel Diehl Road and Jessup Road (and obscured irrigation drains). At the time of the field visit to obtain photographs of the view from KOP 6 the project site was partially inundated with water. The remainder of the site appears to have been recently tilled or otherwise disturbed. Beyond the project site, several indeterminant, light-colored, boxy structures appear on the low horizon as do pockets of tall, dark green vegetation/trees. Lastly. thin and narrow poles supporting electrical transmission infrastructure dot the low horizon and are visible along the Diehl Road corridor in the distance.

Figure 3.2-1. Key Observation Points



PC ORIGINAL PKG

Figure 3.2-2. Existing Key Observation Point 1



Existing View from westbound Interstate 8 towards the Project site (approximately 200 feet away)

PC ORIGINAL PKG

Figure 3.2-3. Existing Key Observation Point 2



Existing View from eastbound Interstate 8 towards the Project site (approximately 125 feet away)

PC ORIGINAL PKG

Figure 3.2-4. Existing Key Observation Point 3



Existing View from southbound Derrick Road over Interstate 8

PC ORIGINAL PKG

Figure 3.2-5. Existing Key Observation Point 4



Existing view from westbound Vaughn Road adjacent to Project site

PC ORIGINAL PKG

Figure 3.2-6. Existing Key Observation Point 5



Existing view from southbound Liebert Road (approximately 0.25 mile north of All-American Canal)

PC ORIGINAL PKG

Figure 3.2-7. Existing Key Observation Point 6



Existing view from eastbound Diehl Road at Jessup Road intersection (approximately 150 feet from nearest project boundary)

PC ORIGINAL PKG

Scenic Vista

Scenic vistas are generally broad and expansive views that may or may not be sited at elevated areas. They may or may not be located at a designated scenic overlook or other area that offers a static, scenic view of a landscape. Lands within the project site are located in an agricultural area of the County and do not encompass lands containing a scenic vista designated as such by the State or the County General Plan. Scenic vistas are not specifically discussed in the Final Program EIR for the Imperial County General Plan; however, natural and developed areas including deserts, sand hills, mountains, the Salton Sea, agricultural lands, and urban areas are identified as County visual resources (Appendix B of this EIR). Due to the general lack of dominant vertical development in the immediate project area (and presence of agricultural lands), broad and long views to regional mountains including the Jacumba Mountains located west of the project site and pyramidal El Centinela (also known as “Weeishpa” by local tribes; located south of the project site) are generally available from I-8 and local roads near the project site (Appendix B of this EIR).

Scenic Highways

There are no designated State scenic highways in Imperial County (County of Imperial 2016). Lands within the project site are not located within a state scenic highway corridor, nor are there any state scenic highways located near the project site. The nearest eligible state scenic highway, State Route (SR)-111 between Bombay Beach and SR-195 near Mecca, is over 40 miles away. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles away (Appendix B of this EIR).

Due to distance and intervening topography and development, views to the project site are not available from a designated scenic highway.

Light and Glare

While glare is considered a continuous source of brightness (relative to diffused light), glint is a direct redirection of the sun beam in the surface of a PV solar module. Glint is highly directional, since its origin is purely reflective, whereas glare is the reflection of diffuse irradiance; it is not a direct reflection of the sun.

The project site consists of active agricultural lands and thus, does not include existing sources of light or glare. Most existing light and glare in the project area is associated with motor vehicles traveling on surrounding roadways, air traffic, and farm vehicles/equipment. Local roadways generate glare both during the night hours when cars travel with lights on, and during daytime hours because of the sun’s reflection from cars and pavement surfaces. Overall, existing light and glare sources are muted and do not contribute significantly to the existing night or day environment (Appendix B of this EIR).

3.2.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

PC ORIGINAL PKG

State

California Department of Transportation

Caltrans manages the California Scenic Highway Program. The goal of the program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to the scenic corridor.

California Scenic Highways Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highway Code, Section 260 et seq. The Scenic Highways Program is comprised of officially designated scenic highways (i.e., highways for which corridor protection programs have been adopted and the highways are listed in the Streets and Highway Code) and eligible scenic highways (i.e., highways designated as scenic by the local planning department).

Local

Imperial County General Plan

The Imperial County General Plan contains policies for the protection and conservation of scenic resources and open spaces within the County. These policies also provide guidance for the design of new development. The Conservation and Open Space Element of the General Plan provides specific goals and objectives for maintaining and protecting the aesthetic character of the region. Table 3.2-1 provides an analysis of the proposed project’s consistency with the Conservation and Open Space Element Goal 7. Additionally, the Circulation and Scenic Highways Element of the General Plan provides policies for protecting and enhancing scenic resources within highway corridors in Imperial County, consistent with the Caltrans State Scenic Highway Program.

PC ORIGINAL PKG

Table 3.2-1. Consistency with Applicable General Plan Conservation and Open Space Element Policies

General Plan Policies	Consistency with General Plan	Analysis
Goal 7: The aesthetic character of the region shall be protected and enhanced to provide a pleasing environment for residential, commercial, recreational, and tourist activity.	Consistent	The project would result in changes to the visual character of the project area, which is currently characterized as an agricultural landscape. As described in Impact 3.2-3, the existing visual character would not be substantially altered by the project. Proposed PV module frames are expected to be approximately 6 to 8 feet in height and as such, the introduction of solar panels would not result in substantial obstruction of views to distant mountain ranges such as those available from I-8 and Derrick Road (i.e., KOPs 1 and 3). Furthermore, project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) and existing operational Campo Verde Solar Facility that have altered the existing project area landscape. For these reasons, the introduction of a solar facility to the project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.
Objective 7.1: Encourage the preservation and enhancement of the natural beauty of the desert and mountain landscape.	Consistent	The Project site is located within an agricultural portion of the County and generally avoids both desert and mountain landscapes.

Source: County of Imperial 2016

County of Imperial Land Use Ordinance, Title 9

The County's Land Use Ordinance Code provides specific direction for lighting requirements.

Division 17: Renewable Energy Resources, Section 91702.00 – Specific Standards for All Renewable Energy Projects

(R) Lights should be directed or shielded to confine direct rays to the project site and muted to the maximum extent consistent with safety and operational necessity.

3.2.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to aesthetic and visual resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

PC ORIGINAL PKG

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to aesthetics are considered significant if any of the following occur:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Methodology

This visual impact analysis is based on field observations conducted in September 2023, as well as a review of maps and aerial photographs for the project area. A representative subset of photographed viewpoints was selected as KOPs, which collectively serve as the basis for this assessment. Assessments of existing visual conditions were made based on professional judgment that took into consideration sensitive receptors and sensitive viewing areas in the project area. The locations of the six KOPs in relation to the project site are presented in Figure 3.2-1 above.

The site photos were used to generate a rendering of the existing conditions and a proposed visualization of the implemented project. The visual simulations, as provided below, provide clear before-and-after images of the location, scale, and visual appearance of the features affected by and associated with the project. Design data — consisting of engineering drawings, elevations, site and topographical contour plans, concept diagrams, and reference pictures — were used as a platform from which digital models were created. In cases where detailed design data were unavailable, more general descriptions about alternative facilities and their locations were used to prepare the digital models.

Impact Analysis

Impact 3.2-1 Would the project have a substantial adverse effect on a scenic vista?

There are no County-designated scenic vistas near the project site. The project site is located adjacent to I-8 and local roads and thus, construction and operational activities associated with the project would be visible from and experienced by motorists and the limited residents in the immediate area. As previously discussed, broad and long views to regional mountains including the Jacumba Mountains (located west of the project site) and pyramidal El Centinela (located south of the project site) are generally available from I-8 and local roads near the project site. Since the County generally identifies mountains as “County visual resources,” views to area mountains are considered scenic vistas for purposes of this analysis (Appendix B of this EIR).

During construction, typical equipment including, but not limited to, tractors, graders, compactors, scrapers, loaders, forklifts, and cranes would be present and operate on site. Combined with a temporary influx of construction personnel and equipment/vehicles, and the visual impacts of

vegetation removal, construction within the project site would alter views of the existing agricultural fields to an active construction site. However, during construction, impacts to existing views would be short-term, temporary, and be experienced by a limited number of permanent residents in the immediate surrounding area. A larger volume of viewers on nearby I-8 would experience construction activities as they approach and pass the project (the northern boundary of the project site parallels the eastbound I-8 travel lanes for approximately 2.1 miles); however, views to construction activities would be fleeting (and limited to the landscape to the south of the interstate). In addition, the visual impacts of construction activities on the project site as experienced from I-8 would be diminished by the incorporation of development setbacks from the interstate. Specifically, project development would be set back between approximately 1,100 feet to up to 2,000 feet from the eastbound lanes of I-8 and thus, project elements including solar arrays, perimeter fencing, and the visual effects of vegetation removal would not be visually prominent and would not detract from existing available views. Further, as westbound motorists and passengers travel alongside the project site, views to distant mountains to the southwest and west would be maintained over the 18-24 month construction schedule and would not be substantially blocked by equipment/vehicles or the installation of project components.

During operations, mobile views to the prominent visual resources in the project area landscape (i.e., rugged hills and distant mountain ranges) would remain available to motorists along I-8 and most local roads and would not be blocked or otherwise encumbered by project components. In addition, views to regional mountains from I-8 would not be blocked by the installation of 7-foot-high perimeter fencing or other project components. As previously discussed, project development would be set back between approximately 1,100 feet to up to 2,000 feet from I-8 and thus, solar arrays, perimeter fencing, and all other permanent features would appear small in the landscape and would not block or interrupt existing available views. While perimeter fencing would be visible from the interstate (see Figure 3.2-8 and Figure 3.2-9), the degree of visual change on the project site as experienced from the interstate would be minimal and overall effects to existing views would be minor. As shown in Figure 3.2-8 and Figure 3.2-9, the existing, interrupted view to distant mountains would be maintained and no blockage or significant interruption of existing views from the interstate to regional mountains would occur. As such, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.2-2 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no designated or eligible state scenic highways in the project vicinity or in Imperial County. The nearest eligible state scenic highway, SR-111 between Bombay Beach and SR-195 near Mecca, is over 40 miles from the project site. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles from the project site. Due to distance, and intervening development and topography, construction and operation of the project would not be visible from a state scenic highway and thus, construction and operation would not result in substantial damage to scenic resources within a state scenic highway. Therefore, no impacts to scenic resources within any state scenic highways would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.2-3 In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The existing visual character in views of the project (Figure 3.2-1. Key Observation Points

through Figure 3.2-7) would not be substantially altered based primarily on the proximity of viewpoints to the project site. The proposed project would convert existing active agricultural lands to a PV solar facility. Components to be installed on the project site include rows of PV solar panels up to between 6 feet and 8 feet in height, up to 500 MW ac of BESS that would typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H), 66-kV collector lines, and a dedicated approximately 5-acre project substation. Temporary and permanent access roads would also be constructed. Slatted chain-link fencing would be installed along the northern perimeter of the project site (portion of the project site adjacent to I-8) and non-slatted chain-link fencing would be installed around the remainder of the project perimeter. Lastly, and to reduce the potential for glare exposure along I-8, project development would be set back between approximately 1,100 feet to up to 2,000 feet from the eastbound lanes of I-8.

Construction. During construction of the project, visual impacts would be temporarily and intermittently experienced by most receptors/viewed over the phased 18-24 month construction period. Short-term visual impacts associated with project construction would occur as construction equipment, materials delivery and movement, and additional traffic is drawn to the project site and utilizes roadways in the surrounding area. Additional changes occurring on the site including removal of existing vegetation, preparation of the site to accommodate components/facilities, and installation of project components/facilities previously identified above. These short-term impacts would be experienced by local motorists and by the limited number of residences in the immediate area. As experienced from I-8, construction activities would be visible but would not be visually prominent due to provided development setbacks from the interstate. As further described in the light and glare analysis below in Impact 3.2-4, there would also be potential for light and glare impacts during the construction period.

As individual construction phases are completed, the overall amount of equipment on-site would be reduced and/or moved to other areas of the project site to initiate other phases and activities. As such, the visual characteristics of construction would be spread out across a large area and difficult to fully experience from any single vantage point in the surrounding area. Due to the temporary and intermittent nature of construction activities, impacts to existing visual character and public views available in the surrounding area would be of a short-term duration, varied, and spread over distinct locations across a large geographical area (i.e., the nearly 1,500-acre Project footprint), thereby reducing the overall severity of visual impacts as experienced by most viewer groups in the area. While construction of the project would result in a noticeable change to the existing character of the site and existing site qualities/features would be removed to accommodate construction equipment and vehicles (and the installation/construction of project components), construction impacts to existing visual character would be less than significant.

The assessment of visual character and view quality considered existing aesthetic conditions and anticipated visual change associated with project development as experienced from six selected KOPs that include west- and eastbound I-8, Derrick Road, Vaughn Road, and Liebert Road. Figure 3.2-8 through Figure 3.2-13 show the simulated views of the proposed project for all six KOPs.

As experienced from KOPs 1 and 2 (west- and eastbound I-8), the introduction of solar panels and slatted, chain-link fencing, and the transformation of the grass covered site to one surfaced with exposed local soils, would produce minimal visual change from existing conditions (see Figure 3.2-9 and Figure 3.2-9). As previously discussed, project development would be set back from the interstate and intervening vegetation and terrain on the project site (i.e., vegetation and terrain between the interstate and project footprint) would be retained/would not be altered. As such, the foreground landscape as experienced from the interstate would retain its existing character and open qualities and existing views to regional mountains would remain largely unchanged.

Similar to anticipated visual change at KOPs 1 and 2, the overall visual change at KOP 3 would be relatively minor as the low, grass-like covered fields in the foreground would be retained and unaltered (Figure 3.2-10). As shown in the KOP 3 visual simulation, the tan slatted chain-link fence and solar arrays would be visible in the distance but would be contained to a relatively small portion of the seen landscape. The installation of rows of dark solar panels would be evident from the elevated vantage point available; however, the existing landscape character would remain and would continue to exude existing agricultural qualities.

The introduction of solar panels and removal of existing vegetation from the project site would produce noticeable visual change as experienced from KOP 4 and KOP 6 (Figure 3.2-11 and Figure 3.2-13). The transformation of the project site from active agricultural lands to an operational solar facility (and more specifically, the introduction of chain-link fencing in the immediate foreground), would produce strong visual change when viewed absent context; however, the anticipated severity of change would be like that associated with development of the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) (located to the immediate south and east of KOP 4) and the operational Campo Verde Solar Facility (located to immediate west of KOP 5 and west and south of KOP 6). Laurel Cluster Solar Farms Project (Laurel Solar 4 site) and Campo Verde Solar Facility Project components are not visible in the specific views selected for KOPs 4 and 6 but will and have noticeably altered the existing landscapes near these KOPs. Given the proximity of approved and existing energy development that includes similar components as those anticipated to be installed on the project site, overall severity of visual change would be lessened as the project would bear a resemblance to existing features (i.e., solar development) in the immediate landscape.

Lastly, the anticipated visual change associated with the development of the project substation and gen-tie line as experienced from Liebert Street (KOP 5) is illustrated in Figure 3.2-12. As shown in Figure 3.2-12, the introduction of multiple vertical structures (e.g., bays and racks) within the footprint of the project substation would create noticeable visual change and would alter the existing quality of the southeasterly view to distant mountain terrain. Additionally, while the existing grass-like covered footprint of the project substation would be replaced by a fenced electrical substation with a greyish gravel covered surface, overall visual change would be dampened by existing solar and electrical transmission/substation development in the immediate area. In addition to the transmission lines in the foreground and structures of the Imperial Valley Substation that are visible in the KOP 5 view, the existing Campo Verde Solar Facility (located across a 1,400-acre site) and project substation are located approximately 200 feet to the west of KOP 5 and Liebert Road. While not visible in the specific view selected for KOP 5, an electrical substation and multiple rows of PV modules associated with the Campo Verde Solar Facility have permanently altered the local

PC ORIGINAL PKG

landscape. As such, the introduction of the project substation to the KOP 5 landscape would result in overall minor visual change when considered in the context of the existing visual landscape that includes prominent electrical transmission and substation infrastructure and large, utility-scale solar development.

Conclusion

Project operations would convert existing agricultural fields across approximately 1,849 acres to a solar facility with BESS. The primary visual change that would be experienced by viewers in the surrounding area is the introduction of numerous rows of orderly solar panels, and installation of slatted/non-slatted chain-link fencing along the site perimeter. As illustrated in the project visual simulations, proposed PV module frames are expected to be approximately 6 to 8 feet in height and as such, the introduction of solar panels would not result in substantial obstruction of views to distant mountain ranges such as those available from I-8 and Derrick Road (i.e., KOPs 1 and 3). Furthermore, project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) and existing operational Campo Verde Solar Facility that have altered the existing project area landscape. For these reasons, the introduction of a solar facility to the project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, impacts are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

PC ORIGINAL PKG

Figure 3.2-8. Key Observation Point 1 – Proposed Condition



Visual Simulation of Project (visible segments of project fence line setback between approximately 1,700 to 2,000 feet from Interstate 8)

Figure 3.2-9. Key Observation Point 2 – Proposed Condition



Visual Simulation of Project (visible segments of project fence line setback approximately 1,100 feet from Interstate 8)

PC ORIGINAL PKG

Figure 3.2-10. Key Observation Point 3 – Proposed Condition



Figure 3.2-11. Key Observation Point 4 – Proposed Condition



PC ORIGINAL PKG

Figure 3.2-12.Key Observation Point 5 – Proposed Condition



Figure 3.2-13. Key Observation Point 6 – Proposed Condition



PC ORIGINAL PKG

Impact 3.2-4 Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Light. Construction activities would generally occur between the hours of 6:00 a.m. and 5:00 p.m. and therefore, construction would not generally require the use of mobile light fixtures/sources that could potentially illuminate the evening or night sky. However, additional hours beyond 5:00 p.m. may be necessary to make up schedule deficiencies and nighttime activities including but not limited to refueling equipment, concrete pours, staging material for the following day's construction activities may potentially occur between the hours of 10:00 p.m. and 7:00 a.m.

While limited construction activities could require the use of mobile light fixtures/sources for general illumination of work areas, their frequency would be irregular and duration would be limited/short. In addition, public views to the project site are mostly limited to I-8 (views are also available from local roads in the immediate project area). Due to the anticipated infrequent use and short duration of nighttime lighting during construction, the limited presence of sensitive receptors in the immediate surrounding area, and because lighting sources would generally be hooded and directed downward onto the active area of construction, project construction would not create a new source of substantial light and glare that would adversely affect nighttime views in the area. Accordingly, impacts associated with project use of lighting during construction would be less than significant.

Lighting installed for use during project operations would be minimal. For example, site lighting may include motion sensor lights for security purposes and these sources may be installed at site entrance gates or at the on-site O&M building (if an on-site building is constructed). Despite the inclusion of lighting on-site and use during operations, the total number of lighting sources to be installed would be limited and occurrences of use/illumination would be infrequent due to motion sensor activation. Furthermore, lighting installed on the project site would be of the lowest intensity foot candle level available while still providing for safe working conditions/adequate deterrence and compliant with applicable local regulations (e.g., County Ordinance, Division 17: Renewable Energy Resources, Section 91702). Lastly, installed site lighting would be directed away from public right-of-way to avoid unsafe driving conditions during periods of lighting activation. For these reasons, the low number of fixtures and anticipated infrequent use of lighting on the project site during operations would not create a new source of substantial light and glare that would adversely affect nighttime views in the area. Impacts would be considered less than significant.

Glare. The presence of heavy equipment and vehicles on the project site during construction may momentarily generate glare that could be experienced from vantage points in the surrounding area due to the presence of reflective construction equipment and materials. However, and as previously stated, public views of the project site are mostly limited to I-8 and given the regular presence of construction vehicles in the landscape, construction-related glare associated with equipment and vehicle presence is not anticipated to adversely affect daytime views. The duration of equipment and vehicle-generated glare that may be experienced by viewers in the surrounding area during project construction would also be short-term. Therefore, constructed-generated glare is considered a less than significant impact.

The proposed project would involve the installation of PV solar arrays which have low reflectivity. Solar PV modules are specifically designed to reduce reflection as any reflected light cannot be converted into energy. With the incorporation of development setbacks from I-8 and the installation of 7-foot-high slatted chain-link fencing around the project site perimeter, the PV panels would not create a significant source of glare that could impact views during daylight hours. Additionally, public views of the project site are relatively limited and, as such, operation-related glare and glint are not

anticipated to adversely affect day or nighttime views. The project would not use other reflective materials such a fiberglass, aluminum or vinyl/plastic siding, galvanized products, and brightly painted steel roofs that have the potential to create on- and off-site glare.

Nevertheless, reflected light from the proposed PV panels can cause glint (a quick reflection) and glare (reflection that lasts for a longer duration), which can create hazards for air-traffic-control personnel, motorists, and other potential receptors. Glare can result in visual hazards and temporary loss of vision (also known as flash blindness). As such, a glare analysis was conducted for the project (contained in Appendix B of this EIR), to assess the potential glare impacts associated with project implementation. The glare analysis was conducted per the Federal Aviation Administration's (FAA) recommended procedures described in the Technical Guidance for Evaluating Selected Solar Technologies on Airports, and the geometric glare modeling software used adheres to the FAA policy regarding solar energy system projects on federally obligated airports (Appendix B of this EIR). This policy does not apply to the project but was included in the Glare Analysis Report to describe the standard methodologies used to assess solar glare near operating airports. Specifically, the glare analysis and software quantify the level of ocular impact hazard (reported as green or yellow glare) and pinpoints the exact time of year the glare would occur.

The hazard level of glare depends on the ocular impact to the observer. Generally, an ocular impact is calculated as a function of the size of the glare spot and the intensity of the light. For the purpose of the Glare Analysis Report contained in Appendix B of this EIR, an ocular impact is classified in one of three categories, as follows:

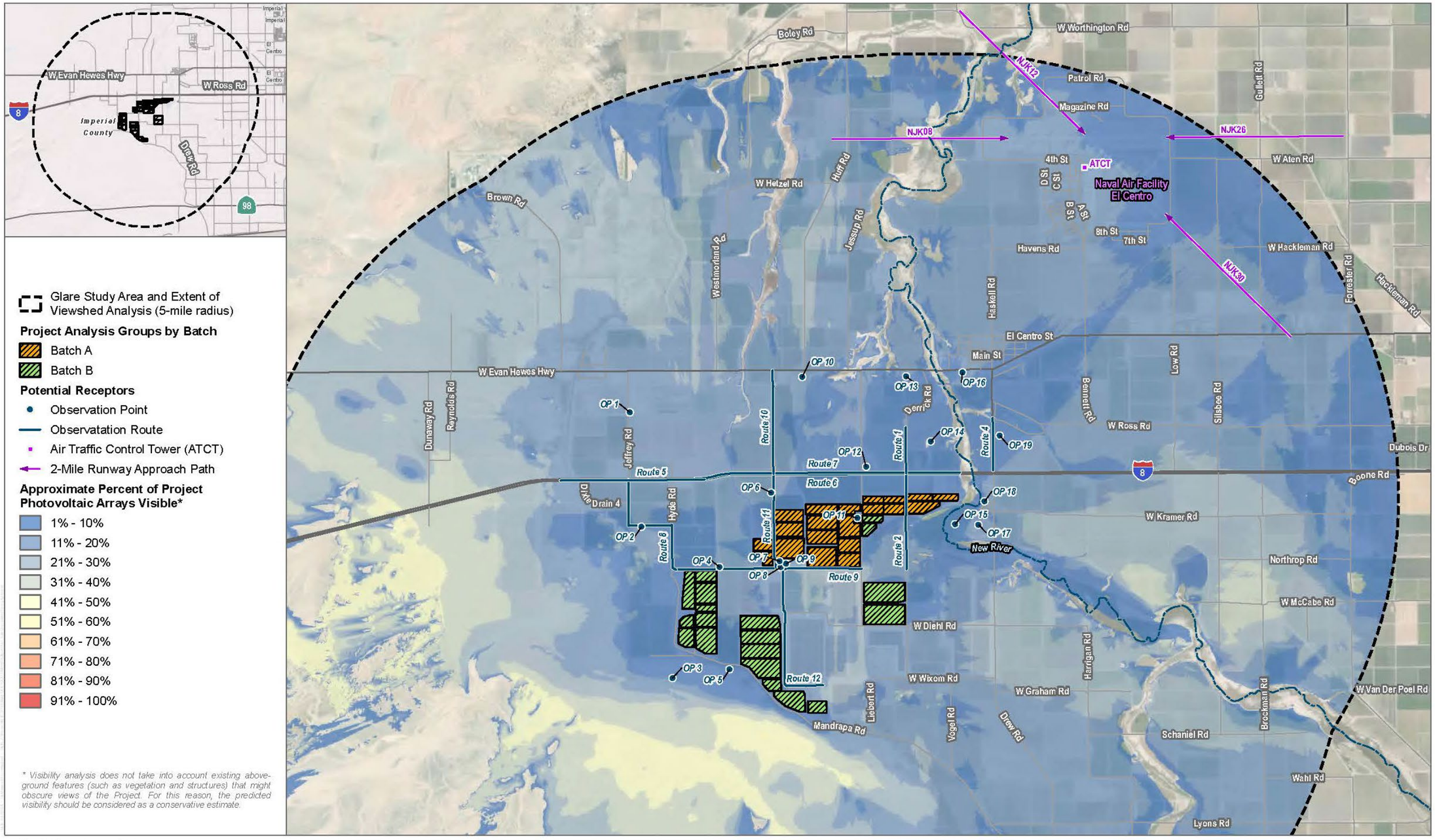
- Green: Low potential for the glare to cause an after-image
- Yellow: Potential to cause a temporary after-image
- Red: Potential to cause retinal burn and permanent eye damage

Because of the project's vicinity to the Naval Air Facility El Centro (NAF), which is a U.S. Navy facility (located approximately 3 miles to the northeast), the presence of I-8, and potential dwellings with direct view of the project, a 5-mile-radius study area was used for the glare analysis. A typical 5-mile study radius was used because that distance approximates the maximum distance that an observer standing at ground-level could see the proposed photovoltaic panels before the curvature of the Earth would intervene (assuming a perfect sphere, no built environmental obstruction, and flat topography) (Appendix B of this EIR). Dudek performed a visibility analysis on the surrounding terrain to predict where the project would be visible at any location within the study area and a geometric glare analysis for the identified potential receptors to determine where and when glare might be encountered. From the visibility and geometric glare analysis, the identified five airport receptors and all observation points and routes are shown in Figure 3.2-14.

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.2-14.Glare Study Area and Potential Receptors



This page is intentionally blank.

PC ORIGINAL PKG

Glare Analysis Results

Results for Airport Receptors. According to the Glare Analysis Report prepared for the project, the project would not result in any glare in the "Green" or "Yellow" ocular hazard levels to any of the receptors associated with airport operations at NAF.

Results for Point and Route Receptors. The results of the analysis indicate that, under the proposed project parameters described in Section 4.1 of the Glare Analysis Report contained in Appendix B of this EIR, most of the point and route receptors analyzed will receive some "green" glare (low potential for after image) and some will receive "yellow" glare (potential for after image). The summarized "Green" and "Yellow" glare results can be found in Table 6 and Table 7 of the Glare Analysis Report contained in Appendix B of this EIR.

- **Interstate 8 Receptors:** The eastbound and westbound lanes of I-8 (Route IDs 5, 6, and 7 as shown in Figure 3.2-14) will receive a small duration of "green" glare and no "yellow" glare from the proposed PV arrays. This "green" glare will occur around 6 minutes per day, on average, during the fall and winter months, and only when the sun is low in the sky (in the early mornings and early evenings). There are currently no thresholds for acceptable levels of glare towards road receptors, but because this low-hazard glare is predicted to occur at a time when there will be considerable baseline levels of glare from the rising or setting sun, it is not anticipated that the project will have a significant impact on motorists traveling on I-8 (Appendix B of this EIR).
- **Dwelling Receptors:** A total of 13 of the 19 dwellings analyzed are predicted to receive some amount of "green" glare (low potential for after image), with 2 of the dwellings predicted to also receive "yellow" glare (potential for after image). The average daily duration of glare is predicted to occur for less than 7 minutes, with maximum daily durations less than 14 minutes. All the glare predicted towards dwelling receptors is anticipated to occur when the sun is around 1° above the horizon, in the very early mornings and very early evenings. There are currently no thresholds for acceptable levels of glare towards dwelling receptors, but because the glare predicted towards these receptors occurs for less than 15 minutes per day and is coincident with the glare from the rising and setting sun, it is not anticipated that the project will have a significant impact on nearby dwelling receptors (Appendix B of this EIR).
- **Other Route Receptors:** Of the non-interstate routes analyzed, four were predicted to receive glare in the "green" (low potential for after image) or "yellow" (potential for after image) ocular impact categories. These routes are identified as Routes 8, 9, 11, and 12 in Figure 3.2-14. All four of these routes are located south of I-8 and west of New River. After the completion of the project, all the affected portions of these routes will likely be used primarily as access roads for the operation and maintenance of the various solar facilities in the area. These four routes will receive, on average, between 4 and 12 daily minutes of "green" glare, and between 1 and 16 daily minutes of "yellow" glare. This glare could occur on most days of the year and would be limited to times when the sun is less than 1° above the horizon, in the early mornings and early evenings. During these times, the glare will be aligned coincident with the glare from the rising/setting sun, which is a significantly more intense source of glare. Because of this and the fact that these routes will be traveled at relatively low speeds by vehicles associated with the operation and maintenance of the solar

PC ORIGINAL PKG

facilities, it is not anticipated that the project will have a significant effect on these route receptors (Appendix B of this EIR).

According to the glare analysis results contained in Appendix B of this EIR, nearly all the glare predicted towards receptors will occur when the sun is less than 1° above the horizon, during sunrise and sunset. From the observer's point of view, this glare will be aligned with the setting/rising sun, similar to what would be seen over a lake or ocean during these times, but less intense due to the implementation of antireflective coatings on the project's PV modules. The results indicate that the glare produced by the project will not result in more ocular impact than a smooth water body under conservative assumptions and will result in far less impact than the hazards posed due to viewing the unfiltered sun.

Based on the rationale and the results of the glare analysis provided above, project-related glare impacts would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.2.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the proposed project, the proposed project will be decommissioned and dismantled. No grading or significant landform modifications would be required during decommissioning activities upon site restoration in the future. Although the project site would be visually disrupted in the short-term during decommissioning activities, because extensive grading is not required and these activities would be temporary, the visual character of the project site would not be substantially degraded in the short-term and related impacts would be less than significant.

Residual

Impacts related to glare and glint impacts to roadway travelers, nearby residences, or flights would be less than significant and no additional mitigation measures are required. Changes to visual character of the project area would be less than significant and would be transitioned back to their prior (pre-solar project) conditions following site decommissioning. Based on these conclusions, implementation of the proposed project would not result in residual significant unmitigable impacts to the visual character of the project site or add substantial amounts of light and glare.

PC ORIGINAL PKG

3.3 Agricultural Resources

This section provides an overview of existing agricultural resources within the project site and identifies applicable federal, state, and local policies related to the conservation of agricultural lands. This includes a summary of the production outputs, soil resources, and adjacent operations potentially affected by the project. The impact assessment in Section 3.3.3 provides an evaluation of potential adverse effects on agricultural resources based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. Section 3.3.4 provides a discussion of residual impacts, if any. In addition, HDR prepared a land evaluation and site assessment (LESA) for the project site. This report is included in Appendix C of this EIR.

No forestry resources are present within the project site and, therefore, this section focuses on issues related to agricultural resources.

3.3.1 Existing Conditions

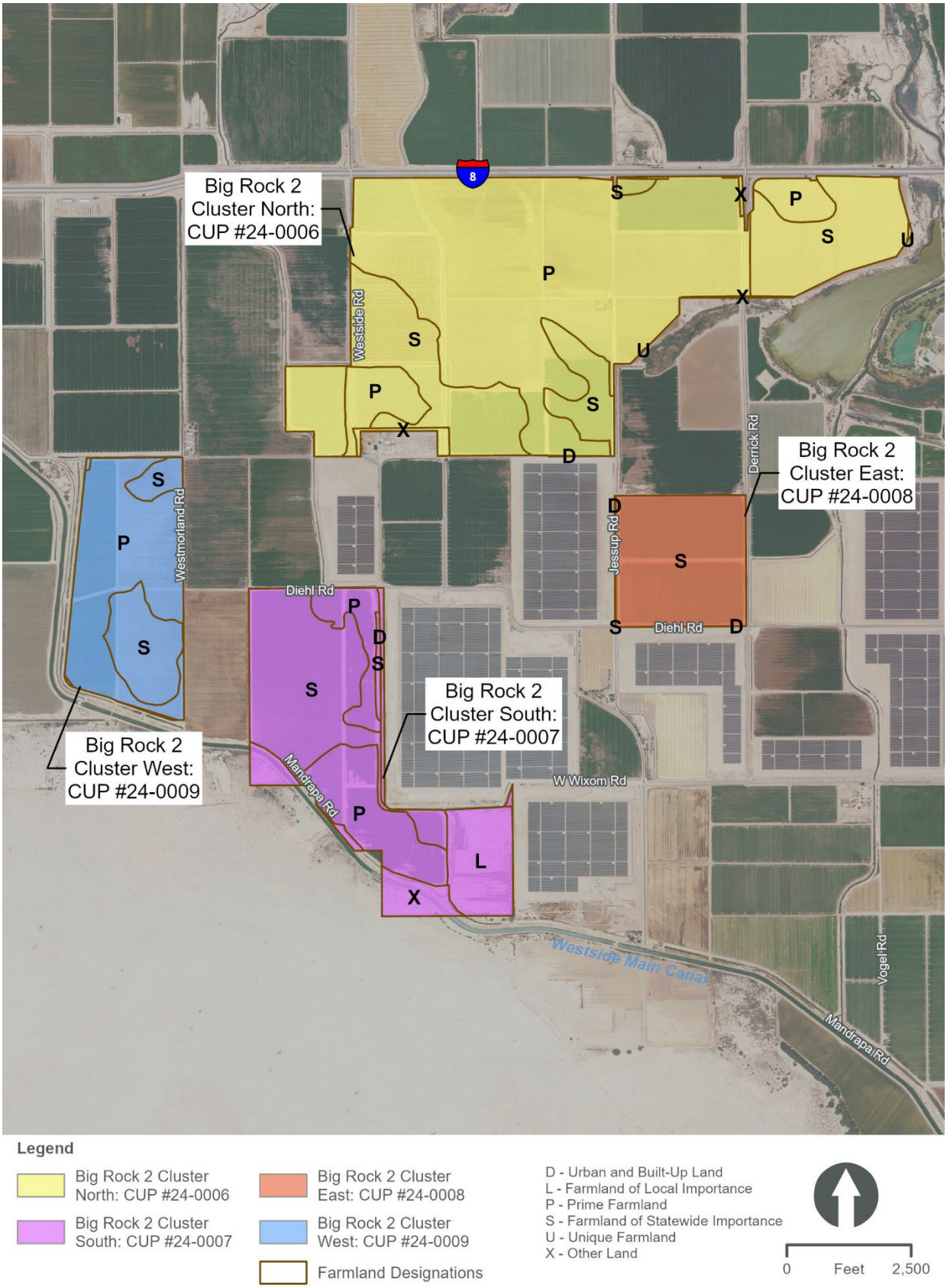
Agriculture has been the single most important economic activity of Imperial County throughout the 1900s, and is expected to play a major economic role in the foreseeable future. The gross annual value of agricultural production in the County has hovered around $1 billion for the last several years, making it the County's largest source of income and employment.

Imperial County agriculture is a major producer and supplier of high quality plant and animal foods and non-food products. According to the 2023 Imperial County Agricultural Crop and Livestock Report, gross production for 2023 was valued at $2,692,716,000. This is an increase of 2.36 percent compared to the 2022 gross value. In 2023, there were 578,659 harvested acres reported, up 4.80 percent from 2022. The number one commodity continues to be cattle followed by alfalfa, leaf lettuce, head lettuce, spinach, onions, broccoli, bermuda grass hay, carrots and alfalfa seed rounding out the top ten commodities (Imperial County Agricultural Commissioner 2023).

Important Farmland

According to the California Department of Conservation’s (DOC) California Important Farmland Finder and as shown in Figure 3.3-1, the project site is designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Other Land, and Urban and Built-Up Land (DOC 2021). Table 3.3-1 provides an acreage breakdown of Important Farmland within the project site.

Figure 3.3-1. Important Farmlands



PC ORIGINAL PKG

Table 3.3-1. Farmland Mapping and Monitoring Program Designations within the Project Site

Important Farmland	Acreage
Prime Farmland	973.24
Farmland of Statewide Importance	753.80
Unique Farmland	0.06
Farmland of Local Importance	65.08
Other Land	51.04
Urban and Built-Up Land	9.81
Total	**1,853.03**

Williamson Act Contract Land

According to the California Williamson Act Enrollment Finder Web map produced by the DOC, Imperial County has a status of "Non-Participating or Withdrawn" (DOC 2024). Therefore, the project site does not contain Williamson Act contracted land.

3.3.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

State

California Land Conservation Act

The Williamson Act (California Land Conservation Act, California Government Code, Section 51200 et seq.) is a statewide mechanism for the preservation of agricultural land and open space land. The Act provides a comprehensive method for local governments to protect farmland and open space by allowing land in agricultural use to be placed under contract (agricultural preserve) between a local government and a landowner.

Under the provisions of the Williamson Act (California Land Conservation Act 1965, Section 51200), landowners contract with the County to maintain agricultural or open space use of their lands in return for reduced property tax assessment. The contract is self-renewing and the landowner may notify the County at any time of intent to withdraw the land from its preserve status. Withdrawal involves a 10-year period of tax adjustment to full market value before protected open space can be converted to urban uses. Consequently, land under a Williamson Act Contract can be in either a renewal status or a nonrenewable status. Lands with a nonrenewable status indicate the farmer has withdrawn from the Williamson Act Contract and is waiting for a period of tax adjustment for the land to reach its full market value. Nonrenewable and cancellation lands are candidates for potential urbanization within a period of 10 years.

The requirements necessary for cancellation of land conservation contracts are outlined in Government Code Section 51282. The County must document the justification for the cancellation through a set of findings. Unless the land is covered by a farmland security zone contract, the Williamson Act requires that local agencies make both the Consistency with the Williamson Act and Public Interest findings.

PC ORIGINAL PKG

On February 23, 2010, the Imperial County Board of Supervisors voted to not accept any new Williamson Act contracts and not to renew existing contracts because of the elimination of the subvention funding from the state budget. The County reaffirmed this decision in a vote on October 12, 2010, and notices of nonrenewal were sent to landowners with Williamson Act contracts following that vote. The applicable deadlines for challenging the County's actions have expired, and, therefore, all Williamson Act contracts in Imperial County terminated on or before December 31, 2018.

California Farmland Mapping and Monitoring Program

The California DOC, under the Division of Land Resource Protection, has set up the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the state's farmland to and from agricultural use. The map series identifies eight classifications, as defined below, and uses a minimum mapping unit size of 10 acres.

- Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
- Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
- Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.
- Farmland of Local Importance is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.
- Urban and Built-up Land is occupied by structures with a building density of at least one unit to 1.5 acre, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, prisons, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.
- Water is defined as perennial water bodies with an extent of at least 40 acres.
- Other Land is land not included in any other mapping category. Common examples include low density rural developments, vegetative and riparian areas not suitable for livestock grazing, confined animal agriculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. More detailed data on these uses is available in counties containing the Rural Land Use Mapping categories.

The program also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of state agricultural land and updates its

PC ORIGINAL PKG

"Important Farmland Series Maps" every 2 years. Table 3.3-2 provides a summary of agricultural land within Imperial County converted to non-agricultural uses during the time frame from 2016 to 2018.

Table 3.3-2. Imperial County Change in Agricultural Land Use Summary (2016 to 2018)

Land Use Category	Total Acreage Inventoried		2016 to 2018 Acreage Changes			
	2016	2018	Acres Lost (-)	Gained (+)	Total Acreage Changed	Net Acreage Changed
Prime Farmland	190,206	189,163	1,699	656	2,355	-1,043
Farmland of Statewide Importance	297,272	291,596	6,330	654	6,984	-5,676
Unique Farmland	2,071	1,905	190	24	214	-166
Farmland of Local Importance	38,923	39,711	1,587	2,375	3,962	788
Important Farmland Subtotal	***528,472***	***522,375***	***9,806***	***3,709***	***13,515***	***-6,097***
Grazing Land	0	0	0	0	0	0
Agricultural Land Subtotal	528,472	522,375	9,806	3,709	13,515	-6,097
Urban and Built-Up Land	37,412	41,764	301	4,653	4,954	4,352
Other Land	461,891	463,488	712	2,309	3,021	1,597
Water Area	749	897	125	273	398	148
Total Area Inventoried	**1,028,524**	**1,028,524**	**10,944**	**10,944**	**21,888**	**0**

Source: DOC 2018

Local

County of Imperial General Plan

The Agricultural Element of the County's General Plan serves as the primary policy statement for implementing development policies for agricultural land use in Imperial County. The goals, objectives, implementation programs, and policies found in the Agricultural Element provide direction for new development as well as government actions and programs. Imperial County's Goals and Objectives are intended to serve as long-term principles and policy statements to guide agricultural use decision-making and uphold the community's ideals.

Agriculture has been the single most important economic activity in the County throughout its history. The County recognizes the area as one of the finest agricultural areas in the world because of several environmental and cultural factors including good soils, a year-round growing season, the availability of adequate water transported from the Colorado River, extensive areas committed to agricultural production, a gently sloping topography, and a climate that is well-suited for growing crops and raising livestock. The Agricultural Element in the County General Plan demonstrates the long-term commitment by the County to the full promotion, management, use, and development and protection of agricultural production, while allowing logical, organized growth of urban areas (County of Imperial 2015).

PC ORIGINAL PKG

The County's Agricultural Element identifies several Implementation Programs and Policies for the preservation of agricultural resources. The Agricultural Element recognizes that the County can and should take additional steps to provide further protection for agricultural operations and at the same time provide for logical, organized growth of urban areas. The County must be specific and consistent about which lands will be maintained for the production of food and fiber and for support of the County's economic base. The County's strategy and overall framework for maintaining agriculture includes the following policy directed at the preservation of Important Farmland:

> The overall economy of the County is expected to be dependent upon the agricultural industry for the foreseeable future. As such, all agricultural land in the County is considered as Important Farmland, as defined by federal and state agencies, and should be reserved for agricultural uses. Agricultural land may be converted to non-agricultural uses only where a clear and immediate need can be demonstrated, such as requirements for urban housing, commercial facilities, or employment opportunities. All existing agricultural land will be preserved for irrigation agriculture, livestock production, aquaculture, and other agriculture-related uses except for non-agricultural uses identified in this General Plan or in previously adopted City General Plans.

The following program is provided in the Agricultural Element:

> No agricultural land designated except as provided in Exhibit C [of the Agricultural Element] shall be removed from the Agriculture category except where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long-term economic benefit to the County can be demonstrated through the planning and environmental review process. The Board (or Planning Commission) shall be required to prepare and make specific findings and circulate same for 60 days (30 days for parcels considered under Exhibit C of this [Agricultural] element) before granting final approval of any proposal, which removes land from the Agriculture category.

Also, the following policy addresses Development Patterns and Locations on Agricultural Land:

> "Leapfrogging" or "checkerboard" patterns of development have intensified recently and result in significant impacts on the efficient and economic production of adjacent agricultural land. It is a policy of the County that leapfrogging will not be allowed in the future. All new non-agricultural development will be confined to areas identified in this plan for such purposes or in Cities' adopted Spheres of Influence, where new development must adjoin existing urban uses. Non-agricultural residential, commercial, or industrial uses will only be permitted if they adjoin at least one side of an existing urban use, and only if they do not significantly impact the ability to economically and conveniently farm adjacent agricultural land.

Agricultural Element Programs that address "leapfrogging" or "checkerboard" development include:

> All non-agricultural uses in any land use category shall be analyzed during the subdivision, zoning, and environmental impact review process for their potential impact on the movement of agricultural equipment and products on roads located in the Agriculture category, and for other existing agricultural conditions which might impact the projects, such as noise, dust, or odors.

PC ORIGINAL PKG

The Planning and Development Services Department shall review all proposed development projects to assure that any new residential or non-agricultural commercial uses located on agriculturally zoned land, except land designated as a Specific Plan Area, be adjoined on at least one entire property line to an area of existing urban uses. Developments that do not meet these criteria should not be approved.

Table 3.3-3 provides a General Plan goal and policy consistency evaluation for the project.

Table 3.3-3. Project Consistency with Applicable General Plan Agricultural Policies

General Plan Policies	Consistency with General Plan	Analysis
Goal 1. All Important Farmland, including the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, as defined by federal and state agencies, should be reserved for agricultural uses.	Consistent	The project would temporarily convert land designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance to non-agricultural uses. However, as part of the project, the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance to non-agricultural uses.
Goal 2. Adopt policies that prohibit "leapfrogging" or "checkerboard" patterns of nonagricultural development in agricultural areas and confine future urbanization to adopted Sphere of Influence area.	Consistent	The project site is designated for agriculture land use in the County General Plan. The project would include development of a solar facility, BESS, and associated infrastructure adjacent to productive agricultural lands surrounding the project site. The project would not include a residential component that would induce urbanization adjacent to the project. Furthermore, with the approval of a General Plan Amendment, Zone Change, and CUPs, the project would be consistent with the County's Land Use Ordinance. Consistency with the Land Use Ordinance implies consistency with the General Plan land use designation.
Objective 2.1. Do not allow the placement of new non-agricultural land uses such that agricultural fields or parcels become isolated or more difficult to economically and conveniently farm.	Consistent	The project would include development of a solar facility adjacent to productive agricultural lands surrounding the project site. Neither construction nor operation of the solar facility would not make it difficult to economically or conveniently farm.
Objective 2.2. Encourage the infilling of development in urban areas as an alternative to expanding urban boundaries.	Consistent	The project involves the construction and operation of solar facility in a rural area. While the proposed project will introduce development in the area, it does not include residential uses that would, in turn, create a demand for other uses such as commercial, employment centers, and supporting services.
Objective 2.3. Maintain agricultural lands in parcel size configurations that help assure	Consistent	The project would temporarily convert agricultural land to non-agricultural uses. However, the project

PC ORIGINAL PKG

that viable farming units are retained.		would not be subdivided into smaller parcels. A reclamation plan will be prepared for the project site, which when implemented, would return the site to pre-project conditions after the solar uses are discontinued.
Objective 2.4. Discourage the parcelization of large holdings.	Consistent	See response to Objective 2.3 above.
Objective 2.6. Discourage the development of new residential or other non-agricultural areas outside of city "sphere of influence" unless designated for non-agricultural use in the County General Plan, or for necessary public facilities.	Consistent	Upon approval of a General Plan Amendment, Zone Change, and CUPs, the proposed project would be an allowable use within an applicable agricultural zone, and the existing zoning of the project site would be consistent with the existing General Plan land use designation.
Goal 3. Limit the introduction of conflicting uses into farming areas, including residential development of existing parcels which may create the potential for conflict with continued agricultural use of adjacent property.	Consistent	Upon approval of a General Plan Amendment, Zone Change, and CUPs, the proposed project would be an allowable use within an applicable agricultural zone. Additionally, the project does not include the development of housing.
Objective 3.2. Enforce the provisions of the Imperial County Right-to-Farm Ordinance (No. 1031).	Consistent	The Imperial County Right-to-Farm Ordinance would be enforced. Existing nuisance issues such as noise, dust, and odors from existing agricultural use would not impact the project given the general lack of associated sensitive uses (e.g., residences). Likewise, with mitigation measures and BMPs proposed in other resource sections, project-related activities would not adversely affect adjacent agricultural operations.
Objective 3.3. Enforce the provisions of the State nuisance law (California Code Sub-Section 3482).	Consistent	The provisions of the State nuisance law would be incorporated into the project. As discussed below, there is the potential that weeds or other pests may occur within the solar facility if the area is not properly maintained and managed to control weeds and pests. Mitigation Measure AG-2 requires the project applicant to develop a Pest Management Plan prior to the issuance of a grading permit or building permit (whichever occurs first).

Source: County of Imperial General Plan 2015

County of Imperial Guidelines for the Public Benefit Program for use with Solar Power Plants in Imperial County

Imperial County has created the Public Benefit Program to address the impacts the utility-scale solar power plants have on the community, local economy, agriculture industry, employment, infrastructure economic development and quality of life. On June 26, 2012 per Minute Order #8, Imperial County Board of Supervisors approved the Renewable Energy Public Benefit Agreement:

- (2) restricted funds were created (Agriculture Benefit and Community Benefit)
- (2) advisory committees were created (Agriculture and Community Advisory)
- Seek applications and finalize recommendations

The 2012 adoption of the Public Benefit Program included provisions for the periodic review of the guidelines.

PC ORIGINAL PKG

Pursuant to these provisions, the County reviewed and amended the guidelines in May 9, 2023.

Prior to the most recent amendment in 2023, the Public Benefit Program had been in operation for a decade. While the program had been successful in providing benefits to both the agricultural and community projects, the County had also experienced an increase in the development of utility-scale solar power plants. In amending the guidelines, the County acknowledged that the increase in development had not brought the traditional increase in revenue to the County and that over the same time period, the costs of providing public services had continued to climb. These include Sheriff, Public Health and Fire Department, and should benefit the residents in the County.

As such the Public Benefit Program was amended by the Imperial County Board of Supervisors which provides specific guidelines for annual payments for Public Service Benefits, Agriculture Benefits, Community Benefits, and Sales Tax Revenues.

The Public Service Benefits are intended to help offset costs of Imperial County Public Services including law enforcement, fire protection, public works, and other services provided by the County of Imperial. The Agricultural Benefits are intended to offset the temporary negative effects of agricultural conversion to the community, local economy, and agriculture industry. The Community Benefit is intended for infrastructure improvement, job creation, economic development, enhancement to the quality of life in neighboring communities, and also to off-set the costs of Imperial County Public Services.

3.3.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to agricultural resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to agricultural resources are considered significant if any of the following occur:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use
- Conflict with existing zoning for agricultural use, or a Williamson Act contract
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description, to adversely impact agricultural resources within the project site based on the applied significance criteria as identified above. The analysis utilizes the LESA model in conjunction with other readily available information sources in assessing impacts on agriculture and farmland. As indicated in the environmental setting, a LESA model has been prepared that addresses the project site. This report is included as Appendix C of this EIR. The analysis prepared for this EIR also relied on Important Farmland and Williamson Act maps for Imperial County produced by the California DOC's Division of

Land Resource Protection. These sources were used to determine the agricultural significance of the land in the project site. Per the County of Imperial General Plan, Farmland of Local Importance is also considered an important farmland. These sources were used to determine the agricultural significance of the land within the project site.

Additionally, potential conflicts with existing agricultural zoning or other changes resulting from the implementation of the project, which could indirectly remove Important Farmland from agricultural production or reduce agricultural productivity were considered. Sources used in this evaluation included, but were not limited to, the Imperial County General Plan and zoning ordinance. The conceptual site plan for the project was also used to evaluate potential impacts.

Impact Analysis

Impact 3.3-1 Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use?

Implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland
- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

The loss of agricultural land designed Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is typically considered a significant impact under CEQA.

Approximately 65.08 acres of the project site are classified as Farmland of Local Importance and 51.04 acres are classified as Other Land. It should be noted that analysis of Farmland of Local Importance and Other Land is not required under CEQA significance criteria, as these designations are not considered an “agricultural land” per CEQA Statute Section 21060.1(a).

To verify the farmland designations on the project site, the LESA model was used with the results provided in Appendix C of this EIR. Based on the LESA’s scoring methodology (Table 3.3-4), a site scoring of 60 points or higher is typically considered “significant” unless either land evaluation (LE) or site assessment (SE) subscore is less than 20 points. As shown in Table 3.3-5, the project site’s LE subscore is 33.71, while the SA subscore is 36.00. The final LESA score is 69.71. Therefore, with both subscores above 20, the project is considered to have a significant impact on agricultural resources. As shown, the LESA score for the project site supports the farmland designations as identified in the FMMP. Therefore, their conversion to non-agricultural use, albeit temporary, is considered a significant impact. Implementation of Mitigation Measures AG-1a and AG-1b would reduce this impact to a level less than significant.

Table 3.3-4. California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA subscores are greater than or equal to 20 points

PC ORIGINAL PKG

60 to 79 points	Considered significant unless either LE or SA subscore is less than 20 points
80 to 100 points	Considered significant

Source: Appendix C of this EIR

Table 3.3-5. Final Land Evaluation Site Assessment Score Sheet Summary

	Factor Rating (0-100 Rating)	Factor Weighting (Total =1.00)	Weighted Factor Rating
Land Evaluation			
1. LCC Rating	76.16	0.25	19.04
1. Storie Index Rating	58.68	0.25	14.67
LE Subscore	--	--	33.71
Site Assessment			
1. Project Size Rating	100	0.15	15
2. Water Resource Availability Rating	100	0.15	15
3. Surrounding Agricultural Land Rating	40	0.15	6
4. Surrounding Protected Resource Lands Rating	0	0.05	0
Site Assessment Subscore	--	--	36
TOTAL	**--**	**--**	**69.71**

Source: Appendix C of this EIR

As discussed in Chapter 2, Project Description, the project applicant would be required to restore the project site to pre-existing conditions following project operations; therefore, agricultural uses would be possible in the future. Given that the project facilities would be constructed near the existing grade, restoration of the project site to facilitate future cultivated agriculture would generally be feasible. However, implementation of the project would replace existing agricultural uses within the solar facilities during the term of the CUPs and until the site is restored. Additionally, although the project applicant is proposing agriculture as the proposed end use, it is possible that project-related activities (e.g., soil disturbance) and subsequent restoration of the site could result in a net reduction in Prime Farmland, Farmland of Statewide Importance, or Unique Farmland within the project site. These acreage reductions could occur through alterations in soil productivity or the retention of project-related structures. As a condition of project approval (CUP condition), a reclamation plan will be prepared for the project site. The reclamation plan will provide guidance and performance criteria to ensure that no net reduction in Important Farmland occurs. Implementation of Mitigation Measure AG-1b would reduce long-term impacts to a level less than significant by ensuring compliance with a Site Reclamation Plan documenting procedures by which the project site will be returned to its current agricultural conditions.

PC ORIGINAL PKG

Mitigation Measure(s)

AG-1a **Payment of Agricultural and Other Benefit Fees.** Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented:

A. Mitigation for Non-Prime Farmland:

Option 1: *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or,

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that: 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.

B. Mitigation for Prime Farmland:

Option 1: *Provide Agricultural Conservation Easements.* Provide Agricultural Conservation Easement(s). The permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the

acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project; or

Option 4: *Avoid Prime Farmland.* The Permittee must revise their Conditional Use Permit Application/Site Plan to avoid Prime Farmland.

AG-1b **Site Reclamation Plan.** In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition during decommissioning. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.

Significance after Mitigation

With the implementation of Mitigation Measure AG-1a, potential impacts on valuable farmlands would be minimized through provision of an agricultural conservation easement, payment into the County agricultural fee program, or entering into a public benefit agreement. With implementation of Mitigation Measure AG-1b, potential impacts on valuable farmlands would be minimized by ensuring the project applicant adheres to the terms of a site Reclamation Plan documenting procedures by which the project site will be returned to its current agricultural conditions. These mitigation measures would reduce the impact on Important Farmlands, including Prime Farmland, to a less than significant level.

Impact 3.3-2 Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Williamson Act. The project site is not located on Williamson Act contracted land (DOC 2024). Therefore, the project would not conflict with a Williamson Act contract and no impact would occur.

Agricultural Zoning. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

Upon approval of the CUPs, the project's uses would be consistent with the Imperial County Land Use Ordinance and thus is also consistent with the General Plan land use designation of the site. Additionally, the operation of the solar energy facility with an integrated BESS is not expected to inhibit or adversely affect adjacent agricultural operations through the placement of sensitive land uses or generation of excessive dust or shading. Based on these considerations, the impact is considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.3-3 Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

The Agricultural Element of the County's General Plan serves as the primary policy statement for implementing development policies for agricultural land use in Imperial County. The goals, objectives, implementation programs, and policies found in the Agricultural Element provide direction for private development as well as government actions and programs. A summary of the relevant

PC ORIGINAL PKG

Agricultural goals and objectives and the project's consistency with applicable goals and objectives is provided in Table 3.3-3. As provided, the project is generally consistent with certain Agricultural Element Goals and Objectives of the County General Plan, but mitigation is required for the project.

Per County policy, agricultural land may be converted to non-agricultural uses only where a clear and immediate need can be demonstrated, such as requirements for urban housing, commercial facilities, or employment opportunities. Further, no agricultural land designated exempt shall be removed from the agriculture category except where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long-term economic benefit to the County can be demonstrated through the planning and environmental review process.

As discussed under Impact 3.3-1, although the project would temporarily convert lands currently under agricultural production, the project applicant is proposing agriculture as the end use and will prepare a site-specific Reclamation Plan to minimize impacts related to short- and long-term conversion of farmland to non-agricultural use. Additionally, the County is requiring Mitigation Measure AG-1b to ensure that post-restoration of the project facilities result in no net reduction in Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. With implementation of Mitigation Measure AG-1b, this impact would be reduced to a level less than significant.

The project would not directly impact the movement of agricultural equipment on roads located within the agriculture category and access to existing agriculture-serving roads would not be precluded or hindered by the project. Furthermore, existing nuisance issues such as noise, dust, and odors from existing agricultural use would not impact the project given the general lack of associated sensitive uses (e.g. residences). Likewise, with mitigation measures and best management practices (BMPs) proposed in other resource sections, project-related activities would not adversely affect adjacent agricultural operations. Further, the provisions of the Imperial County Right-to-Farm Ordinance (No. 1031) and the State nuisance law (California Code Sub-Section 3482) would continue to be enforced.

With the implementation of the project, it is possible that the physical and chemical makeup of the soil materials within the upper soil horizon may change. For example, improper soil stockpiling and management of the stockpiles could result in increased decomposition of soil organic materials, increased leaching of plant available nitrogen, and depletion of soil biota communities (e.g., Rhizobium or Frankia). Any reductions in agricultural productivity could significantly limit the types of crops (e.g., deeper rooting crops, orchards, etc.) that may be grown within the project site in the future. However, implementation of Mitigation Measure AG-1b would require the project applicant or its successor in interest for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes restoration of the site to its pre-project condition. Implementation of Mitigation Measure AG-1b would reduce this impact to a level less than significant.

Additionally, there is the potential that weeds or other pests may occur within the solar field if the area is not properly maintained and managed to control weeds and pests. This is considered a significant impact. Implementation of Mitigation Measure AG-2 would reduce this impact to a level less than significant.

Mitigation Measure(s)

AG-2 **Pest Management Plan.** Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following:

1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line);
2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows:
    - Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business;
    - All treatments must be performed by a qualified applicator or a licensed pest control operator;
    - "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments;
    - Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation;
    - Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture;
    - Obey all pesticide use laws, regulations, and permit conditions;
    - Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties;
    - Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current;
    - Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name

(current and previous if changed), and methods used. For pesticides include the chemical(s) used, EPA Registration numbers, and application rates. A pesticide use report may be used for this;

- Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request.

3. A long-term strategy for weed and pest control and management during the operation of the proposed project. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis.
4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands.
5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.

Significance after Mitigation

With implementation of Mitigation Measure AG-1b, the project applicant would be required to adhere to the terms of the comprehensive reclamation plan that would restore the project site to preexisting (pre-project) conditions following decommissioning of the project (after their use for solar generation and BESS activities). In addition, the proposed project would be required to implement a weed and pest management control plan per Mitigation Measure AG-2. Compliance with these measures would reduce this impact to a level less than significant.

3.3.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

In any land restoration project, it is necessary to minimize disruption to topsoil or stockpiled topsoil for later use during restoration following project decommissioning. With the implementation of the project, it is possible that the physical and chemical makeup of the soil materials within the upper soil horizon may change during construction and associated stockpiling operations. Improper soil stockpiling and management of the stockpiles could result in increased decomposition of soil organic materials, increased leaching of plant-available nitrogen, and depletion of soil biota communities (e.g., Rhizobium or Frankia). Each of these circumstances could have an adverse effect on the future productivity of the restored soils. Any reductions in agricultural productivity could significantly limit the types of crops (e.g., deeper rooting crops, orchards, etc.) that may be grown within the project site in the future. With implementation of Mitigation Measure AG-1b, the project applicant would be required to adhere to the terms of the comprehensive reclamation plan that would restore the project site to pre-existing (pre-project) conditions following decommissioning of the project (after their use for solar generation activities). Implementation of Mitigation Measure AG-1b would reduce this impact to a level less than significant.

Residual

With mitigation, issues related to the conversion of Important Farmland to non-agricultural use would be mitigated and reduced to a less than significant level. Operation of the project, subject to the approval of the CUPs, would generally be consistent with applicable federal, state, regional, and local plans and policies. Following the proposed use (e.g., solar facility and BESS), the project would be decommissioned and the project site would be restored to pre-project conditions. Based on these circumstances, the project would not result in any residual significant and unmitigable impacts on agricultural resources.

PC ORIGINAL PKG

3.4 Air Quality

This section includes an overview of the existing air quality within the project area and identifies applicable local, state, and federal policies related to air quality. The impact assessment provides an evaluation of potential adverse effects on air quality based on criteria derived from the CEQA Guidelines and Imperial County Air Pollution Control District's (ICAPCD) Air Quality Handbook in conjunction with actions proposed in Chapter 2, Project Description, of this EIR. Information contained in this section is summarized from the *Air Quality and Greenhouse Gas Emissions Technical Report* prepared by HDR Engineering, Inc. This report is included in Appendix D of this EIR.

3.4.1 Existing Conditions

Regional Setting

The project is located in Imperial County within the Salton Sea Air Basin (SSAB). The SSAB consists of all of Imperial County and a portion of Riverside County. Both the ICAPCD and South Coast Air Quality Management District (SCAQMD) have jurisdiction within the SSAB. The ICAPCD has full jurisdiction within Imperial County and SCAQMD only has jurisdiction within Riverside County.

The climate of Imperial County is governed by the large-scale sinking and warming of air in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The high-pressure ridge blocks out most mid-latitude storms, except in the winter, when it is weakest and located farthest south. The coastal mountains prevent the intrusion of any cool, damp air found in California coastal areas. Because of the barrier and weakened storms, Imperial County experiences clear skies, extremely hot summers, mild winters, and little rainfall. The sun shines, on the average, more in Imperial County than anywhere else in the United States.

The lack of clouds and atmospheric moisture creates strong diurnal and seasonal temperature variations ranging from an average summer maximum of 108 degrees Fahrenheit (° F) down to a winter morning minimum of 38° F. The most pleasant weather occurs from about mid-October to early May when daily highs are in the 70s and 80s with very infrequent cloudiness or rainfall. Imperial County experiences rainfall on an average of only four times per year (>0.10 inches in 24 hours). The local area usually has three days of rain in winter and one thunderstorm day in August. The annual rainfall in this region is less than three inches per year.

Humidity is low throughout the year, ranging from an average of 28 percent in summer to 52 percent in winter. The large daily oscillation of temperature produces a corresponding large variation in the relative humidity. Nocturnal humidity rises to 50 to 60 percent but drops to about 10 percent during the day.

The wind in Imperial County follows two general patterns. Wind statistics indicate prevailing winds are from the west-northwest through southwest; a secondary flow maximum from the southeast is also evident. The prevailing winds from the west and northwest occur seasonally from fall through spring and are known to be from the Los Angeles area. Occasionally, Imperial County experiences periods of extremely high wind speeds. Wind speeds can exceed 31 miles per hour (mph), and this occurs most frequently during the months of April and May. However, speeds of less than 6.8 mph account for more than one-half of the observed wind measurements (Appendix D of this EIR).

Major Air Pollutants

Criteria Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone, coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 3.4-1.

Table 3.4-1. Criteria Air Pollutants - Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health and Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N_2O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} and $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze)
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: CAPCOA 2021

Attainment Status

The CAA requires the USEPA to designate areas within the country as either “attainment” or “nonattainment” for each criteria pollutant based on whether the NAAQS have been achieved. Similarly, the CCAA requires the CARB to designate areas within California as either “attainment” or “nonattainment” for each criteria pollutant based on whether the CAAQS have been achieved. If a pollutant concentration is lower than the standard, the area is classified as “attainment” for that

PC ORIGINAL PKG

pollutant. If a pollutant exceeds the standard, the area is classified as “nonattainment” for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards.

The attainment status for the portion of the SSAB encompassing the project site is shown in Table 3.4-2. As shown in Table 3.4-2, the Imperial County portion of the SSAB is currently designated as nonattainment for O_3 under State standards. Under federal standards, the Imperial County portion of the SSAB is in nonattainment for O_3, and $PM_{2.5}$. The area is currently in attainment or unclassified status for CO, NO_2, and SO_2.

Table 3.4-2. Attainment Status of Criteria Pollutants in the Imperial County Portion of the Salton Sea Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Attainment	Attainment
$PM_{2.5}$	Attainment	Nonattainment
CO	Attainment	Unclassified/attainment
NO_2	Attainment	Unclassified/attainment
SO_2	Attainment	Unclassified/attainment
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Lead	Attainment	Unclassified/Attainment

Source: Appendix D of this EIR

Local Ambient Air Quality

Ambient air quality at the project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. The ICAPCD operates a network of monitoring stations throughout the County that continuously monitor ambient levels of criteria pollutants in compliance with federal monitoring regulations.

Table 3.4-3 shows the most recent monitoring data from CARB from 2019 to 2023 from the El Centro monitoring station.

PC ORIGINAL PKG

Table 3.4-3. Ambient Air Quality Monitoring Data

	Year				
	2019	2020	2021	2022	2023
O_3					
Maximum 1-hour concentration (ppm)	0.080	0.097	0.096	0.113	0.100
Maximum 8-hour concentration (ppm)	0.071	0.077	0.084	0.079	0.091
Number of days standard exceeded					
National 1-hour standard	0	1	1	2	5
State 8-hour standard	1	2	7	10	15
NAAQS 8-hour (>0.07 ppm)	1	2	6	10	15
PM_{10}					
National maximum 24-hour concentration (µg/m^3)	123.9	197.5	194.5	554.6	231.6
State maximum 24-hour concentration (µg/m^3)	130.0	197.7	186.9	553.6	224.0
National annual average concentration (µg/m^3)	34.9	41.5	41.8	44.7	36.7
State annual average concentration (µg/m^3)	35.6	41.5	41.6	45.5	36.7
Number of days standard exceeded					
National 24-hour standard	0	2	1	2	3
State 24-hour standard	54	92	89	99	65
$PM_{2.5}$					
National maximum 24-hour concentration (µg/m^3)	21.4	28.5	19.1	30.6	42.0
State maximum 24-hour concentration (µg/m^3)	21.4	28.5	19.1	30.6	42.0
National annual average concentration (µg/m^3)	7.9	9.8	8.4	8.9	7.8
State annual average concentration (µg/m^3)	7.9	9.8	8.3	8.9	*
Number of days standard exceeded					
NAAQS 24-hour standard	1	5	2	5	3

Source: CARB 2024a

Notes: O_3 = ozone; PM_{10} = particles of 10 micrometers and smaller; $PM_{2.5}$ = particles of 2.5 micrometers and smaller; µg/m^3 = micrograms per cubic meter; ppb = parts per billion; NAAQS = national ambient air quality standards; CAAQS = California Ambient air quality standards.

PC ORIGINAL PKG

Valley Fever

Valley Fever (also called *coccidioidomycosis* or "cocci") is a fungal lung infection that is caused by a fungus that lives in the soil. This fungus, Coccidioides, has been found in the southwestern United States and can be breathed in when soil is disturbed, and the fungus is spread through the air. People can contract Valley Fever when working or living in areas with soil disturbance such as during construction activities for grading or soil movement. Valley Fever causes flu-like symptoms including fatigue, cough, fever, shortness of breath, headache, night sweats, muscle aches, or rash, but can also present no symptoms in some people. Because of these common symptoms, people may delay treatment and let the infection take its course without medical attention. Valley fever can be serious and even fatal. Recently in California, there have been more than 1,000 people hospitalized with Valley fever each year, of which about 1 in 10 have died in the hospital (Appendix D of this EIR).

Valley fever is contracted by breathing in dust from outdoor air that contains spores of the Coccidioides fungus that grows in the soil. Like seeds from a plant, a fungus grows and spreads from tiny spores that are too small to see. When soil or dirt is stirred up by strong winds or while digging, dust containing these fungus spores can get into the air. Anyone who lives, works, or travels in an area where the Valley fever fungus grows can breathe in these fungus spores from outdoor dust without knowing it and become infected (Appendix D of this EIR).

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive Receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or California Air Resources Board may determine (Appendix D of this EIR).

The nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby sensitive receptors include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

3.4.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Clean Air Act and National Ambient Air Quality Standards

The Clean Air Act (CAA) is the primary federal law governing air quality. The CAA is regulated by the USEPA, which sets standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS have been established for six criteria air pollutants that have been linked to potential health concerns: O_3, PM_{10},

$PM_{2.}5$, CO, NO_2, and SO_2. Additionally, national standards exist for Pb. The NAAQS are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. The federal regulatory schemes also cover toxic air contaminants (TACs).

The Federal CAA requires U.S EPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table 3.4-4.

The Federal CAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). USEPA is responsible for implementing the programs established under the CAA, programs such as establishing and reviewing the federal ambient air quality standards and judging the adequacy of SIPs. If a state contains areas that violate the national standards, the Federal CAA requires the State to revise its SIP to incorporate additional control measures to reduce air pollution. USEPA has authorized States such as California with air programs that meet or exceed federal standards to implement many of the federal programs while retaining an oversight role.

State

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the California standards are more health protective (stringent) than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

The CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts (air districts) at the regional and local levels. CARB and local air districts bear responsibility for achieving California's air quality standards, which are to be achieved through air district-level air quality management plans that would be incorporated into the SIP. In California, USEPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. CARB is responsible for establishing state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The act also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures.

As shown in Table 3.4-4, the CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment.

PC ORIGINAL PKG

Assembly Bill 2588

California regulates TACs primarily through the Tanner Air Toxics Act of 1983 (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Toxic Air Contaminant Identification and Control Act (AB 1807) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In August 1998, CARB identified particulate emissions from diesel-fueled engines as TACs. In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. As an ongoing process, CARB reviews air contaminants and identifies those that are classified as TACs. CARB also continues to establish new programs and regulations for the control of TACs, including DPM, as appropriate. Among the programs and strategies CARB has developed to reduce diesel emissions for various sources, including off-road sources (construction equipment), and on-road trucks (haul trucks). In 2015, OEHHA adopted the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.

Senate Bill 375

SB 375, also known as the Sustainable Communities and Climate Protection Act, provides for a new planning process that coordinates land use planning, regional transportation plans (RTPs), and funding priorities, originally in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires RTPs to incorporate a "sustainable communities strategy" (SCS). The goal of the SCS is to reduce regional VMT through land use planning and consequent transportation patterns. SCS measures include transportation demand management, transportation system management, and pricing.

California State Implementation Plan

The CAA mandates that the state submit and implement a State Implementation Plan (SIP) for areas not meeting the NAAQS. These plans must include pollution control measures that demonstrate how the standards will be met. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. The Code of Federal Regulations Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items which are included in the California SIP.

Table 3.4-4. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	
O_3	1 hour	-	Same as Primary Standard	0.09 ppm
	8 hour	0.07 ppm		0.07 ppm
PM_{10}	24 hour	150 µg/m^3	Same as Primary Standard	50 µg/m^3
	Annual	-		20 µg/m^3

PC ORIGINAL PKG

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	
$PM_{2.5}$	24 hour	35 µg/m^3	Same as Primary Standard	-
	Annual Arithmetic Mean	12 µg/m^3	15 µg/m^3	12 µg/m^3
CO	1 hour	35 ppm	-	20 ppm
	8 hour	9 ppm	-	9 ppm
	8 hour (Lake Tahoe)	-	-	6 ppm
NO_2	1 hour	100 ppb	-	0.18 ppm
	Annual Arithmetic Mean	0.053 ppm	Same as Primary Standard	0.03 ppm
SO_2	1 hour	75 ppb	-	0.25 ppm
	3 hour	-	0.5 ppm	-
	24 hour	0.14 ppm	-	0.04 ppm
	Annual Arithmetic Mean	0.03 ppm	-	-
Pb	30-day Average	-	-	1.5 µg/m^3
	Calendar Quarter	1.5 µg/m^3	Same as Primary Standard	-
	Rolling 3-month Average	0.15 µg/m^3		-
Visibility Reducing Particles	8 hour	No National Standards		-[5]
Sulfates	24 hour	No National Standards		25 µg/m^3
Hydrogen Sulfide	1 hour	No National Standards		0.03 ppm
Vinyl Chloride	24 hour	No National Standards		0.01 ppm

PC ORIGINAL PKG

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	

Source: CARB 2024b
Notes:
O_3 = ozone; PM_{10} = particles of 10 micrometers and smaller; $PM_{2.5}$ = particles of 2.5 micrometers and smaller; CO = carbon monoxide; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; Pb = lead; ppm = parts per million; µg/m^3 = micrograms per cubic meter; ppb = parts per billion
1. National standards (other than O_3, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the USEPA for further clarification and current national policies.
2. California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
3. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
4. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
5. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Regional

Imperial County Air Pollution Control District

The ICAPCD is the agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. ICAPCD is responsible for regulating stationary sources of air emissions in Imperial County. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by ICAPCD. ICAPCD is responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. Monitoring of ambient air quality in Imperial County began in 1976. Since that time, monitoring has been performed by ICAPCD, CARB, and by private industry. There are six monitoring sites in Imperial County from Niland to Calexico. The ICAPCD has developed the following plans to achieve attainment for air quality ambient standards.

- **2009 Imperial County Plan for PM_{10}.** Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. As a result, ICAPCD was required to develop a PM_{10} Attainment Plan. The final plan was adopted by ICAPCD on August 11, 2009 (ICAPCD 2009).
- **2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area.** U.S. EPA designated Imperial County as nonattainment for the 2006 24-hr $PM_{2.5}$ standard, effective December 14, 2009. The 2013 $PM_{2.5}$ SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but-for" transport of international emissions from Mexicali, Mexico. The City of Calexico, California shares a border with the City of Mexicali. Effective July 1, 2014, the City of Calexico was designated nonattainment, while the rest of the SSAB was designated attainment (ICAPCD 2014).
- **2017 Imperial County Plan for 2008 8-hour Ozone Standard.** Because of Imperial County's "moderate" nonattainment status for 2008 federal 8-hour O_3 standards, ICAPCD was required to develop an 8-hour Attainment Plan for Ozone (ICAPCD 2017a). The plan includes control measures which are an integral part of how the ICAPCD currently controls the ROG and NO_X

PC ORIGINAL PKG

emissions within the O_3 nonattainment areas. The overall strategy includes programs and control measures which represent the implementation of Reasonable Available Control Technology (40 CFR 51.912) and the assurance that stationary sources maintain a net decrease in emissions.

- **2018 Imperial County Plan for PM_{10}**. Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. The 2018 SIP maintained previously adopted fugitive dust control measures (Regulation VIII) that were approved in the Imperial County portion of the California SIP in 2013 (see above) (ICAPCD 2018a).
- **2018 Imperial County Plan for $PM_{2.5}$.** U.S. EPA designated Imperial County as nonattainment for the 2018 24-hr $PM_{2.5}$ standard. The 2018 $PM_{2.5}$ SIP concluded that the majority of the $PM_{2.5}$ emissions resulted from transport in nearby Mexico. Specifically, the SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but for" transport of international emissions from Mexicali, Mexico. In accordance with the CCAA, the $PM_{2.5}$ SIP satisfies the attainment demonstration requirement satisfying the provisions of the CCAA (ICAPCD 2018b).

In addition to the above plans, the ICAPCD is working cooperatively with counterparts from Mexico to implement emissions reductions strategies and projects for air quality improvements at the border. The two countries strive to achieve these goals through local input from states, county governments, and citizens. Within the Mexicali and Imperial Valley area, the Air Quality Task Force has been organized to address those issues unique to the border region known as the Mexicali/Imperial air shed. The Air Quality Task Force membership includes representatives from federal, State, and local governments from both sides of the border, as well as representatives from academia, environmental organizations, and the general public. This group was created to promote regional efforts to improve the air quality monitoring network, emissions inventories, and air pollution transport modeling development, as well as the creation of programs and strategies to improve air quality.

Imperial County Air Pollution Control District Rules and Regulations

ICAPCD has the authority to adopt and enforce regulations dealing with controls for specific types of sources, emissions or hazardous air pollutants, and New Source Review. The ICAPCD Rules and Regulations are part of the SIP and are separately enforceable by the EPA.

Rule 106 – Abatement. The Board may, after notice and a hearing, issue, or provide for the issuance by the Hearing Board, of an order for abatement whenever the District finds that any person is in violation of the rules and regulations limiting the discharge of air contaminants into the atmosphere.

Rule 107 – Land Use. The purpose of this rule is to provide ICAPCD the duty to review and advise the appropriate planning authorities within the District on all new construction or changes in land use which the Air Pollution Control Officer believes could become a source of air pollution problems.

Rule 201 – Permits Required. The construction, installation, modification, replacement, and operation of any equipment which may emit or control Air Contaminants require ICAPCD permits.

Rule 207 – New and Modified Stationary Source Review. Establishes preconstruction review requirements for new and modified stationary sources to ensure the operations of equipment does not interfere with attainment or maintenance of ambient air quality standards.

Rule 208 – Permit to Operate. The ICAPCD would inspect and evaluate the facility to ensure the facility has been constructed or installed and will operate to comply with the provisions of the Authority to Construct permit and comply with all applicable laws, rules, standards, and guidelines.

Rule 310 – Operational Development Fee. The purpose of this rule is to provide ICAPCD with a sound method for mitigating the emissions produced from the operation of new commercial and residential development projects throughout the County of Imperial and incorporated cities. All project proponents have the option to either provide off-site mitigation, pay the operational development fee, or do a combination of both. This rule will assist ICAPCD in attaining the state and federal ambient air quality standards for PM_{10} and O_3.

Rule 401 – Opacity of Emissions. Sets limits for release or discharge of emissions into the atmosphere, other than uncombined water vapor, that are dark or darker in shade as designated as No.1 on the Ringelmann Chart[1] or obscure an observer's view to a degree equal to or greater than smoke does as compared to No.1 on the Ringelmann Chart, for a period or aggregated period of more than three minutes in any hour.

Rule 403 – General Limitations on the Discharge of Air Contaminants. Rule 403 sets forth limitations on emissions of pollutants, including particulate matter, from individual sources.

Rule 407 – Nuisance. Rule 407 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Rule 801 – Construction and Earthmoving Activities. Rule 801 aims to reduce the amount of PM_{10} entrained in the ambient air as a result of emissions generated from construction and other earthmoving activities by requiring actions to prevent, reduce, or mitigate PM_{10} emissions. This rule applies to any construction and other earthmoving activities, including, but not limited to, land clearing, excavation related to construction, land leveling, grading, cut and fill grading, erection or demolition of any structure, cutting and filling, trenching, loading or unloading of bulk materials, demolishing, drilling, adding to or removing bulk of materials from open storage piles, weed abatement through disking, back filling, travel on-site and travel on access roads to and from the site.

Regulation VIII – Fugitive Dust Rules. Regulation VIII sets forth rules regarding the control of fugitive dust, including fugitive dust from construction activities. The regulation requires implementation of fugitive dust control measures to reduce emissions from earthmoving, unpaved roads, handling of bulk materials, and control of track-out/carry-out dust from ~~active~~ any construction site~~s~~ and other earthmoving activities. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:

- Phasing of work in order to minimize disturbed surface area
- Application of water or chemical stabilizers to disturbed soils
- Construction and maintenance of wind barriers
- Use of a track-out control device or wash down system at access points to paved roads.

Compliance with Regulation VIII is mandatory for all construction sites, regardless of size; however, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the Air District is required

[1] The Ringelmann scale is a scale for measuring the apparent density or opacity of smoke.

PC ORIGINAL PKG

10 days prior to the commencement of any construction activity. Furthermore, any use of engine(s) and/or generator(s) of 50 horsepower or greater may require a permit through ICAPCD.

Southern California Association of Governments – ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~

Imperial County General Plan

The Imperial County General Plan serves as the overall guiding policy for the County. The Conservation and Open Space Element includes objectives for helping the County achieve the goal of improving and maintaining the quality of air in the region. Table 3.4-5 summarizes the project's consistency with the applicable air quality goal and objectives from the Conservation and Open Space

Element. While this EIR analyzes the project's consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.4-5. Project Consistency with Applicable Plan Policies

Applicable Policies	Consistency Determination	Analysis
Conservation and Open Space Element		
Protection of Air Quality and Addressing Climate Change Goal 7: The County shall actively seek to improve the quality of air in the region.	Consistent	The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities. Therefore, the proposed project is consistent with this goal.
Objective 7.1: Ensure that all project and facilities comply with current Federal, State and local requirements for attainment of air quality objectives.	Consistent	The proposed project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Further, the project would comply with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Measures. Therefore, the proposed project is consistent with this objective.
Objective 7.2: Develop management strategies to mitigate fugitive dust. Cooperate with all federal and state agencies in the effort to attain air quality objectives.	Consistent	The Applicant would cooperate with all federal and State agencies in the effort to attain air quality objectives through compliance with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Measures. Therefore, the proposed project is consistent with this objective.

Source: County of Imperial 2016

3.4.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to air quality, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to air quality are considered significant if any of the following occur:

- Conflict with or obstruct implementation of the applicable air quality plan
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)
- Expose sensitive receptors to substantial pollutant concentrations

PC ORIGINAL PKG

- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

Imperial County Air Pollution Control District

ICAPCD amended the *Air Quality Handbook: Guidelines for the Implementation of CEQA* on December 12, 2017 (ICAPCD 2017b). ICAPCD established significance thresholds based on the state CEQA thresholds. The handbook was used to determine the proper level of analysis for the project.

CONSTRUCTION

For construction projects, the *Air Quality Handbook* indicates that the significance threshold for NO_x is 100 pounds per day, 75 pounds per day for ROG, and 150 pounds per day for PM_{10}. As discussed in the ICAPCD's *Air Quality Handbook*, the approach to evaluating construction emissions should be qualitative rather than quantitative. In any case, regardless of the size of the project, the standard mitigation measures for construction equipment and fugitive PM_{10} must be implemented at all construction sites. The implementation of discretionary mitigation measures, as listed in Section 7.1 of the ICAPCD's *Air Quality Handbook*, apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. The mitigation measures found in Section 7.1 of the ICAPCD's handbook are intended as a guide of feasible mitigation measures and are not intended to be an all-inclusive comprehensive list of all mitigation measures. Table 3.4-6 presents the construction emission thresholds that are identified by ICAPCD.

Table 3.4-6. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities

Pollutant	Thresholds
PM_{10}	150 pounds per day
ROG	75 pounds per day
NO_X	100 pounds per day
CO	550 pounds per day

Source: ICAPCD 2017b

CO – carbon monoxide; NO_x – nitrogen oxide; PM_{10} - particulate matter less than 10 microns in diameter; ROG - reactive organic gas

OPERATIONS

Air quality analyses should compare all operational emissions of a project, including motor vehicle, area source, and stationary or point sources to the thresholds in Table 3.4-7. Projects can be classified as either Tier 1 or Tier 2 projects, depending on the project's operational emissions. As shown in Table 3.4-7, Tier 1 projects are projects that emit less than 137 pounds per day of nitrogen oxide (NOx) or reactive organic gases (ROGs); less than 150 pounds per day of PM_{10} or SOx; or less than 550 pounds per day of CO or $PM_{2.5}$.

Tier 1 projects are not required to develop a Comprehensive Air Quality Analysis Report or an EIR and require the implementation of all feasible mitigation measures listed in Section 7.2 of the ICAPCD's Air Quality Handbook (ICAPCD 2017b). Alternatively, Tier 2 projects are projects that emit

PC ORIGINAL PKG

137 pounds per day of NOx or ROG or greater; 150 pounds per day of PM_{10} or SOx or greater; or 550 pounds per day of CO or $PM_{2.5}$ or greater. Tier 2 projects are required to develop a Comprehensive Air Quality Analysis Report at a minimum, and are required to implement all standard mitigation measures as well as all feasible discretionary mitigation measures listed in Sections 7.2 and 7.3 of the ICAPCD's Air Quality Handbook (ICAPCD 2017b).

Table 3.4-7. Imperial County Air Pollution Control District Significance Thresholds for Operation

Criteria Pollutant	Tier 1 Thresholds	Tier 2 Thresholds
NO_x and ROG	Less than 137 pounds per day	137 pounds per day and greater
PM_{10} and SO_2	Less than 150 pounds per day	150 pounds per day and greater
CO and $PM_{2.5}$	Less than 550 pounds per day	550 pounds per day and greater
Level of Significance	Less than Significant	Significant Impact

Source: ICAPCD 2017b
CO – carbon monoxide; NO_x – nitrogen oxide; O_3 – ozone; Pb – lead; $PM_{2.5}$ – particulate matter less than 2.5 microns in diameter; PM_{10} - particulate matter less than 10 microns in diameter; ROG - reactive organic gas; S0x – sulfur oxide

Diesel Toxic Risk Thresholds

There are inherent uncertainties in risk assessment with regard to the identification of compounds as causing cancer or other health effects in humans, the cancer potencies and reference exposure levels of compounds, and the exposure that individuals receive. It is common practice to use conservative (health protective) assumptions with respect to uncertain parameters. The uncertainties and conservative assumptions must be considered when evaluating the results of risk assessments.

There is debate as to the appropriate levels of risk assigned to diesel particulates. The U.S. EPA has not yet declared diesel particulates as a toxic air contaminant. Using the CARB threshold, a risk concentration of one in one million (1:1,000,000) per micrograms per cubic meter ($\mu g/m^3$) of continuous 70-year exposure is considered less than significant.

Methodology

The analysis criteria for air quality impacts are based on the approach and methods discussed in the ICAPCD's *Air Quality Handbook* (ICAPCD 2017b). The ICAPCD's *Air Quality Handbook* establishes aggregate emission calculations for determining the potential significance of a project. In the event that the emissions exceed the established thresholds (Table 3.4-6 and Table 3.4-7), air dispersion modeling may be conducted to assess whether the project results in an exceedance of an air quality standard.

An air quality technical report was prepared by HDR Engineering, Inc. (Appendix D of this EIR). The emissions of criteria air pollutants were estimated using methodologies recommended by the ICAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Imperial County as well as timing and equipment identified by the project proponent. Associated emissions calculations and assumptions are included in Appendix D of this EIR.

PC ORIGINAL PKG

The air quality impacts are mainly attributable to construction phases of the project, including site preparation, facility installation, and gen-tie and site restoration. Operational impacts include inspection and maintenance operations, which includes washing of the solar panels.

Construction

For purposes of estimating project emissions, and based on information provided by the applicant, it is assumed that construction of the project would commence in April 2026 and is anticipated ending in October 2027. The project is assumed to have a 30-year lifespan and at the end of operation will be decommissioned. However, the EMFAC and OFFROAD models in CalEEMod only have emission factors through 2050. As such, the year 2050 was assumed for estimating emissions from the decommissioning phase.

Earthmoving activities are expected to include the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The project is not anticipated to require paving, removal, or significant alteration of existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface. However, the analysis conservatively assumes all 1,849 acres will be graded.

Regional emissions during construction have been estimated by assuming a conservative estimate of construction activities (i.e. assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. Assuming an early date for construction activities is conservative because emission factors decrease in future years due to improvements in engine technology and the retirement of older, dirtier equipment and vehicles from the fleet. This is pursuant to state regulations that require vehicle fleet operators to phase-in less-polluting trucks.

All worker, vendor, and hauling trips would occur on public roadways (i.e., not within the project construction boundary). However, some driving on unpaved roads could occur to unload materials and installation of PV arrays. Therefore, an input value of 85% paved roads is utilized in the emissions model to account for some unpaved road usage. Vehicle speed would also be restricted to 15 miles per hour on both paved and unpaved roads.

Construction emissions were estimated using CalEEMod, version 2022, which incorporates CARB's EMFAC2021 model. For the purposes of the air quality analysis, it has been assumed that the contractor would implement dust control measures during construction pursuant to ICAPCD Regulation VIII. The applicant provided the number of construction workers and vendor trips as well as the trip lengths.

Operations

Once constructed, periodic maintenance of the PV solar and BESS facility would generally be limited to cleaning PV panels, monitoring, and site security. Since the project would share O&M, substation, and/or transmission facilities with other nearby PV solar and BESS projects, it is assumed the project would share personnel, thereby reducing the project's on-site staff to below the anticipated 4 to 10 full-time employees.

There are no expected sources of stationary emission sources (i.e. emergency generators). During operation of the proposed project, minimal amounts of emissions could be generated from

PC ORIGINAL PKG

maintenance operations, including routine cleaning and from periodic visits from service vehicles. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and emissions will be analyzed qualitatively.

Impact Analysis

Impact 3.4-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

The air quality attainment plan (AQAP) for the SSAB, through the implementation of the AQMP (previously AQAP) and SIP for PM_{10}, sets forth a comprehensive program that will lead the SSAB into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections, meeting the land use designation set forth in the local General Plan, and comparing assumed emissions in the AQMP to proposed emissions.

The project must demonstrate compliance with all ICAPCD applicable rules and regulations, as well as local land use plans and population projections. As the project does not contain a residential component, the project would not result in an increase in the regional population. While the project would contribute to energy supply, which is one factor of population growth, the proposed project is a solar energy and BESS project and would not significantly increase employment or growth within the region. Moreover, development of the proposed project would increase the amount of renewable energy and help California meet its RPS.

As shown in Table 3.4-5, the project is consistent with the applicable air quality goal and objectives from the Conservation and Open Space Element of the Imperial County General Plan. The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities.

Furthermore, the thresholds of significance adopted by the air district (ICAPCD), determine compliance with the goals of the attainment plans in the region. As such, emissions below the ICAPCD regional mass daily emissions thresholds presented in Table 3.4-6 and Table 3.4-7 Table 3.4-6 would not conflict with or obstruct implementation of the applicable air quality plans.

As shown in Table 3.4-2, the project region is classified as nonattainment for federal O_3 and $PM_{2.5}$ standards. The region's SIP is made up of the following ICAPCD plans; 2009 Imperial County Plan for PM_{10}, 2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area, 2017 Imperial County Plan for 2008 8-hour Ozone Standard, 2018 Imperial County Plan for PM_{10}, and 2018 Imperial County Plan for $PM_{2.5}$. Construction of the project would generate emissions of VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ that could result in short-term impacts on ambient air quality in the study area. Sources of construction emissions include heavy-duty construction equipment (such as graders, trenchers, and loaders), worker, vendor, and haul truck vehicle emissions, and fugitive dust from material movement. As shown in Table 3.4-8under Impact 3.4-2, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1

through AQ-5 would minimize construction emissions. As shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

It is assumed the project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects. The facility would operate 24/7 with potentially 4 to 10 full-time employees at any given time. During long-term operations of the project, minimal amounts of criteria air pollutants would be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. However, these events are expected to be occasional and result in minimal emissions. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes.

Additionally, the project does not include residential or commercial development. The project would have 4 to 10 full-time employees but would not induce unplanned population or employment growth. Therefore, the project would not conflict with or obstruct the implementation of the applicable air quality plan.

As described above, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections and comparing assumed emissions in the AQMP to proposed emissions. Because the proposed project complies with local land use plans and population projections and would not exceed ICAPCD's regional mass daily emissions thresholds during construction and operation with mitigation, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This is considered a less than significant impact.

Mitigation Measure(s)

No mitigation measures are required. With implementation of mitigation measures required under Impact 3.4-2, the construction and operation of the project would not exceed ICAPCD's regional mass daily emissions thresholds.

Impact 3.4-2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)?

Construction. Construction-related activities are temporary, short-term sources of emissions. Two basic sources of short-term emissions will be generated through project construction: operation of heavy-duty equipment (i.e., excavators, loaders, haul trucks) and the creation of fugitive dust during clearing and grading. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Construction emissions vary from day-to-day depending on the number of workers, number, and types of active heavy-duty vehicles and equipment, level of activity, the prevailing meteorological conditions, and the length over which these activities occur.

The proposed project is anticipated to take approximately 18 to 24 months from the commencement of the construction process to complete. Construction activities would primarily involve site preparation and grading of the project site to establish access roads and pads for electrical equipment, trenching

for underground electrical collection lines, and the installation of solar equipment/battery units and security fencing.

As shown in Table 3.4-2, the project region is classified as nonattainment for federal O_3 and $PM_{2.5}$ standards. The ICAPCD's application of thresholds of significance for criteria air pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As shown in Table 3.4-8, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would reduce construction emissions.

As previously discussed above, the proposed project is not anticipated to significantly alter existing soils. Rather solar panels, which would occupy approximately 61 percent of the project site, would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. All 1,849 acres were assumed to be graded with 15 percent of roads unpaved. Due to this conservative assumption, the ICAPCD threshold for PM_{10} would be exceeded. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. The proposed project must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Therefore, implementation of the Regulation VIII fugitive dust control measures (Mitigation Measure AQ-1) is required for the project.

Mitigation Measure AQ-2 would require all off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, meet, at a minimum, the Tier 4 Final California Emission Standards for Off-Road Compression-Ignition Engines as specified in C.C.R., Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NOx and particulate matter emissions that are equivalent to Tier 4 engine. Implementation of Mitigation Measure AQ-2 would be implemented to reduce PM_{10} emissions, but as shown in Table 3.4-9, would also have the co-benefit of reducing NOx emissions during construction. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NOx analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds.

Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

Table 3.4-8. Unmitigated Daily Construction Maximum Criteria Air Pollutant Emissions

Construction Phase	Pounds/Day (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	5.6	36.8	59.6	0.1	71.5	9.0
Phase 2: Civil Improvements – Grading/Roads/Earthwork (2026)	7.3	47.9	71.5	0.1	80.9	10.3
Phase 3: PV Panel & BESS Construction (2026)	11.4	51.6	160.2	0.1	79.3	10.8
Phase 3: PV Panel & BESS Construction (2027)	9.3	50.0	114.2	0.1	79.1	10.7
Phase 4: Testing & Commissioning (2027)	0.4	1.9	5.7	0.0	67.1	6.9
Phase 5: Decommissioning (2050)	3.5	18.8	57.2	0.1	78.1	9.7
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	12.9	84.7	131.1	0.2	152.4	19.3
Maximum	**12.9**	**84.7**	**160.2**	**0.2**	**152.4**	**19.3**
ICAPCD Thresholds	*75*	*100*	*550*	*N/A*	*150*	*N/A*
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**Yes**	**N/A**

Source: Appendix D of this EIR

Notes:

CO = carbon monoxide, NO_X = oxides of nitrogen, PM_{10} = coarse particulate matter, $PM_{2.5}$ = fine particulate matter, SO_X = oxides of sulfur, VOC = volatile organic compounds, ICAPCD = Imperial County Air Pollution Control District; N/A = Not applicable

PC ORIGINAL PKG

Table 3.4-9. Mitigated Daily Construction Maximum Criteria Air Pollutant Emissions

Construction Phase	Pounds/Day (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	1.9	7.8	74.3	0.1	69.1	7.4
Phase 2: Civil Improvements – Grading/Roads/Earthwork (2026)	3.7	18.8	89.1	0.1	78.7	8.8
Phase 3: PV Panel & BESS Construction (2026)	8.5	24.9	166.1	0.1	77.7	9.8
Phase 3: PV Panel & BESS Construction (2027)	6.5	25.0	119.9	0.1	77.6	9.8
Phase 4: Testing & Commissioning (2027)	0.4	1.8	5.6	0.0	66.2	6.8
Phase 5: Decommissioning (2050)	2.7	13.7	63.9	0.1	77.4	9.6
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	5.7	26.7	163.4	0.2	147.8	16.2
Maximum	**8.5**	**26.7**	**166.1**	**0.2**	**147.8**	**16.2**
ICAPCD Thresholds	*75*	*100*	*550*	*N/A*	*150*	*N/A*
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**N/A**

Source: Appendix D of this EIR

Notes:

CO = carbon monoxide, NO_X = oxides of nitrogen, PM_{10} = coarse particulate matter, $PM_{2.5}$ = fine particulate matter, SO_X = oxides of sulfur, VOC = volatile organic compounds, ICAPCD = Imperial County Air Pollution Control District; N/A = Not applicable

NOTE: An increase in carbon monoxide emissions as compared to the unmitigated emissions depicted in Table 3.4-8 is attributable to water application/water truck use.

Operations. As previously discussed, it is assumed the project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects or with any future nearby proposed renewable energy projects. During long-term operations of the project, minimal amounts of criteria air pollutants would be generated from periodic vehicle trips for maintenance, inspections, and routine cleaning. However, these events are expected to be occasional and result in minimal emissions. Operational emissions are not anticipated to exceed ICAPCD's significance thresholds. Although no significant air quality impact would occur during operation, the project applicant is required to submit a Dust Suppression Management Plan for both construction and operation in order to reduce fugitive dust emissions. Implementation of Mitigation Measures AQ-3 and AQ-4 would ensure that a Dust Suppression Management Plan is implemented, thereby ensuring that this potential impact would remain less than significant. In addition, implementation of Mitigation Measure AQ-5 would limit the

speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less and Mitigation Measure AQ-6 would ensure an Operational Dust Control Plan is implemented. Therefore, operational impacts would be less than significant.

Mitigation Measure(s)

AQ-1 **Fugitive Dust Control.** Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process.

ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control

- All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover.
- All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.
- The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering.

ICAPCD “Discretionary” Measures for Fugitive Dust (PM_{10}) Control

- Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust.
- Replace ground cover in disturbed areas as quickly as possible.
- Automatic sprinkler system installed on all soil piles.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.
- Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.
- Implement a shuttle service to and from retail services and food establishments during lunch hours.

Standard Mitigation Measures for Construction Combustion Equipment

- Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Enhanced Mitigation Measures for Construction Equipment

To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures:

- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

AQ-2 **Construction Equipment.** ~~All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig engines shall meet a minimum of Tier 4 Interim California Emission Standards.~~ A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and ~~expected/~~actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted ~~periodically~~ annually to ICAPCD to

perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. If the NOx analysis is found to exceed the threshold of significance for construction activities, per page 20 of the District's CEQA Handbook the project will be subject to Policy 5. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The Applicant shall submit a construction schedule at the time of application of a grading or building permit (whichever comes first) to ICPDS. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of ~~all~~ construction ~~phases~~. ~~This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant.~~ During the operational life of the project, ~~T~~the project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-4 **Dust Suppression Management Plan.** Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.

AQ-5 **Speed Limit.** During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.

AQ-6 **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule ~~301~~ 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Significance After Mitigation

As discussed above, the proposed project would exceed the ICAPCD's threshold for PM_{10}. To mitigate the potential impacts associated with construction-generated emissions with regard to PM_{10}, the project would adhere to the requirements of ICAPCD Regulation VIII for the control of fugitive dust (Mitigation Measure AQ-1). Furthermore, implementation of Mitigation Measure AQ-2 would ensure construction equipment will be equipped with an engine designation of EPA Tier 4 engine. ICAPCD will utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds. Operation of the project, subject to the approval of CUPs, would be consistent with applicable federal, state, regional, and local plans and policies. Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on

dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

Impact 3.4-3 Would the project expose sensitive receptors to substantial pollutant concentrations?

The nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby sensitive receptors include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

Construction. The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project.

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to OEHHA, health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 24 months), the proposed project and project-related offsite improvements would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities. The project would be consistent with the applicable ICAPCD rules and regulations intended to reduce emissions from construction equipment and activities. The project would comply with regulatory control measures including the CARB Air Toxics Control Measure (ATCM) that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that requires fleets to retire, replace, or repower of older, dirtier engines with newer emission-controlled models; compliance with these would minimize emissions of TACs during construction. Although sensitive receptors, residential uses, are located onsite and in the project vicinity, construction is relatively short-term, anticipated at 24 months and would result in an overall low level of DPM concentrations at the project site. Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions in the project site and project-related offsite improvements.

The project would also comply with best practices to limit exposure to Valley Fever. During excavation, grading, and other earth-moving activities, construction workers and nearby sensitive receptors have the potential to be exposed to Valley Fever. As this risk cannot be eliminated entirely, Valley Fever risk from construction-related dust from the project will be partially mitigated by implementation of fugitive dust control measures within ICAPCD Regulation VIII (Mitigation Measure AQ-2).

Additionally, traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO “hotspots.” CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels affecting sensitive receptors. Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis

of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

Title 40 of the Code of Federal Regulations, Section 93.123(c)(5), Procedures for Determining Localized CO, PM_{10}, and $PM_{2.5}$ Concentrations (Hot-Spot Analysis), states that "CO, PM_{10}, and $PM_{2.}$ hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site." Project construction would involve on-road vehicle trips from trucks and workers during construction. Construction activities would last approximately 24 months and would not require a project-level construction hotspot analysis.

Operations. CARB recommends that health risk assessments be conducted for substantial sources of operational DPM emissions (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions. The Project would not include any truck stop or warehouse distribution uses, and, as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Project operations would not be considered a substantial source of diesel particulates. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes, which the project is not.

With respect to the use of consumer products and architectural coatings, the project's land uses would not include installation of industrial-sized paint booths, emergency generators, or require extensive use of commercial or household cleaning products. Therefore, impacts operational impacts from TACs would be less than significant.

As previously mentioned, minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, since only limited vehicle trips are anticipated. The proposed project would not result in the creation of a CO hotspot and would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hotspot.

In summary, construction and operation of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.4-4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

An odor impact depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies.

Among possible physical harms is inhalation of VOCs that cause smell sensations in humans. These odors can affect human health in four primary ways:

- The VOCs can produce toxicological effects

PC ORIGINAL PKG

- The odorant compounds can cause irritations in the eye, nose, and throat
- The VOCs can stimulate sensory nerves that can cause potentially harmful health effects
- The exposure to perceived unpleasant odors can stimulate negative cognitive and emotional responses based on previous experiences with such odors

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project would not include any of these land uses. Therefore, impacts associated with odors during operations would be less than significant.

During construction, odors would come predominantly from construction equipment, which would cease immediately after construction is complete. Furthermore, the project would be required to comply with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. As discussed, construction-related odors would be short-term and cease upon project completion. Therefore, impacts associated odors during construction would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.4.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Similar to construction activities, decommissioning and restoration of the project site would generate air emissions. A summary of the daily unmitigated construction emissions for the project is provided in Table 3.4-8. Solar equipment has a lifespan of approximately 20 to 25 years. The emissions from on- and off-road equipment during decommissioning are expected to be significantly lower than project construction emissions, as the overall activity would be anticipated to be lower than project construction activity. No significant air quality impacts are anticipated during decommissioning and restoration of the project site. However, all construction projects within Imperial County must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. In addition, the ICAPCD's Air Quality Handbook lists additional feasible mitigation measures that may be warranted to control emissions of fugitive dust and combustion exhaust. Mitigation Measures AQ-1 through AQ-5 would provide additional reduction strategies to further improve air quality. Therefore, a less than significant impact is identified during decommissioning and site restoration of the project site.

Residual

As discussed above, the proposed project would exceed the ICAPCD's threshold for PM_{10}. To mitigate the potential impacts associated with construction-generated emissions with regard to PM_{10}, the project would adhere to the requirements of ICAPCD Regulation VIII for the control of fugitive dust (Mitigation Measure AQ-1). Furthermore, implementation of Mitigation Measure AQ-2 would ensure

construction equipment will be equipped with an engine designation of EPA Tier 4 engine. ICAPCD will utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds. Operation of the project, subject to the approval of CUPs, would be consistent with applicable federal, state, regional, and local plans and policies. Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant. The project would not result in any residual operational significant and unavoidable impacts with regards to air quality.

PC ORIGINAL PKG

3.5 Biological Resources

This section identifies the biological and aquatic jurisdictional resources that may be impacted by the proposed project. The following identifies the existing biological and jurisdictional resources in the project area, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project. The information for this section is summarized from the *Biological Resources Technical Report* prepared by Dudek. This report is included in Appendix E of this EIR.

As part of the *Biological Resources Technical Report*, Dudek conducted a literature review, desktop survey, and biological reconnaissance survey of the project site to document the existing biological resources, to assess the habitat for its potential to support sensitive plant and wildlife species, and to determine the potential impacts of the project on biological resources.

3.5.1 Existing Conditions

Vegetation Communities and Land Cover Types

Five vegetation communities/land cover types were observed within the project site during the biological reconnaissance survey: general agriculture, stream channel, creosote bush scrub and allscale scrub shrubland, urban/developed, and disturbed habitat. The acreage of each vegetation community/land cover type within the project site is summarized in Table 3.5-1 and shown in Figure 3.5-1 and Figure 3.5-2. The majority of vegetation communities and land cover types mapped within the project site consisted of general agriculture and disturbed habitat.

Table 3.5-1. Vegetation Communities or Land Cover Types within the Project Site

Vegetation Community or Land Cover Type	Acres within Project Site[a]
General Agriculture	1,590.38
Stream Channel	5.80
Creosote Bush Scrub and Allscale Scrub Shrubland	80.97
Urban/Developed	5.81
Disturbed Habitat	165.86
Project Site Total	**1,848.82**

Source: Appendix E of this EIR

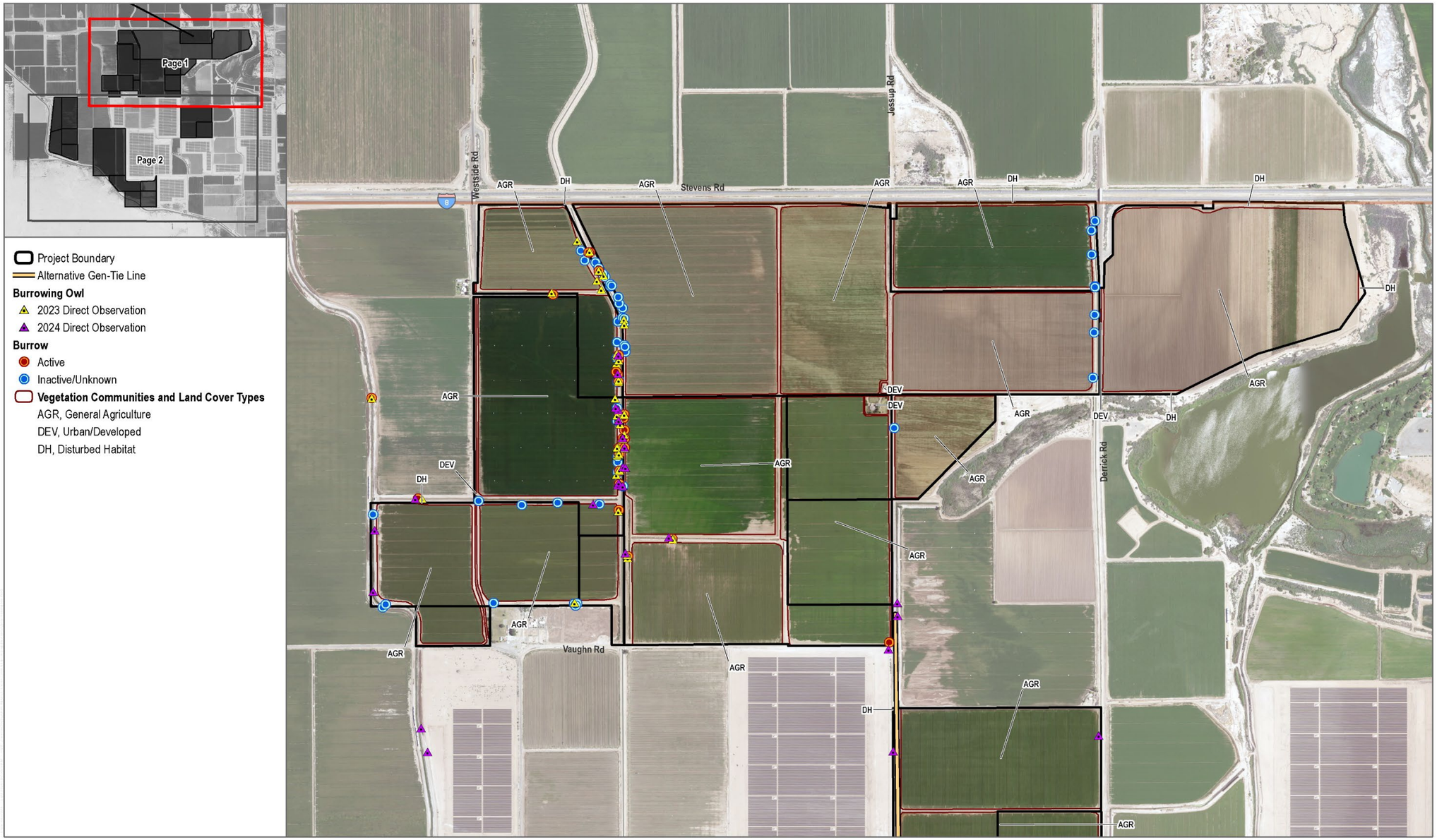
[a] *Vegetation and land cover type acreages are rounded to the nearest hundredth acre.*

PC ORIGINAL PKG

This page is intentionally blank.

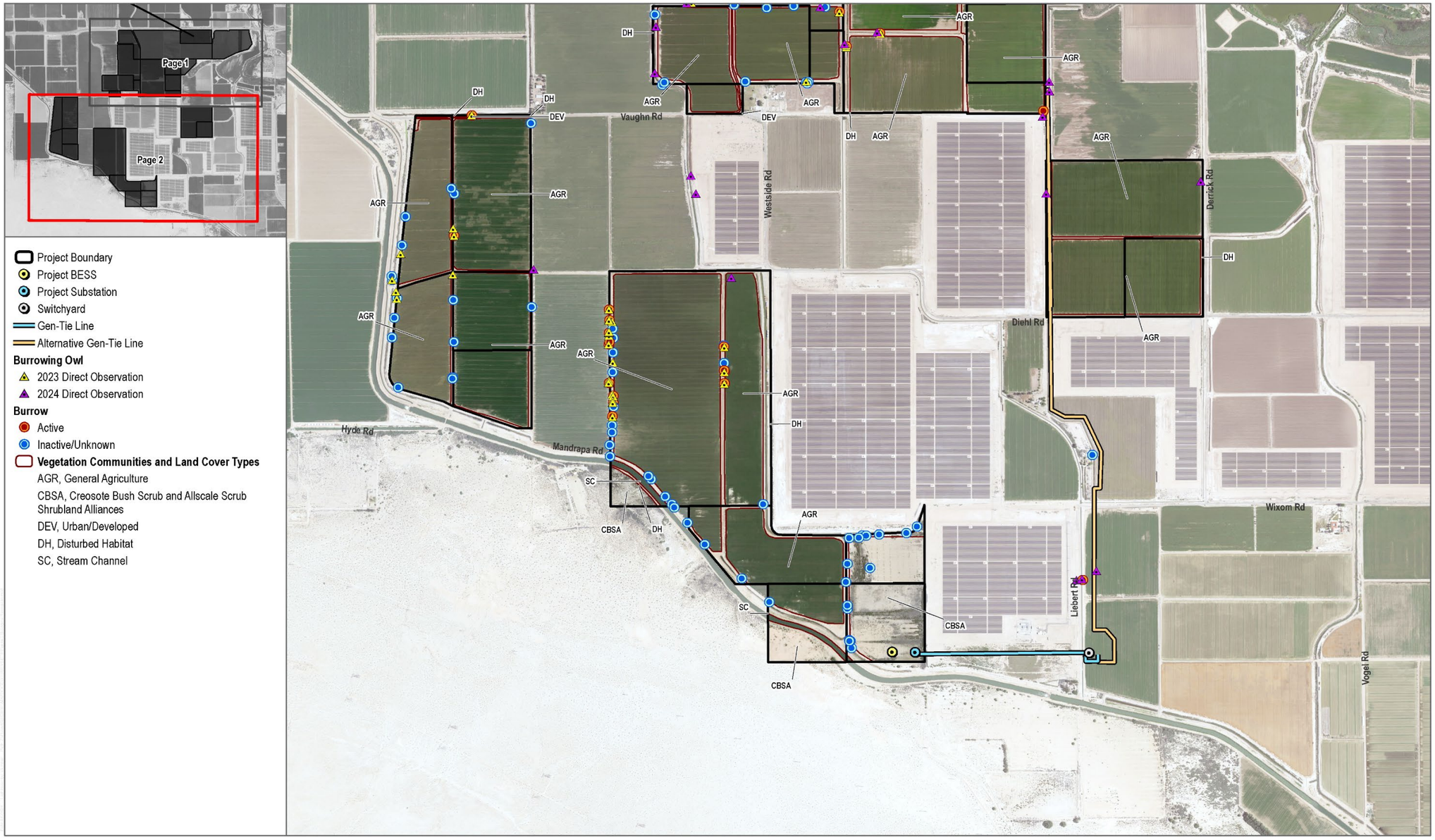
PC ORIGINAL PKG

Figure 3.5-1. Vegetation Communities and Land Cover Types within the Project Site (Map 1 of 2)



Source: Appendix E of this EIR

Figure 3.5-2. Vegetation Communities and Land Cover Types within the Project Site (Map 2 of 2)



Source: Appendix E of this EIR

PC ORIGINAL PKG

Detailed descriptions of the applicable vegetation communities and land cover types occurring within the project site are described below.

General Agriculture

Agricultural lands are an anthropogenic habitat and are not described by the California Department of Fish and Wildlife (CDFW) or by the California Native Plant Society (CNPS). Within the project site, agricultural lands consist of alfalfa (*Medicago sativa*), date palms (*Phoenix dactylifera*), Bermudagrass (*Cynodon dactylon*), and herbaceous vegetables, as well as several fallow fields. On-site farming practices include soil disking, plowing, herbicide application, and regular anthropogenic maintenance and disturbance associated with ongoing management actions. Compacted dirt roads and brow ditches are included within this land cover type (Appendix E of this EIR).

Stream Channel

Although not recognized by the Manual of California Vegetation, Online Edition, or the Natural Community List, stream channel is described by Oberbauer et al. (2008) as areas that exhibit ephemeral or intermittent flow and are barren or sparsely vegetated as a result of the scouring effects of floods or other anthropogenic causes. Within the project site, stream channel is characterized by irrigation ditches that convey flows throughout active agricultural lands. These areas include irrigation ditches that are unvegetated or vegetated with ruderal species such as giant reed (*Arundo donax*), nettleleaf goosefoot (*Chenopodium murale*), and asthmaweed (*Erigeron bonariensis*) (Appendix E of this EIR).

Creosote Bush Scrub and Allscale Scrub Shrubland Alliances

Desert scrub habitats generally consist of open areas with vegetative cover less than or equal to 50 percent populated with scattered shrubs and evergreen or deciduous species. Within the project site, creosote bush scrub and allscale scrub shrubland alliances are present in undeveloped areas that are absent of agricultural crops. These areas are primarily found around the southern project boundaries.

Creosote bush scrub shrubland alliance is dominated by creosote (*Larrea tridentata*), which serves as a canopy in most settings. Interspaces typically include saltbush (*Atriplex* spp.), goldenheads (*Acamptopappus* spp.), ragweed (*Ambrosia* spp.), woolly brickellbush (*Brickellia incana*), brittlebush (*Encelia farinose*), California jointfir (*Ephedra californica*), Nevada jointfir (*Ephedra nevadensis*), and Anderson wolfberry (*Lycium andersonii*). Emergent trees may be present at low cover, including honey mesquite (*Prosopis glandulosa*) or Joshua tree (*Yucca brevifolia*).

Allscale scrub shrubland alliance is dominated by allscale (*Atriplex polycarpa*). Interspaces typically include white bursage (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), four-winged saltbush (*Atriplex canescens*), red brome (*Bromus rubens*), smallseed sandmat (*Chamaesyce polycarpa*), bladderpod (*Cleome isomeris*), alkali goldenbush (*Isocoma acradenia*), and creosote. Emergent trees may be present at low cover, including honey mesquite (Appendix E of this EIR).

Urban/Developed

Urban/developed areas contain a mixture of constructed materials and vegetation. Within the project site, urban/developed land takes the form of maintained roads for access to crops and irrigation canals, and residences.

PC ORIGINAL PKG

Disturbed Habitat

Disturbed habitat are areas that have physical anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized vegetation association. The existing vegetation is typically composed of non-native ornamental or exotic species. There can also be impacts from animal uses, grading, or repeated clearing for fuel management that leave the land incapable of providing a suitable or sustainable habitat for native species to persist (Appendix E of this EIR).

Sensitive Vegetation Communities

No vegetation communities considered sensitive by CDFW (Rank S1, S2, or S3) were mapped within the project site during the biological survey.

Special-Status Species

Literature Review

Prior to conducting field surveys, a literature search was conducted to identify special-status plant and animal species with potential to occur within the project site. Special-status plants and animal species were evaluated for their potential to occur within the project site where impacts could potentially occur.

Using information from the literature review and observations in the field, a list of special-status plant and animal species that have potential to occur within the project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal or California Endangered Species Acts (ESA);
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code Sections 3511, 4700, 5050, or 5515; and
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Plant Species

Based on the results of the literature review and database searches, 19 special-status plant species were identified as occurring within the region. Due to the current conditions present on site, including the vegetation communities; soils; elevation ranges; previous known locations documented in the CNDDB, by CNPS, and/or by USFWS; and current disturbance levels, none have moderate or high potential to occur. Four of these species have a low potential to occur on the project site, which is generally not suitable due to the predominantly agricultural landscape. These four species are Abrams' spurge (*Euphorbia abramsiana*), Baja California ipomopsis (*Ipomopsis effusa*), brown turbans (*Malperia tenuis*), and hairy stickleaf (*Mentzelia hirsutissima*). The complete results of this potential to occur evaluation for special-status plants are included within Appendix E of this EIR. No special-status plant species were recorded within the project site. No USFWS designated critical habitat for a federally listed plant species occurs within 1 mile of the project site (Appendix E of this EIR).

PC ORIGINAL PKG

Wildlife Species

Based on the results of the literature review and database searches, ~~23~~ 25 special-status wildlife species were identified as occurring within the region. The western burrowing owl was recently named by the CDFW as a candidate for potential listing as a protected species under the California Endangered Species Act (CESA) and is present within the project site. Additionally, based on results of the literature review, database searches, and site conditions, one additional state-listed special-status species, California black rail (*Laterallus jamaicensis coturniculus*), was determined to have a low potential to occur within the irrigation ditches on the project site. All other listed species are not expected to occur.

One non-listed special-status species, northern harrier, was observed within the project site. One additional candidate for listing under the CESA, Crotch's bumble bee (*Bombus crotchii*), has a low potential to occur on the project site as a transient during foraging, but is not expected to nest.

The following ~~eight~~ nine non-listed special-status species were determined to have a low potential to occur, nest, or roost within the project site: Colorado Desert fringe-toed lizard (*Uma notata*), mountain plover (*Charadrius montanus*), California black rail, Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), LeConte's thrasher (*Toxostoma lecontei*), Colorado Valley woodrat (*Neotoma albigula venusta*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), ~~and~~ American badger (*Taxidea taxus*), and desert kit fox (*Vulpes macrotis arsipus*).

The following three non-listed special-status bat species were determined to have a low potential to forage on the project site, but no potential to roost on the project site: western yellow bat (*Dasypterus xanthinus*), western mastiff bat (*Eumops perotis californicus*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*).

Pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*) have yearlong ranges that encompass the project site.

The complete results of the potential-to-occur evaluation for special-status wildlife species are included as Appendix E of this EIR. No USFWS designated critical habitat for a federally listed wildlife species occurs within 1 mile of the project site (Appendix E of this EIR).

CALIFORNIA BLACK RAIL

California black rail is designated as state threatened and a fully protected species in California, and primarily occurs in California, Arizona, Baja California, and the Colorado River delta in Sonora. Suitable California black rail habitat generally includes salt marshes, freshwater marshes, and wet meadows. The species is typically identified in conjunction with common threesquare (*Schoenoplectus pungens*), arrowweed (*Pluchea sericea*), Fremont cottonwood (*Populus fremontii*), and seepwillow (*Baccharis salicifolia*). California black rails typically prey on small (less than 1 centimeter [0.39 inches]) invertebrates, chiefly insects, gleaned from marsh vegetation and mudflats; they also eat small seeds.

No California black rails were detected on the project site during the 2023 general biological survey. There are no CNDDB occurrences within the project site, and no focused surveys were performed. The closest records are from approximately 2.7 miles north of the project site in 2001. There is marginal suitable marsh habitat within some drainage canals that could potentially support foraging; however, the species is not expected to breed due to the limited suitable habitat on the project site (Appendix E of this EIR).

BURROWING OWL

Burrowing owl is a California Species of Special Concern and Bird of Conservation Concern, and was recently named by the CDFW as a candidate for potential listing as a protected species under the CESA. This species inhabits much of California. Burrowing owls prefer open, dry, annual or perennial grasslands; deserts; and scrublands characterized by low-growing vegetation. They usually nest in old burrows of ground squirrels, badgers, or other small mammals, although they may dig their own burrows in soft soil. Within disturbed or developed areas, burrowing owls may also nest in burrow surrogates (e.g., rock cavities, pipes, culverts, debris piles). Prey consists mostly of insects, small mammals, reptiles, birds, and carrion.

During the four focused survey passes in 2023 and 2024, approximately 89 burrowing owls were detected on the project site (Figure 3.5-1 and Figure 3.5-2). Burrowing owls were observed at 40 burrows, and an additional 143 burrows were found to have suitable habitat for the species. Most detections were concentrated along roads within the northern and southern areas of the project site. Additionally, burrowing owls were observed during raptor surveys in April 2025. Due to the close proximity and high density of burrowing owls and repeated observations in several areas, it is likely that some of the same individuals were documented across several survey passes, and that the number of burrowing owls that reside on site may be fewer. Furthermore, due to the close proximity of many burrows, it is likely that there are several well-established burrow systems/complexes on site that the owls regularly use (Appendix E of this EIR).

NORTHERN HARRIER

Northern harrier is a California Species of Special Concern that inhabits much of California. Northern harriers use a wide variety of open habitats in California, including deserts, coastal sand dunes, pasturelands, croplands, dry plains, grasslands, estuaries, floodplains, and marshes. The species also forages over coastal sage scrub and other open scrub communities. Nesting areas are associated with marshes, pastures, grasslands, prairies, croplands, desert shrubsteppe, and riparian woodland. Undisturbed grasslands and wetlands that have dense vegetation have been documented to have higher nesting rates. Winter habitats similarly include a variety of open habitats dominated by herbaceous cover. Northern harrier populations are most concentrated in areas with low vegetation and occur from sea level to 3,048 meters above mean sea level.

During June 2023 burrowing owl surveys and April 2025 raptor surveys, one northern harrier was observed foraging in agricultural fields ~~at~~ on the project site. The project site contains potentially suitable nesting habitat within fallow agricultural fields where human-caused disturbance is infrequent (Appendix E of this EIR).

Nesting Birds

The vegetation communities and open landscape within the project site provide potentially suitable habitat for commonly occurring nesting birds, including Anna's hummingbird (*Calypte anna*), Gambel's quail (*Callipepla gambelii*), and Abert's towhee (*Melozone aberti*). Although no nests were identified during the site visit, suitable nesting habitat exists within the project site and surrounding areas. No active nests were identified during the April 2025 raptor and nesting bird survey.

Roosting Bats

A bat roost assessment and emergence surveys were conducted within the project site on May 19, 2025 to determine if suitable roosting habitat for bats exists on the project site.

The bat roost assessment determined that the project site is primarily comprised of active agriculture fields and provides little to no suitable roosting habitat for bats. The project site lacks manmade structures that may provide suitable roosting sites for species that are known to roost in crevices of buildings and structures including big free-tailed bat (*Nyctinomops macrotis*) and crevice-roosting bats like western mastiff bat that inhabit rocky canyons and cliff faces.

As such, the pocketed free-tailed bat has a low potential to forage within the project site, but is not expected to roost due to the lack of primary habitat present on the site. Finally, western yellow bat was determined to have a low potential to occur within the project site due to a small area of desert riparian located along the southern border of the project site. During the roost assessment of the site, partially skirted palm trees were observed within the southern portion of the project site, which may provide suitable roosting sites for western yellow bats. Therefore, the emergence surveys were conducted at two locations within the project site where partially skirted palm trees were observed. The emergence surveys were negative, as no bats were detected visually nor acoustically emerging from either of the survey locations. The locations of the emergence surveys and photos of the survey sites are included in Appendix E of this EIR.

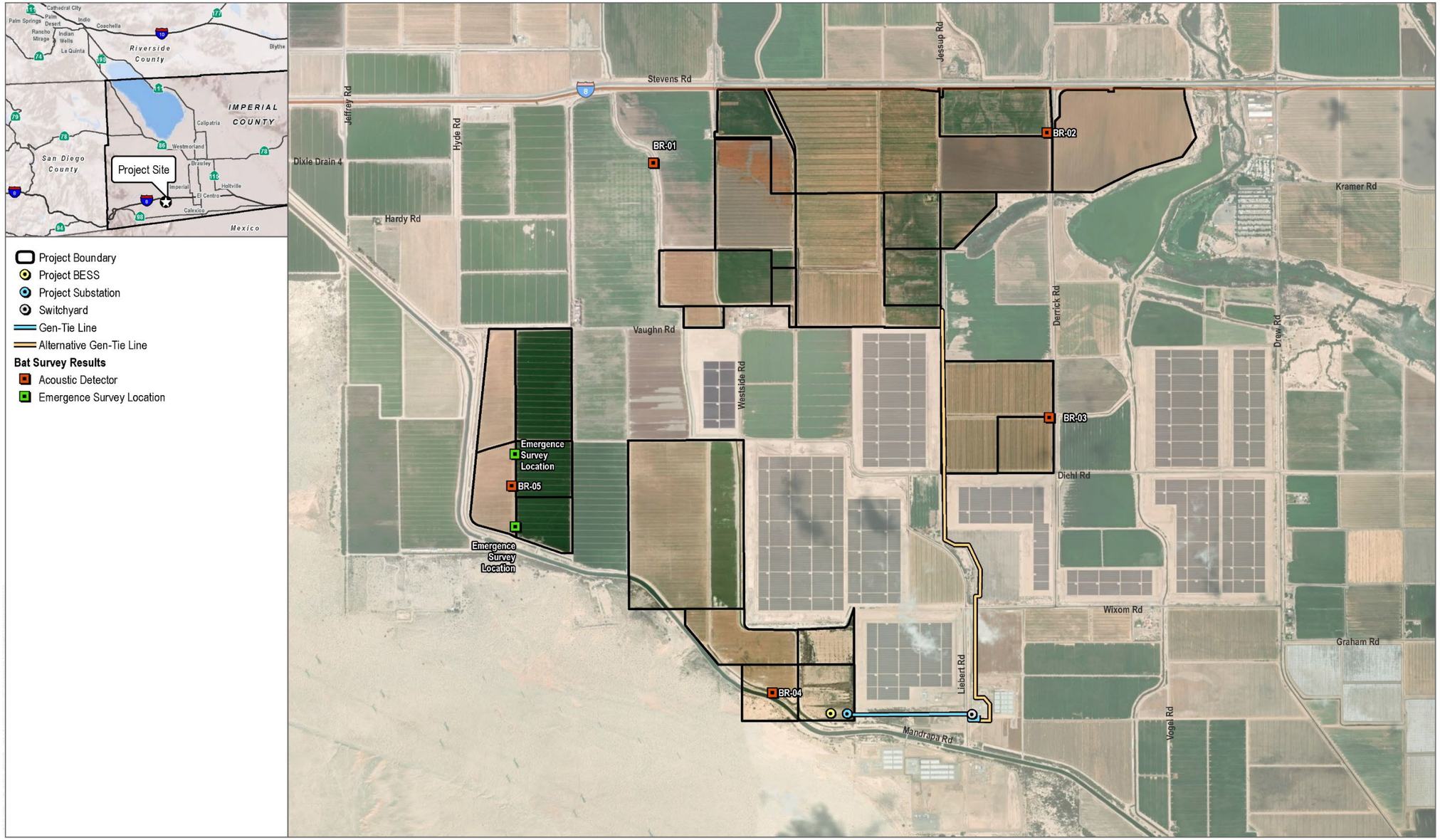
The echolocation data collected from the five detectors deployed along the boundaries of the project site determined that eight different bat species are present within the project site. None of the special-status bat species listed above were acoustically detected on the project site. However, as shown in Figure 3.5-3, one special-status species, pallid bat, was detected at two locations (BR-03 and BR-05) in limited numbers (less than 10 recordings).

After three nights of passive acoustic detection, the survey resulted in a total of 834 bat passes attributed to eight different bat species that are all common species except for pallid bat, which despite its SSC listing status is relatively common in desert environments. Canyon bat (*Parastrellus hesperus*) was the most abundant species detected on site which is a very common species, as well as Mexican free-tailed bat (*Tadarida brasiliensis*), which is the most common bat species in the western United States. The remaining bat species detected were in relatively low numbers (i.e. less than 50 passes), indicating only a few individuals of each species are actively foraging within the project site. The total number of bat passes recorded indicates bats are likely foraging throughout the project site but are not roosting on site, as active roosts can record several thousands of bat passes per night for a single species. The acoustic survey data corresponds to the roost assessment and emergence survey results of negative active roosts on site.

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.5-3. Bat Survey Results



SOURCE: Maxar 2023; Imperial County 2023; USDA SSURGO 2023; Avantus 2023

Source: Appendix E of this EIR

This page is intentionally blank.

PC ORIGINAL PKG

Critical Habitat

There is no USFWS designated critical habitat for federally listed wildlife species within 5 miles of the project site (Appendix E of this EIR).

Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal.

On a regional level, the Imperial Valley is an important component of the Pacific Flyway, which is a major north/south passage for migratory birds. The Salton Sea is known to serve as a stopover for birds migrating along this flyway, with as many as 400 different bird species having been recorded. The project site is located approximately 23 miles southeast of the Salton Sea.

Because the project site is primarily surrounded by, and includes extensive, active agriculture, the project site has limited value as a potential wildlife corridor or habitat linkage for most wildlife species. The irrigation canals are not large enough to support large populations of birds, amphibians, or other wildlife species associated with water and riparian vegetation; however, it could provide stopover habitat for migratory species. The agriculture fields provide habitat for migratory birds that forage in open fields. As such, the project site likely does not serve as an important wildlife corridor or habitat linkage for larger mammals or species that are limited to native habitats, but it does provide foraging or stopover habitat for migratory birds.

Jurisdictional Aquatic Resources

According to the project's Aquatic Resources Delineation Report (Appendix E of this EIR), the project site contains approximately 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW. These non-wetland waters are characterized as IID irrigation canals that convey water throughout the Imperial Valley and are connected to a vast network of canals that source water from the Colorado River. Table 3.5-2 provides a summary of aquatic resources delineated within the project site (Appendix E of this EIR).

Many smaller, likely non-jurisdictional concrete canals with gates exist within and along the boundaries of agricultural fields on the project site. Although technically connected to potentially jurisdictional irrigation canals, they are constructed in uplands purely for the function of irrigating individual fields, and do not serve as critical conveyance pathways for regional irrigation like the larger, likely jurisdictional, irrigation canals.

During the field delineation, surface water was present in all of the non-wetland waters/ditches mapped within the project site; therefore, the waters onsite are likely considered relatively permanent waters. Based on site conditions observed in April 2023, the 24.74 acres of non-wetland waters/ditches and 0.05 acres of culverts connecting these non-wetland waters/ditches within the project site contain surface water and include, or have a continuous surface connection to, the Fern Canal, Fig Canal, and the Westside Main Ditch. These have a continuous surface connection to the Salton Sea, a traditional navigable water. Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters. Accordingly, all non-wetland waters mapped in the review area may be subject to USACE regulation (Appendix E of this EIR).

PC ORIGINAL PKG

All of the features described in Table 3.5-2 have also been identified as potential waters of the state. These features are subject to regulation by the RWQCB under the Porter-Cologne Water Quality Control Act and CDFW under California Fish and Game Code Section 1600.

Table 3.5-2. Aquatic Resource Summary for the Project Site

Feature Name	Cowardin[1]	OHWM Indicators	Location	Acres/Linear Feet
Non-Wetland Waters (Below OHWM)				
Irrigation Ditch[2]	R4SBCx	BBS, occasional CVS and CVC	Throughout project site	24.74/71,760
Culvert	N/A	N/A	Throughout project site	0.05/1,059

Source: Appendix E of this EIR

OHWM = ordinary high-water mark; R4SBCx = Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated; BBS = break in bank slope; CVS = change in vegetation species; CVC = change in vegetation cover

[1] Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979).

[2] Feature likely classified as seasonal "relatively permanent water" that flows for at least 3 months of the year, based on conditions observed during the delineation.

3.5.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most listed plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain listed marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The Migratory Bird Treaty Act protects more than 800 species of birds and prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.).

Section 404 Permit (Clean Water Act)

The Clean Water Act (CWA) is the major federal legislation governing water quality, providing guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. CWA Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

PC ORIGINAL PKG

Wetlands and Other Waters of the United States

The term “wetlands” (a subset of waters of the United States) is defined in 33 CFR 328.3(c)(16), as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high-water mark (OHWM), which is defined in 33 CFR 328.3(c)(7) as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

State

California Endangered Species Act

CDFW administers the California Endangered Species Act (CESA), which prohibits the “take” of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

California Fish and Game Code Section 1600 et. seq (as amended)

The California FGC Section 1600 et. seq. requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.”

California Fish and Game Code Sections 3503, 3503.5, and 3513

Under the California Fish and Game Code, CDFW provides protection from “take” for a variety of species. Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law. Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey, or to take, possess, or destroy any nest or eggs of such birds.

California Department of Fish and Wildlife Streambed and Riparian Habitat

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Under California Fish and Game Code Section 1602, a notification to CDFW is required prior to beginning any project activity that may (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. CDFW requires a Lake and Streambed Alternation Agreement when one of the above project activities may substantially adversely affect fish and wildlife resources. Therefore, wetlands are not regulated by CDFW under California Fish and Game Code Section 1602 unless the wetlands are part of a river, stream, or lake.

State and Regional Water Quality Control Boards

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the RWQCBs develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a "water of the state" (California Water Code Section 13260[a]). Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter–Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a CWA Section 401 Certification. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter–Cologne Act.

California Environmental Quality Act

Title 14 CCR, Section 15380 requires the identification of endangered, rare, or threatened species or subspecies of animals or plants that may be impacted by a project. If any such species are found, appropriate measures should be identified to avoid, minimize, or mitigate the potential effects of projects.

Local

Imperial County General Plan

The Conservation and Open Space Element of the Imperial County General Plan provides detailed plans and measures for the preservation and management of biological resources. The purpose of this element is to recognize that natural resources must be maintained for their ecological value for the direct benefit to the public and to protect open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and for public health and safety. In addition, the purpose of this element is to promote the protection, maintenance, and use of the County's natural resources with particular emphasis on scarce resources, and to prevent wasteful exploitation, destruction, and neglect of the state's natural resources. Table 3.5-3 analyzes the consistency of the project with specific policies contained in the Imperial County General Plan associated with biological resources.

PC ORIGINAL PKG

Table 3.5-3. Project Consistency with General Plan Goals and Policies

General Plan Policies	Consistency with General Plan	Analysis
Conservation and Open Space Element - *Open Space and Recreation Conservation* **Policy No. 2 -** The County shall participate in conducting detailed investigations into the significance, location, extent, and condition of natural resources in the County. **Program:** Notify any agency responsible for protecting plant and wildlife before approving a project which would impact a rare, sensitive, or unique plant or wildlife habitat.	Consistent	A biological assessment has been conducted at the project site to evaluate the proposed project's potential impacts on biological resources. Although special-status wildlife species were observed and have potential to occur within the project site, implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts on these species to a level that is less than significant. Applicable agencies responsible for protecting plants and wildlife will be notified of the proposed project and provided an opportunity to comment on this EIR prior to the County's consideration of any approvals for the project. As described in Chapter 2, Project Description, implementation of the project would require the approval of CUPs by the County to allow for the construction and operation of the project.
Conservation of Environmental Resources for Future Generations **Goal 1 -** Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value. **Objective 1.6 -** Promote the conservation of ecological sites and preservation of cultural resource sites through scientific investigation and public education.	Consistent	A biological assessment has been conducted at the project site to evaluate the proposed project's potential impacts on biological resources. Although special-status wildlife species were observed and have potential to occur within the project site, implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts on these species to a level that is less than significant. With implementation of Mitigation Measures BIO-1 through BIO-7, the project would not result in residual significant and unmitigable impacts on biological resources.

Source: County of Imperial 2016
BLM=Bureau of Land Management; CDFW – California Department of Fish and Wildlife; EIR – environmental impact report; USFWS – U.S. Fish and Wildlife Service

3.5.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering the respective Project's impacts on biological resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, Project impacts related to biological resources are considered significant if any of the following occur:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS

PC ORIGINAL PKG

- Have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Impact Analysis

Impact 3.5-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Construction

Special-Status Plants

No special-status plant species were identified within the project site. There are small pockets of creosote bush scrub and allscale scrub shrubland, but, overall, the project site lacks suitable habitat or site characteristics required for special-status plant species; thus, special-status plant species are either not expected to occur or have a low potential to occur within the project site (Appendix E of this EIR). As such, there would be no anticipated direct and/or indirect impacts to special-status plant species.

Special-Status Wildlife

As described above, burrowing owls and one northern harrier were observed on the project site during biological surveys conducted in 2023, ~~and~~ 2024, and 2025. Potential impacts are described below.

BURROWING OWL

Burrowing owls and active burrow sites were recorded on the project site during the 2023 and 2024 burrowing owl surveys (Figure 3.5-1 and Figure 3.5-2). Potential direct impacts to burrowing owls, including unintentional clearing or trampling of occupied habitat and/or destruction of burrowing owl dens, eggs, young, or adults, would be significant. However, construction-related direct impacts to burrowing owls would be reduced to a level less than significant with implementation of Mitigation Measures BIO-1 through BIO-4.

Mitigation Measure BIO-1 requires pre-construction clearance surveys to be conducted within 14 days prior to the start of ground disturbance by qualified and agency-approved biologists to determine the presence or absence of this species within the project footprint. These surveys are necessary because burrowing owls may not use the same burrow every year. The identification of any active burrows would result in the establishment of appropriate buffers and avoidance/minimization of impacts to burrowing owls. Mitigation Measure BIO-2 establishes compensation for unavoidable direct impacts

to burrowing owls. Mitigation Measure BIO-3 establishes an education program to provide information on burrowing owl biology, regulations, protection measures, and reporting procedures. Mitigation Measure BIO-4 requires evaluation and implementation of best measures to reduce burrowing owl mortality along access roads and establishment of a speed limit.

Potential short-term, indirect impacts to burrowing owls include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, burrowing owls present within the project site are likely accustomed to increased human presence and noise and vibration. Construction-related indirect impacts to burrowing owls would be reduced to a level less than significant with implementation of Mitigation Measure BIO-1. Mitigation Measure BIO-1 establishes measures at active burrows, including passive relocation, shelter in place (using hay bales to shelter the burrow from construction activities), and abandoned burrow destruction.

CALIFORNIA BLACK RAIL AND YUMA RIDGEWAY'S RAIL

California black rail and Yuma Ridgeway's rail were not recorded during the 2023 reconnaissance survey; however, marginally suitable habitat occurs in small quantities within the irrigation canals on the project site. Focused surveys were not conducted within the project site; therefore, habitat suitability is conservatively based on the presence of a small amount of aquatic vegetation within the irrigation canals. Potential direct impacts to California black rail or Yuma Ridgeway's rail, including destruction of nests, eggs, and/or young if one or both species nest on site, would be considered significant. Implementation of Mitigation Measure BIO-5 would require nesting bird pre-construction surveys to be completed if construction occurs during the nesting bird season (February 1 through September 15). These surveys would identify any California black rails and Yuma Ridgeway's rails within the project site, establish appropriate buffers, and avoid impacts to California black rails and Yuma Ridgeway's rails. Construction-related direct impacts to California black rails and Yuma Ridgeway's rails would be reduced to a level less than significant with implementation of Mitigation Measure BIO-5.

Potential short-term, indirect impacts to California black rails and Yuma Ridgeway's rails include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, California black rails and Yuma Ridgeway's rails potentially present are likely accustomed to increased human presence and noise and vibration. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to a level less than significant.

NORTHERN HARRIER

One northern harrier was recorded foraging during the June 2023 burrowing owl survey. Potential direct impacts to northern harriers, including destruction of nests, eggs, and/or young if they nest on site, would be significant. The proposed project also has the potential to impact the species' migratory movement. The agriculture fields on the project site provide foraging habitat for northern harrier, and the migratory movements of the species may be adversely affected by construction and presence of

construction on the project site. However, implementation of Mitigation Measure BIO-6 would require a qualified biologist to conduct a pre-construction bird survey within and adjacent to the project area. The survey will account for breeding and nesting birds, as wells other bird activity, such as foraging, and for behavior possibly caused by project activities, such as agitation, stress, and/or nest abandonment. The survey would identify any northern harriers within the project site, establish appropriate buffers, and avoid impacts to northern harriers. Construction-related direct impacts to northern harriers would be reduced to a level less than significant with incorporation of Mitigation Measure BIO-6.

Potential short-term, indirect impacts to northern harriers include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, northern harriers potentially present within the project site are likely accustomed to increased human presence and noise and vibration. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to a level less than significant.

NESTING BIRDS

The project site has the potential to support avian nests, which are protected under the Migratory Bird Treaty Act and the California Fish and Game Code (Section 3503), under which it is unlawful to “take, possess, or needlessly destroy” avian nests or eggs. Thus, potentially significant impacts could occur if vegetation clearing is undertaken during the breeding season (February 1 through September 15). Removal of habitat would occur outside of the breeding season. If vegetation removal cannot occur outside of the breeding season, Mitigation Measure BIO-5 would be implemented to require a pre-construction nesting bird survey, thus addressing direct and indirect impacts to nesting birds. Construction-related direct impacts to nesting birds would be reduced to a level less than significant with implementation of Mitigation Measure BIO-5.

Potential short-term, indirect impacts to nesting birds include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, nesting birds potentially present within the project site are likely accustomed to increased human presence and noise and vibration. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to a level less than significant.

BATS

The following non-listed special-status bat species were determined to have a low potential to forage on the project site: western yellow bat, western mastiff bat, and pocketed free-tailed bat. In addition, pallid bat and Townsend’s big-eared bat have yearlong ranges that encompass the project site. Pallid bat was detected in limited numbers on the Project site, suggesting the species forages on site but is not roosting. The project site provides foraging habitat for these bat species, and the movements of these species may be adversely affected by construction and presence of construction on the project site. Implementation of Mitigation Measure BIO-7, which requires a focused bat survey to be

conducted for all suitable roosting and foraging habitat for local or migratory bat ,would reduce potential impacts on bat species to a level less than significant.

Operation

Potential impacts during project operation could result from lighting, noise, dust, increased human activity, and collision hazards. These impacts are described below.

Lighting

All permanent lighting would be of low intensity and in compliance with local, applicable regulations. Lighting would be directed away from the public right-of-way and pointed inward toward the solar energy facility and may utilize directional hoods or shades as needed to reduce light from shining into the adjacent habitat and disturbing birds or exposing them to increased visibility by predators. In addition, any lighting not required daily for security purposes would have motion sensor or temporary use capabilities. As such, no significant impact due to lighting is anticipated to occur to migratory birds because the vast majority of the light would be directed onto the facility, not onto adjacent habitat, and because the lights would not be on continuously.

Noise

The project site is actively farmed and there are solar facilities operating adjacent to the project site. As described in Section 3.12 Noise and Vibration of this EIR, no equipment or components are anticipated to produce noise that would exceed ambient noise in the vicinity. No significant impact due to noise would occur to migratory birds because their movement and habitat would not be substantially affected.

Dust

Dust from vehicles during project operation could impact suitable habitat for special-status species. This potential impact is considered significant. However, no equipment or components are anticipated to produce dust that would exceed what currently exists in the vicinity. Furthermore, with implementation of Mitigation Measure BIO-4, which requires reduced speed limits, potential operational impacts from dust would be reduced to a level less than significant.

Increased Human Activity

Increased human activity can deter wildlife from using habitat areas near the project site and increase the potential for vehicle collisions. This potential impact is considered significant. However, Mitigation Measure BIO-3 provides for worker training for operational staff to minimize impacts associated with increased human activity. Mitigation Measure BIO-4 imposes speed limits on site and limits allowed activities to reduce effects from increased human activity. Therefore, with implementation of Mitigation Measures BIO-4 and BIO-4, impacts would be reduced to a level less than significant.

Collision Hazards

The project site is approximately 23 miles south of the Salton Sea, a major stopover location for migratory birds. The project could potentially increase the risk of collisions due to sky reflection (or “pseudo-lake effect”). Although avian collisions with towers and structures have been well documented, there are few published papers that study the possibility that large areas of solar PV panels in the desert environment may mimic water bodies and inadvertently attract migrating or

dispersing wetland bird species. There is currently insufficient research to assess the magnitude or likely risk associated with collisions with solar fields. The solar PV modules would be coated to be non-reflective and are designed to be highly absorptive of all light that strikes their glass surfaces. Based on the evidence available—non-reflective design of the solar panels, typical migration patterns, comparatively few documented deaths—glare and pseudo-lake effect are not expected to result in significant impacts to migrating or local avian species.

Mitigation Measure(s)

BIO-1 **Burrowing Owl Mitigation.** Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities.

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance shall be established based on the following table:

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

~~of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0 to 250 meters (825 feet) during the breeding season (February through August)~~ These buffers shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on

Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures identified in the Burrowing Owl Protection and Mitigation Plan shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation.

Burrowing Owl Protection and Mitigation Plan

If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site “replacement burrow site(s)” must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.

As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant.

PC ORIGINAL PKG

Incidental Take Authorization

The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

BIO-2 **Burrowing Owl Habitat Compensation.** The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site.

Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-2 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

BIO-3 **Worker Awareness Program and Ongoing Training.** Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:

- Biology and status of burrowing owl.
- California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations.
- Protection measures designed to reduce potential impacts on the species.
- The function of flagging designated authorized work areas.
- Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field.

All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

BIO-4 **Speed Limit.** During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.

PC ORIGINAL PKG

Perimeter Fencing. Fence markers shall be installed to deter or prevent birds and bats from colliding with perimeter/security fencing, and maintenance or replacement of these markers will be completed per the manufacturer instruction. The applicant shall consult with the California Department of Fish and Wildlife (CDFW) to establish appropriate wildlife-friendly fencing measures.

BIO-5 **Migratory Birds and Other Sensitive Non-Migratory Bird Species.** To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial.

Construction conservation measures to be incorporated into the ABPP shall include the following:

- Minimizing disturbance to vegetation to the maximum extent practicable.
- Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest.
- Minimizing wildfire potential.
- Minimizing activities that attract prey and predators.
- Controlling non-native plants.

Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following:

- Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities.
- Minimizing noise.
- Minimizing use of outdoor lighting.

BIO-6 **Pre-Construction Bird Surveys and Nest Avoidance.** Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species).

If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian

biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures.

If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.

BIO-7 **Focused Bat Surveys and Bat Management Plan.** A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings.

If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed.

PC ORIGINAL PKG

The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.

Significance after Mitigation

Project construction and operation has the potential to directly and indirectly impact special-status wildlife species. However, implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts on special-status wildlife species to a level less than significant.

Impact 3.5-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

No special-status vegetation communities occur within the project site. Thus, implementation of the proposed project would not result in direct or indirect impacts to special-status vegetation communities. No impact would occur.

Mitigation Measure(s)

No mitigation is required.

Impact 3.5-3 Would the project have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means?

According to the project's Aquatic Resources Delineation Report (Appendix E of this EIR), the project site contains approximately 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW. While it is assumed that the project would avoid all direct impacts to IID irrigation canals, the smaller canals along the boundaries of agricultural fields on the project site may be impacted. Potential impacts to jurisdictional waters would be significant. The project is expected to comply with the relevant laws that apply to potentially jurisdictional waters and notify the respective agencies of the impacts to determine the jurisdictional status and the need for permits to be acquired for impacts. If permits are required, avoidance and minimization measures would be included in the conditions of the permits and shall be adhered to. All poles associated with the collector areas would be sited outside of non-wetland waters. Mitigation Measure BIO-8 requires the project applicant or its designee to obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. If impacts to jurisdictional waters were to occur, implementation of Mitigation Measure BIO-8 would reduce impacts to less than significant.

Potential short-term, indirect impacts to jurisdictional waters could include generation of fugitive dust and the introduction of chemical pollutants. Mitigation Measure BIO-3 would further ensure no impacts to jurisdictional waters. With implementation of these measures, potential short-term indirect impacts from construction activities would be less than significant.

Mitigation Measure(s)

Implement Mitigation Measure BIO-3.

BIO-8 **Federal and State Agency Permits.** Prior to impacts occurring to USACE, RWQCB, and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.

Significance after Mitigation

The smaller canals along the boundaries of agricultural fields on the project site may be impacted. Potential impacts to jurisdictional waters would be significant. However, implementation of Mitigation Measures BIO-3 and BIO-8 would reduce potential impacts on jurisdictional waters to a level less than significant.

Impact 3.5-4 Would the project interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project is not likely to have direct or indirect impacts on movement of any native resident or migratory fish or wildlife species regionally or locally. The project site is approximately 23 miles southeast of the Salton Sea and would not affect its use by migratory birds. Locally, the project site is primarily surrounded by and includes extensive historical and present-day agricultural practices. As such, the project site has limited value as a potential wildlife corridor or habitat linkage for fish and wildlife species, and likely does not serve as an important wildlife corridor. Impacts to wildlife movement would be less than significant.

Mitigation Measure(s)

No mitigation is required.

Impact 3.5-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As demonstrated in Table 3.5-3 and discussed further in Section 3.11, Land Use Planning, with approval of CUPs and General Plan Amendment, the project would be consistent with the Imperial County General Plan, and with biological resources policies contained therein. Therefore, implementation of the proposed project would not result in a significant impact associated with the project's potential to conflict with local policies protecting biological resources.

Mitigation Measure(s)

No mitigation is required.

PC ORIGINAL PKG

Impact 3.5-6 Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No adopted Habitat Conservation Plan area overlaps with the project site. Thus, implementation of the proposed project would not result in direct or indirect impacts to any Habitat Conservation Plan.

Mitigation Measure(s)

No mitigation is required.

3.5.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Project decommissioning activities will require construction vehicles to drive across the solar facility, transmission line, and access roads. Concrete footings, foundations, and pads would be removed using heavy equipment and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. Similar to project construction, decommissioning activities have the potential to directly impact special-status species, nesting birds, raptors, bats, and jurisdictional resources. This is a potentially significant impact; however, implementation of Mitigation Measures BIO-1 through BIO-8 at the time of decommissioning would reduce potential impacts to a level less than significant.

Residual

The proposed project would not impact sensitive vegetation communities, state or federally-protected wetlands, would not conflict with any local policies or ordinances protecting biological resources and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

With the implementation of Mitigation Measures BIO-1 through BIO-8, potential impacts on special-status species, nesting birds, raptors, bats, and jurisdictional resources would be reduced to a level less than significant. Therefore, the project would not result in residual significant and unmitigable impacts related to biological resources.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.6 Cultural Resources

This section discusses cultural resources that may be potentially impacted by the proposed project. The following identifies the existing cultural resources within the project site, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project. Information from this section is summarized from the *Cultural Resources Inventory Report* and *Built Environment Inventory and Evaluation Report* prepared by Dudek. These reports are included in Appendix F1 and F2 of this EIR, respectively.

The Phase I cultural resources inventory included a records search, literature review, and pedestrian survey. In addition to the Phase I cultural resources inventory, Dudek prepared the Built Environment Inventory and Evaluation Report which identifies previously identified and unidentified build environment cultural resources within or adjacent to the project site.

3.6.1 Existing Conditions

Cultural Setting

The project site is within California's Colorado Desert, a small part of the larger Sonoran Desert. The Colorado Desert encompasses Imperial County, and includes parts of San Diego County, Riverside County, and a small section of San Bernardino County, California. The cultural setting for the Colorado Desert is described in detail in the *Cultural Resources Inventory Report* (Appendix F of this EIR) prepared for the project and includes the following time periods: Late Pleistocene, Terminal Pleistocene-Very Early Holocene, Mid-Holocene, and Late Holocene. The ethnohistoric and historic periods are also described in detail in the *Cultural Resources Inventory Report* (Appendix F1 of this EIR) prepared for the project.

Records Search

A records search dated March 31, 2023 was obtained from the South Coastal Information Center (SCIC) at San Diego State University. The records search provided information on all documented cultural resources and previous archaeological investigations within the 1-mile record search radius. Dudek returned to the SCIC in June 2023 to retrieve three resource reports that were not recovered from the March 31, 2023 records search. Resources consulted during the records search conducted by the SCIC included the National Register of Historic Places (NRHP), California Historical Landmarks, California Points of Historical Interest, and the California Register of Historical Resources (CRHR) Inventory. Results of the records search and additional research are detailed below.

Previously Conducted Cultural Resources Studies

Fifty-one (51) cultural resources studies have been previously conducted within a one-mile radius of the project site. Seven of those studies intersect the project site (see Table 1 of Appendix F of this EIR). All seven studies were conducted between 1979 to 2006 and include two Class II cultural resources inventories, two archaeological assessments, two environmental studies, and a management plan. Although approximately 30 percent of the project site overlaps with previous study areas, none of the studies are considered adequate according to the Secretary of Interior's standards and guidelines for a cultural resources inventory (Appendix F1 of this EIR).

Previously Recorded Cultural Resources

Historical resources significant under CEQA include those designated or eligible for designation in the NRHP, the CRHR or other state program, or a local register of historical resources. Historical resources may also include resources listed in the State Historic Resources Inventory as significant at the local level or higher, and resources evaluated as potentially significant in a survey or other professional evaluation.

The NRHP and CRHR eligibility criteria are described below.

- **NRHP Eligibility Criteria.** Four criteria have been established to determine if a resource is significant to American history, architecture, archaeology, engineering, or culture and should be listed in the NRHP. These criteria include:
    A. It is associated with events that have made a significant contribution to the broad patterns of our history;
    B. It is associated with the lives of persons significant in our past;
    C. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and
    D. It yields, or may be likely to yield, information important in prehistory or history.
- **CRHR Eligibility Criteria.** For the purposes of CEQA review, a historical resource is defined as follows (14 CCR 15064.5[a]):
    1. A resource listed in, or determined eligible by the State Historical Resources Commission for listing in, the CRHR
    2. A resource included in a local register of historical resources
    3. A resource identified as significant in a historical resource survey meeting the requirements specified in PRC 5024.1(g)
    4. Any resource that the lead agency determines to be historically significant

The SCIC records search indicates that seven previously recorded cultural resources are located within the project site (Table 3.6-1). Table 3.6-1 provides brief descriptions and CRHR/NRHP eligibility for each resource identified within the project site, based on the SCIC records search.

The seven resources consist of an historic wagon road (P-13-003403), four canal/water conveyance systems for agricultural use (P-13-012688, P-13-12689, P-13-12693, and P-13-014975), and two single-family residences (P-13-013758 and P-13-014263). The recorded sections of three canal/water conveyance systems (P-13-012689, P-13-012693 and P-13-014975), and the two single-family residences have all been recommended not eligible for listing on the CRHR and the NRHP. The historic wagon road and portions of one water-conveyance system (P-13-012688) have not been formally evaluated for listing on the CRHP and the NRHP. The SCIC records search also indicates that an additional 18 cultural resources have been recorded within the one-mile radius of the project site (Appendix F1 of this EIR).

PC ORIGINAL PKG

Table 3.6-1. Previously Recorded Cultural Resources Within 1-mile of the Project Site

Primary Number	Trinomial	Age	Description	CRHR/NRHP Status
Within the Project Site				
P-13-003403	CA-IMP-3403/H	Historic	Wagon Road from Fort Yuma to Warner's Ranch	Unevaluated
P-13-012688	--	Historic	Dixie Drains 2, 3, and 4 and Dixie Lateral 1	Dixie Drain 3 and Lateral 1 recommended not eligible; Dixie Drains 2 and 4 unevaluated
P-13-012689	--	Historic	Fern Canal and Drain System	Recommended not eligible
P-13-012693	--	Historic	Fig Canal	Recommended not eligible
P-13-013758	CA-IMP-11759/H	Historic	1651 Westside Road	Recommended not eligible
P-13-014263	--	Historic	Preece Residence	Recommended not eligible
P-13-014975	--	Historic	Wixom Drain	Recommended not eligible
Not within the Project Site				
P-13-014264	--	Historic	HP15; Westside Elementary School	Recommended not eligible
P-13-014265	--	Historic	HP3; Multiple Residence Compound	Recommended not eligible
P-13-014266	--	Historic	HP2; Black Residence	Recommended not eligible
P-13-017714	CA-IMP-13040	Prehistoric	AP2, AP11; Lithic scatter and hearth	No formal recommendation
P-13-017729	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017730	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017731	--	Prehistoric	Lithic utilized flake tool isolate	Not eligible
P-13-017732	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017733	--	Prehistoric	Lithic assayed cobble isolate	Not eligible

PC ORIGINAL PKG

P-13-017734	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017735	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017736	--	Prehistoric	Lithic retouched flake tool	Not eligible
P-13-017737	--	Prehistoric	Lithic core fragment and debitage isolate	Not eligible
P-177740	--	Prehistoric	Colorado Buff Ceramic body fragment	Not eligible

Source: Appendix F1 of this EIR

P-13-003403/CA-IMP-3403/H (WAGON ROAD FROM FORT YUMA TO WARNER'S RANCH)

P-13-003403 is a wagon road that historically connected Fort Yuma in Imperial County to Warner's Ranch in San Diego County. It was first recorded in 1956. The historic placement of P-13-003403 crosses the project site on a roughly east to west axis, although there is no current evidence to indicate this resource still exists with the integrity it was first recorded.

P-13-012688 (DIXIE DRAINS 2, 3, AND 4, AND DIXIE LATERAL 1)

P-13-012688 consists of Dixie Drains 2, 3, and 4 and Dixie Lateral 1. Dixie Drain 3 was first recorded in 2009 and given the primary number P-13-012688. In 2011, DPR forms for P-13-012688 were updated to include a larger section of Dixie Drain 3, as well as Dixie Drains 2 and 4, and Dixie Lateral 1. The Dixie Drain Irrigation System is a part of a larger water conveyance system that includes Westside Drain, Forget-Me-Not Drain, and Salt Creek Drain that all empty into the New River. Dixie Lateral 1 dates back to before 1914, while Dixie Drains 2, 3, and 4 were likely constructed ca. 1940. In 2009, Dixie Drain 3 was recommended as not eligible for listing on the CRHR or NRHP due to its loss of integrity from the regular dredging and widening of the canals and drains over time. In 2011, Dixie Lateral 1 was recommended as not eligible for listing on the CRHR or NRHP for similar reasons. Formal evaluations or recommendations of eligibility were not conducted for Dixie Drains 2 and 4. The Dixie Drains run along the boundaries of the southwestern portion of the project site on a north to south axis, while Lateral 1 runs through the project site on an east to west axis.

P-13-012689 (FERN CANAL AND DRAIN SYSTEM)

P-13-012689 consists of a section of the Fern Canal and an associated section of the Fern Side Main. This resource was first recorded in 2009. Updates to include additional sections of the Fern Canal were completed in 2010, 2011, and 2017. The Fern Canal was constructed ca. 1909 and is approximately 10 miles long. Modifications were made to the canal in the 1960s, and at present, the canal is lined with concrete. The recorded portions of the Fern Canal are not recommended eligible for listing on the CRHR or NRHP due to a lack of integrity. The Fern Canal runs through the middle of the northern portion of the project site, on a north to south axis.

P-13-012693 (FIG CANAL)

P-13-012693 consists of a concrete-lined section of the Fig Canal that was constructed ca. 1912 and spans over 4 miles on a north to south axis through the easternmost portion of the project site. The Fig Canal was first recorded in 2009. DPR form updates to include additional portions of the Fig Canal

were conducted in 2011. The recorded portions of the Fig Canal are not recommended eligible for listing on the CRHR or NRHP due to a lack of integrity.

P-13-013758/CA-IMP-11759 (1651 WESTSIDE ROAD)

1651 Westside Road is a one-story ranch style house constructed as a single-family residence ca. 1955. The residence was first recorded in 2011. The building is wood-framed and rectangular in plan with a concrete foundation. The exterior is clad in stucco, and the roof is a low-pitched side gable with a front gable projection on the south section of the building and clad in asphalt roll. 1651 Westside Road was recommended not eligible for listing on the NRHP and the CRHR due to not meeting any of the criteria for inclusion in the national or state register. This resource sits along the northwestern portion of the project boundary on the west side of Westside Road, approximately 0.2 miles south of Interstate Highway 8.

P-13-014263 (2396 VAUGHN ROAD)

2396 Vaughn Road is a modern style ranch house with a low-pitch gable roof and composite roofing, a pedimented front gable entry with full-length porch, and stucco cladding on the exterior. This resource was recorded in 2009. P-13-014263 was recommended not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. This single-family residence sits along Vaugh Road, directly west of Dixie Drain 3 and within the western-central portion of the project site.

P-13-014975 (WIXOM DRAIN)

P-13-014975 (Vaughn and Jessup Roads) is an earthen-dug irrigation drainage ditch constructed ca. 1940. It is approximately 10–20 feet ASM. P-13-014975 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. The drain is located east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixom Road.

Pedestrian Survey

As part of the *Cultural Resources Inventory Report,* Dudek conducted a pedestrian survey on the project site between April 10, 2023, to April 14, 2023 by Dudek archaeologists using standard archaeological procedures and techniques. Intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects spaced no more than 15 meters apart over entire portions of the project site, when appropriate. Several fields were densely vegetated by agricultural crops/grasses and ground visibility was between 0-30 percent (poor visibility). Though physically feasible, the complete intensive-level survey of these fields using formal parallel transects was determined unproductive as these areas are considered to have a low potential for containing significant cultural resources. Instead, a sample of each of these fields was surveyed using formal parallel transects. An opportunistic/reconnaissance survey approach was also utilized, selectively examining exposed ground surface areas (canals, drainages, dirt roads, low lying vegetation) where possible. In summary, 88.9 percent of the project site (1,662 acres) consisted of active agricultural fields with ground visibility ranging from 0 to 30 percent (poor visibility). Dudek surveyed a 5 percent sample of each of these fields. The remaining 11.1 percent of the project site (165 acres) had moderate to excellent visibility (40-60 percent, and 70-100 percent, respectively) and was subject to 50 to 100 percent survey using formal 15 meter parallel transects. The proposed generation intertie (gen-tie) corridor location was also surveyed within a 100’ corridor measured from the center line (Appendix F1 of this EIR).

PC ORIGINAL PKG

Within each transect, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire- affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials (Appendix F1 of this EIR).

Built Environment Inventory and Evaluation Report

In addition to the Phase I cultural inventory report, Dudek prepared a built environment and evaluation report for the proposed project to identify and evaluate built environment resources 45 years of age or older (historic era). As part of the *Built Environment Inventory and Evaluation Report*, Dudek developed an Area of Potential Impacts (API), a records search of the CHRIS, an intensive-level survey of the API for built resources of historic age (45 years of age or older); building development and archival research, the creation of an appropriate historic context, and recordation and evaluation of historic-era properties located in the API under National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) designation criteria.

In addition to a discussion of the previously recorded cultural resources within the API (Table 3.6-1), the built environment report also identified five newly recorded properties (Table 3.6-2). Dudek evaluated the API in accordance with Section 15064.5 (a)(2)-(3) of the State CEQA Guidelines and using the criteria outlined in Section 5024.1 of the PRC. Dudek concludes that the properties evaluated within the API do not appear eligible for listing in the NRHP or CRHR due to a lack of significance. As such, no properties within the API are considered to be historical resources under CEQA.

Table 3.6-2. Newly Recorded Built Environment Resources Within the API

Address/APN	Year Built	CRHR/NRHP Status
2250 West Vaughn Road (APN 051-300-027)	ca. 1976	Not eligible
2104 West Wixom Road (APN 051-330-021)	1940	Not eligible
Cattle Corral Shelter (APN 051-310-026)	ca. 1956	Not eligible
Diehl Drain (multiple APNs)	ca. 1950	Not eligible
Fig Drain (multiple APNs)	ca. 1940	Not eligible

Source: Appendix F2 of this EIR

PC ORIGINAL PKG

3.6.2 Regulatory Setting

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

Federal

National Historic Preservation Act

Federal regulations (36 CFR Part 800.2) define historic properties as "any prehistoric or historic district, site, building, structure, or object included, or eligible for inclusion in, in the National Register of Historic Places." Section 106 of the National Historic Preservation Act (NHPA) (Public Law 89-665; 80 Stat 915; USC 470, as amended) requires a federal agency with jurisdiction over a project to take into account the effect of the project on properties included in or eligible for the NRHP, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The term "cultural resource" is used to denote a historic or prehistoric district, site, building, structure, or object, regardless of whether it is eligible for the NRHP.

State

California Office of Historic Preservation

The California Office of Historic Preservation (OHP) administers state and federal historic preservation programs and provides technical assistance to federal, state, and local government agencies, organizations, and the general public with regard to historic preservation programs designed to identify, evaluate, register, and protect California's historic resources.

Section 15064.5 of the CEQA Guidelines also requires that Native American concerns and the concerns of other interested persons and corporate entities, including but not limited to museums, historical commissions, associations, and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (HSC Section 7050.5, PRC Sections 5097.94 et seq.).

CEQA Guidelines: Historical Resources Definition

CEQA Guidelines Section 15064.5(a) defines a historical resource as:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (PRC Section 5024.1; Title 14 CCR, Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of

California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC Section 5024.1; Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important to our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.[1]

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.

(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).

(2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

(3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

[1] Ibid.

PC ORIGINAL PKG

(4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

CEQA Guidelines: Human Remains

Section 15064.5 of CEQA Guidelines provides specific guidance on the treatment of human remains pursuant to PRC § 5097.98, which provides specific guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the NAHC:

(d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

(1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (HSC Section 7050.5).

(2) The requirements of CEQA and the Coastal Act.

(e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

(A) The coroner or the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

(B) If the coroner determines the remains to be Native American:

1. The coroner shall contact the NAHC within 24 hours.
2. The NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
3. The mostly descendent may make recommendations to the landowner of the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or

(2) Where the following conclusions occur the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.

(B) The descendant fails to make a recommendation; or

(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

(f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."

California Health and Safety Code, Section 7050.5

California HSC 7050.5 makes it a misdemeanor to disturb or remove human remains found outside a cemetery. This code also requires a project owner to halt construction if human remains are discovered and to contact the County Coroner.

Local

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, and policies for the identification and protection of significant cultural resources. The Conservation and Open Space Element of the General Plan includes goals, objectives, and policies for the protection of cultural resources and scientific sites that emphasize identification, documentation, and protection of cultural resources. While Section 3.9, Land Use Planning, of this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors and Planning Commission ultimately make a determination as to the project's consistency with the General Plan. Goals and Objectives applicable to the proposed project are summarized in Table 3.6-3.

Table 3.6-3. Project Consistency with Applicable General Plan Goals and Objectives

General Plan Policies	Consistency with General Plan	Analysis
Conservation and Open Space Element - *Open Space and Recreation Conservation* **Goal 1** - Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value. **Objective 1.4** - Ensure the conservation and management of the County's natural and cultural resources.	Consistent	A cultural resources inventory was prepared for the project site. No known archaeological resources within the project site were identified. However, as discussed below, the proposed project has the potential to encounter undocumented archaeological resources and human remains. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the potential impact associated with the inadvertent discovery of archaeological resources to a level less than significant. Mitigation Measure CUL-3 would ensure that the potential impact on previously unknown human

PC ORIGINAL PKG

Table 3.6-3. Project Consistency with Applicable General Plan Goals and Objectives

General Plan Policies	Consistency with General Plan	Analysis
Objective 3.1 - Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.	Consistent	remains does not rise to the level of significance pursuant to CEQA.

Source: County of Imperial 1993
Notes:
CUL=cultural; WEAP= Worker Environmental Awareness Program

3.6.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering proposed Project impacts related to cultural and archeological resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to cultural resources are considered significant if any of the following occur:

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5
- Disturb any human remains, including those interred outside of dedicated cemeteries

Methodology

This analysis evaluates the potential for the proposed project, as described in Chapter 2, Project Description, to interact with cultural resources in the Project area. Based on the extent of these interactions, this analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

As indicated in the environmental setting, the *Cultural Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project* (Appendix F1 of this EIR) and *Built Environment Inventory and Evaluation Report* (Appendix F2 of this EIR) were prepared for the project.

The information from these reports were reviewed and summarized to present the existing conditions and to identify potential environmental impacts, based on the significance criteria presented in this section. Impacts associated with cultural resources that could result from project construction and operational activities were evaluated qualitatively based on site conditions; expected construction practices; materials, locations, and duration of project construction and related activities.

Impact Analysis

Impact 3.6-1 Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

To be considered historically significant, a resource must meet one of four criteria for listing outlined in the CRHR (CEQA Guidelines 15064.3 (a)(3)). In addition to meeting one of the criteria outlined the CRHR, a resource must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues (CCR Title 14, Chapter 1.5 Section 4852 [c]). Further, based on CEQA Guidelines Section 15064.5 (b), substantial adverse change would include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is materially impaired. This can occur when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR, NRHP, a local register, or historic resources.
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its identification in an historical resources survey meeting the requirements of PRC §5024.1(g), unless the public agency establishes by a preponderance of the evidence that the resource is not historically or culturally significant.

The SCIC records search indicates that seven previously recorded cultural resources are located within the project site (Table 3.6-1). These seven resources consist of an historic wagon road (P-13-003403), four canal/water conveyance systems for agricultural use (P-13-012688, P-13-12689, P-13-12693, and P-13-014975), and two single-family residences (P-13-013758 and P-13-014263). The recorded sections of three canal/water conveyance systems (P-13-012689, P-13-012693 and P-13-014975), and the two single-family residences have all been recommended not eligible for listing on the CRHR and the NRHP. As part of the *Built Environment Inventory and Evaluation Report,* Dudek evaluated the historic wagon road and portions of one water-conveyance system (P-13-012688) for listing on the CRHR and the NRHP.

Historic Wagon Road (P-13-003403). According to the SCIC records search, the road was recorded as recently as 2009. The associated site form provides limited information and no evaluation was completed at this time. On April 11, 2023, Dudek revisited the site and did not find any indications the road was ever at this location and was likely incorrectly mapped in the API. Dudek concluded that the resource as it was previously mapped is not extant in this location (Appendix F2 of this EIR). No further analysis of this resource is warranted.

P-13-012688. Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral appear to be ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the resource is not a historical resource for the purposes of CEQA.

In addition to the previously recorded cultural resources within the API (Table 3.6-1), the built environment report also identified five newly recorded properties (Table 3.6-2). Dudek evaluated the API in accordance with Section 15064.5 (a)(2)-(3) of the State CEQA Guidelines and using the criteria outlined in Section 5024.1 of the PRC. Dudek concludes that the properties evaluated within the API do not appear eligible for listing in the NRHP or CRHR due to a lack of significance. As such, no properties within the API are considered to be historical resources under CEQA.

PC ORIGINAL PKG

Given these findings, the proposed project would not result in any adverse change related to the significance of a historical resource under CEQA and impacts would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.6-2 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Pursuant to CEQA Guidelines §15064.5(c)(1) and (2), an archaeological resource includes an archaeological site that qualifies as a significant historical resource as described for Impact 3.6-1. If an archaeological site does not meet any of the criteria outlined in the provisions under Impact 3.6-1, but meets the definition of a "unique archaeological resource" in PRC 21083.2, the site shall be treated in accordance with the provisions of PRC 21083.2, unless the project applicant and public agency elect to comply with all other applicable provisions of CEQA with regards to archaeological resources. "Unique archaeological resource" means an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1) Contains information needed to answer important scientific research questions that there is a demonstrable public interest in that information.
2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3) Is directly associated with a scientifically recognized important historic event or person.

CEQA Guidelines 15064.5(c)(4) confirms that if an archaeological resource is neither a unique archaeological nor an historic resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

No newly identified prehistoric or historic-era archaeological resources were recorded on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to §15064.5.

Based on available archival information, the presence of archaeological resources adjacent to the project site, and in consideration of the topography, and the project's vicinity to the New River; there is a moderate potential for the inadvertent discovery of archaeological resources on the project site. The project includes ground-disturbing activities that will extend to depths of 20 feet below the ground surface. As such, the project has the potential to disturb previously undocumented cultural resources that could qualify as unique archaeological resources pursuant to CEQA. This potential impact is considered significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the potential impact on archaeological resources to a level less than significant.

Mitigation Measure(s)

CUL-1 **Cultural Resources Worker Environmental Awareness Program Training.** Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel

about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist.

The training shall be provided to all ~~construction supervisors, forepersons, and operators of ground disturbing equipment~~ personnel. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

CUL-2 **Archaeological Monitoring.** Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist to serve as the principial archaeologist and a traditionally and culturally affiliated Native American Monitor. The principal archaeologist will oversee the ~~to~~ monitoring of all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.

In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.

Impact 3.6-3 Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

During the construction and operational phases of the proposed project, grading, excavation and trenching will be required. Although the potential for encountering subsurface human remains within the project site is low, there remains a possibility that human remains are present beneath the ground surface, and that such remains could be exposed during construction. The potential to encounter human remains is considered a significant impact. Mitigation Measure CUL-3 would ensure that the potential impact on previously unknown human remains does not rise to the level of significance pursuant to CEQA.

Mitigation Measure(s)

CUL-3 **Discovery of Human Remains.** In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983). If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

3.6.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

No impact is anticipated from restoration activities as the ground disturbance and associated impacts on cultural resources will have occurred during the construction phase of the proposed project.

Residual

Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the potential impact associated with the inadvertent discovery of archaeological resources to a level less than significant. Mitigation Measure CUL-3 would ensure that the potential impact on previously unknown human remains does not rise to the level of significance pursuant to CEQA. No unmitigable impacts on cultural resources would occur with implementation of the proposed project.

This page is intentionally blank.

PC ORIGINAL PKG

3.7 Geology and Soils

This section includes an evaluation of the project in relation to existing geologic and soils conditions within the project site. Information contained in this section is summarized from the *Preliminary Geological and Geotechnical Assessment Report* prepared by HDR. This report is included as Appendix G of this EIR.

3.7.1 Existing Conditions

Regional Geology

The project site is located in the Imperial Valley, a part of the Salton Trough, located in the Colorado Desert physiographic province of California. With surface elevations as low as 275 feet below sea level, the Salton Trough formed as a structural depression resulting from tectonic boundary extension between the Pacific and the North American plates. The Salton Trough is bounded on the east and northeast by the San Andreas Fault and on the west by the San Jacinto Fault Zone. The structural trough is filled with more than 15,000 feet of Miocene and younger, marine and non-marine sediments capped by approximately 100 feet of Pleistocene and later lacustrine deposits that have been deposited by intermittent sedimentation derived from periodic flooding from the Colorado River and the filling of Lake Cahuilla (Appendix G of this EIR).

The project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla comprised of tan and gray fossiliferous clay, silt, sand, and gravel in conjunction with young alluvial deposits of unconsolidated clay, sand, silt, and gravel. West of the project site are mapped uplands consisting of Pliocene and Pleistocene sandstone, shale, and gravel deposits (Appendix G of this EIR).

Subsurface Soil Conditions

Previous geotechnical investigations have been completed in the vicinity of the project site along the I-8 and to the south near the Westside Main Canal. Generally, previous investigations for improvements related to the California Department of Transportation (Caltrans) are located north of the Big Rock 2 Cluster North site. According to nearby Caltrans Log-of-Test-Borings (LOTB), the explored subsurface soils generally consist of fine to coarse sands with interbedded clays and silts to the maximum depth explored of about 110 feet below ground surface (bgs). The granular soils were encountered with relative densities ranging from loose to very dense, increasing in relative density with depth. Generally, soft to stiff clays were encountered in these previous investigations within the upper 10 feet. Additionally, available information from a nearby solar project (Westside Canal Battery Storage Project) located southeast of the Big Rock 2 Cluster South site, indicate that the subsurface soils consisted of soft to hard fine-grained soils (lean clay, sandy lean clay, fat clay, and sandy silts) in the upper 25 feet bgs. Below the fine-grained soils, fine to coarse, medium dense to very dense sands with varying amounts of silts were encountered to the maximum depth of 80 feet bgs (Appendix G of this EIR).

Based on review of the Soil Survey for Imperial County prepared by the United States Department of Agriculture Soil Conservation Service, surface soils at the project site consist of ten primary groups:

- 110 Holtville silty clay
- 114 Imperial silty clay

PC ORIGINAL PKG

- 115 Imperial-Glenbar silty clay loam complex
- 118 Indo loam
- 119 Indo-Vint complex
- 122 Meloland very fine sandy loam
- 123 Meloland-Holtville
- 135 Rositas fine sand
- 142 Vint loamy very fine sand, and
- 144 Vint-Indo very fine sandy loam undifferentiated group.

All of the abovementioned soil groups are described as wet and are generally limited to a 0 to 2 percent slope (Appendix G of this EIR). Figure 4 of the Preliminary Geological and Geotechnical Assessment Report (Appendix G of this EIR) shows the soil series mapped on the project site.

Groundwater Conditions

A review of the online monitoring well database from the California Department of Water Resources indicate that there are no monitoring wells with groundwater data within a 2-mile radius of the project site (Appendix G of this EIR). In the absence of available groundwater data for the project site, a review of available groundwater data was undertaken for the surrounding area.

Available groundwater information from existing Caltrans LOTB indicate the presence of shallow groundwater near the project site along the I-8. Generally, groundwater was encountered during these previous investigations at depths ranging from about 1 to 12 feet bgs, corresponding to groundwater elevations ranging from about -41 and -49 feet North American Vertical Datum (NAVD) 88 (Appendix G of this EIR).

On the southern end of the project near the Big Rock 2 Cluster South site, groundwater was encountered at depths ranging from about 9 to 19 feet, corresponding to groundwater elevations ranging from about -30 to -37 feet NAVD 88(Appendix G of this EIR).

Faulting

Southern California straddles the boundary between two global tectonic plates known as the North American Plate (on the east) and the Pacific Plate (on the west). The main plate boundary is represented by the San Andreas Fault, which extends northwest from the Gulf of California in Mexico, through the desert region of the Imperial Valley, through the San Bernardino region, and into Northern California, where it eventually trends offshore, north of San Francisco (Appendix G of this EIR).

In Southern California, the plate boundary is a complex system of numerous faults known as the San Andreas Fault System (SAFS) that spans a 150-mile-wide zone from the main San Andreas fault in the Imperial Valley westward to offshore of San Diego. The major faults east of San Diego (from east to west) include the San Andreas Fault, the San Jacinto Fault, and the Elsinore Fault. The SAFS is a transform plate boundary dominated by right-lateral fault displacement with the Pacific Plate moving northwest relative to the North American Plate. The significance of this lateral faulting is that transform plate interactions typically generate much smaller maximum magnitude earthquakes than convergent or subduction plate boundaries. Thus, in Southern California the expected maximum moment magnitudes for most faults are typically in the M6.5 to M7.5 range, with only a few faults (San Andreas

Fault, possibly some thrust faults of the Transverse Ranges) capable of generating earthquakes in the M8 range, such as the 1906 San Francisco and 1857 Fort Tejon earthquakes, on the San Andreas Fault itself (Appendix G of this EIR).

The project site is located in the seismically active Southern California region, with numerous mapped faults traversing the region including the San Andreas, San Jacinto, and Elsinore Fault Zones. Figure 5 of the *Preliminary Geological and Geotechnical Assessment Report* (Appendix G of this EIR) shows the location of nearby faults relative to the project site. There is an unnamed fault (Unnamed Creep-Active Fault) in the vicinity of the project site located approximately three miles northwest. USGS has classified this unnamed fault as "historic-well constrained" with an age of less than 150 years old (Appendix G of this EIR).

Seismic Ground Shaking

Ground shaking is the byproduct of an earthquake and is the energy created as rocks break and slip along a fault during an earthquake. The amount of ground shaking that an area may be subject to during an earthquake is related to the proximity of the area to the fault, the depth of the hypocenter (focal depth), location of the epicenter and the size (magnitude) of the earthquake. Soil type also plays a role in the intensity of shaking. Bedrock or other dense or consolidated materials are less prone to intense ground shaking than soils formed from alluvial deposition.

As the project site is located in the seismically active Southern California region, strong ground shaking can be expected at the project site during moderate to severe earthquakes in the general region.

Fault-Rupture Hazard

Surface rupture occurs when movement along a fault results in actual cracking or breaking of the ground along a fault during an earthquake; however, it is important to note that not all earthquakes result in surface rupture. Surface rupture almost always follows preexisting fault traces, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Fault creep is the slow rupture of the earth's crust. Sudden displacements are more damaging to structures because they are accompanied by shaking.

The California Geologic Survey (CGS) established criteria for faults as active, potentially active, and inactive. Active faults are those that show evidence of surface displacement within the last 11,000 years (Holocene age). Potentially active faults are those that demonstrate displacement within the past 1.6 million years (Quaternary age). Faults showing no evidence of displacement within the last 1.6 million years may be, in general, considered inactive for most structures, except for critical structures. In 1972 the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed, which required fault studies within 500 feet of active or potentially active faults. The Alquist-Priolo Act designates "active" and "potentially active" faults utilizing the same age criteria as that used by the CGS (Appendix G of this EIR).

The project site is not located within a currently delineated State of California Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zones are located approximately 0.7 miles (Route 247 Fault Zone) and 2.5 miles (Yuha Basin Faults) from the Big Rock 2 Cluster South site and Big Rock 2 Cluster West site, respectively. The likelihood of fault rupture at the project site is considered low (Appendix G of this EIR).

Liquefaction

The term liquefaction describes a phenomenon in which saturated, cohesionless soils temporarily lose shear strength (liquefy) when subjected to cyclic ground motions. Cyclic loading of saturated soils leads to the build-up of pore water pressure as a result of soil particles being rearranged with a tendency toward closer packing. Under undrained conditions, shaking of loose noncohesive soils may result in loads being transferred from the soil skeleton to the pore water with consequent reduction in the soil strength and stiffness. Structures founded on or above potentially liquefiable soils may experience bearing capacity failures due to the temporary loss of foundation support, vertical settlements (both total and differential), and/or undergo lateral spreading. The factors known to influence liquefaction potential include soil type, relative density, grain size distribution, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking. Liquefaction is most prevalent in loose- to medium-dense, silty, sandy, and gravelly soils below the groundwater table.

The project site has not been mapped for liquefaction potential by CGS. Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the project site (Appendix G of this EIR).

Landslides

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. The project site is relatively flat. Due to the existing topography, landslides are not considered a potential hazard for the project.

Lateral Spreading

Liquefaction-induced lateral spreading is defined as the lateral displacement of ground as a result of pore pressure build-up or liquefaction in shallow underlying soils during an earthquake. Lateral spreading can occur on sloping ground or where nearby slopes are present. The factors known to influence the magnitude of lateral spreading include earthquake magnitude, peak ground acceleration, distance between the project site and the seismic event, the slope height and gradient, thickness of the liquefied layer, fines content, soil particle gradation, and residual strength of the liquefied soil.

Based on a preliminary evaluation of on site subsurface conditions and general site topography, lateral spreading is not a considered a potential hazard on the project site.

Land Subsidence

Subsidence is the sinking of the ground surface caused by the compression of earth materials or the loss of subsurface soil due to underground mining, tunneling, or erosion. The major causes of subsidence include fluid withdrawal from the ground, decomposing organics, underground mining or tunneling, and placing large fills over compressible earth materials. The effective stress on underlying soils is increased resulting in consolidation and settlement. Subsidence may also be caused by tectonic processes.

The project site is not located in an area of known ground subsidence or within any delineated zones of subsidence due to groundwater pumping or oil extraction. However, according to the City of Calipatria's '2035 General Plan, natural subsidence occurs in the Salton Trough, averaging two inches

PC ORIGINAL PKG

per year in the Salton Sea and decreasing outward until it reaches zero near the Mexican border. Therefore, the potential for subsidence exists at the project site (Appendix G of this EIR).

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures. Based on available data, the onsite near-surface soil deposits primarily consist of granular soils (clayey sand and silty sands) and fine-grained soils (fat clay, lean clay, and silts). Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils.

Clays are expected to be found at the project site. Therefore, the potential for expansive soils exists at the project site.

Collapsible Soils

Collapsible soil is generally defined as soil that will undergo a sudden decrease in volume and its internal support is lost under applied loads when water is introduced into the soil. The internal support is considered to be a temporary strength and is derived from a number of sources including capillary tension, cementing agents, e.g. iron oxide and calcium carbonate, clay-welding of grains, silt bonds, clay bonds and clay bridges. Soils found to be most susceptible to collapse include loess (fine grained wind-deposited soils), valley alluvium deposited within a semi-arid to arid climate, and residual soil deposits.

At this time, it is unknown whether collapsible soils are present at the project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the project site is possible. As such, the potential for collapsible soils exists at the project site.

Corrosive Soils

Corrosive soils can damage underground utilities, including pipelines and cables, or weaken roadway structures. Generally, fine grained soils like clays are more likely to be corrosive. Fine grained and potentially corrosive soils are expected to be encountered at the project site.

Paleontological Resources

Paleontological resources (fossils) are the remains of prehistoric plant and animal life. Fossil remains, such as bones teeth, shell, and wood, are found in geologic deposits (rock formations) within which they were originally buried. Many paleontological fossil sites are recorded in Imperial County and have been discovered during construction activities. Paleontological resources are typically impacted when earthwork activities, such as mass excavation cut into geological deposits (formations) with buried fossils.

The project site is in the Salton Basin near the shoreline of ancient Lake Cahuilla. The lake covered much of the Imperial Valley and created an extensive lacustrine environment. Lake Cahuilla experienced several fill recession episodes before it finally dried up about 300 years ago. In 1905, the Colorado River overflowed into the Salton Basin creating the present-day Salton Sea. As previously mentioned above, the project site sits in a graben valley underlain by lacustrine deposits of ancient

Lake Cahuilla. Sediments from this formation have yielded fossilized remains of continental vertebrates, invertebrates, and plants at numerous previously recorded fossil sites in the Imperial Valley. Therefore, the project site is considered paleontologically sensitive.

3.7.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1977 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in November 1990 by NEHRP, which refined the description of agency responsibilities, program goals, and objectives.

NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards such as those to which the project would be required to adhere.

State

Alquist-Priolo Special Studies Earthquake Hazards Act

The Alquist-Priolo Special Studies Earthquake Hazards Act (APEHA) was passed into law following the destructive February 9, 1971 San Fernando earthquake. The APEHA provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the APEHA is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The state geologist (Chief of the California Division of Mines and Geology) is required to identify "earthquake fault zones" along known active faults in California. Counties and cities must withhold development permits for human occupancy projects within these zones unless geologic studies demonstrate that there would be no issues associated with the development of projects. The project site is not located within a currently mapped APEHA zone.

California Building Code

The California Building Standards Commission is responsible for coordinating, managing, adopting, and approving building codes in California. CCR Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment, known as building standards. The California Building Code (CBC) is based on the Federal Uniform Building Code used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The

California Health and Safety Code (HSC) Section and 18980 HSC Section 18902 give CCR Title 24 the name of California Building Standards Code. The updates to the 2022 California Building Standards Code were published on July 1, 2022, with an effective date of January 1, 2023.

Local

County of Imperial Land Use Ordinance

Title 9 Division 15 (Geological Hazards) of the County Land Use Ordinance has established procedures and standards for development within earthquake fault zones. Per County regulations, construction of buildings intended for human occupancy are prohibited across the trace of an active fault. An exception exists when such buildings located near the fault or within a designated Special Studies Zone are demonstrated through a geotechnical analysis and report not to expose a person to undue hazard created by the construction.

County of Imperial General Plan

The County of Imperial General Plan, Seismic and Public Safety Element identifies potential natural and human-induced hazards and provides policy to avoid or minimize the risk associated with hazards. The Seismic and Public Safety Element identifies 'lifelines and critical facilities' whose disruption could endanger the public safety. Lifelines are defined as networks of services that extend over a wide area and are vital to the public welfare, and can be classified into four categories: energy, water, transportation, and communications. The IID has a formal Local Hazard Mitigation Plan ~~Disaster Readiness Standard Operating Procedure~~ for the Water Department, Power Department, and the entire District staff for response to earthquakes and other emergencies.

Table 3.7-1 analyzes the consistency of the project with specific policies contained in the County of Imperial General Plan associated with geology, soils, and seismicity. While this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.7-1. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Seismic and Public Safety Element		
Goal 1. Integrate public health and resilience into land use planning.	Consistent	Division 15 of the County Land Use Ordinance has established procedures and standards for development within earthquake fault zones. Per County regulations, construction of buildings intended for human occupancy which are located across the trace of an active fault are prohibited. An exception exists when such buildings located near the fault or within a designated Special Studies Zone are demonstrated through a geotechnical analysis and report not to expose a person to undue hazard created by the construction.
Policy 1.1. Incorporate data on areas with geological and seismic hazards into the land use review process and future development processes. As development is proposed, developers shall be required to provide information related to these hazards.		
Policy 1.3. Regulate development adjacent to or near all mineral deposits and geothermal operations.		

PC ORIGINAL PKG

Table 3.7-1. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Policy 1.4. Require seismic risks be avoided, when feasible, and mitigation measures, commensurate with risks, be taken to reduce injury, loss of life, destruction of property, and disruption of service.		Since the project site is located in the seismically active Southern California region, the project is required to be designed in accordance with the CBC. With implementation of the mitigation requirements outlined in the impact analysis, the risks associated with seismic hazards would be minimized. A preliminary geotechnical study has been prepared for the proposed project. The preliminary geotechnical study has been referenced in this environmental document. Additionally, a design-level geotechnical investigation will be conducted to evaluate the potential for site specific hazards associated with seismic activity.
Goal 2: Avoid loss of life, injury, and property damage from seismic and geologic hazards.		
Policy 2.2. Require new development in areas prone to geologic hazards (e.g., landslides, slope instability) to be adequately protected against these hazards. Any development in hillside areas shall prepare drainage plans to direct runoff and drainage away from potentially unstable slopes. New developments shall incorporate hillside design techniques and features to mitigate and support slope stability.		
Policy 2.5.. Require that geological and geotechnical investigations for new development proposals in areas with potential earthquake-induced liquefaction, landslides, or settlement. To the extent feasible, the County will limit intensive developments and land uses along rivers and waterways where it is likely that erosion could cause property damage or threaten life during high-precipitation events.		

Source: County of Imperial 2022

3.7.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to geologic and soil conditions, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to geology and soils are considered significant if any of the following occur:

PC ORIGINAL PKG

- Directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent AP Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault; (Refer to Division of Mines and Geology Special Publication 42)
    - Strong seismic ground shaking
    - Seismic related ground failure, including liquefaction
    - Landslides
- Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description, to interact with local geologic and soil conditions on the project site. A *Preliminary Geological and Geotechnical Assessment Report* (Appendix G of this EIR) was prepared for the project. The information obtained from the report was reviewed and summarized to present the existing geologic and soil conditions on the project site. This analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

Impact Analysis

Impact 3.7-1 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Rupture of a known earthquake fault, as delineated on the most recent AP Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault; (Refer to Division of Mines and Geology Special Publication 42)?

As previously discussed above, the project site is located in the seismically active Imperial Valley of southern California with several mapped faults of the San Andreas Fault System traversing the region. The project site is not located on an active fault. Furthermore, no portion of the project site is within a designated APEHA zone, and, therefore, the potential for ground rupture to occur within the project site is considered low. The project would not increase or exacerbate existing hazards related to fault rupture. The proposed project would not directly or indirectly cause potential substantial adverse

effects, including the risk of loss, injury or death involving rupture of a major fault as delineated on the most recent Alquist-Priolo Fault Zoning map. This impact would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.7-2 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Strong seismic ground shaking?

The closest mapped fault to the project site is an unnamed fault (Unnamed Creep-Active Fault) which is approximately three miles to the northwest. In the event of an earthquake along this fault or another regional fault, seismic hazards related to ground motion could occur in susceptible areas within the project site. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment magnitude, and the duration of shaking.

Even with the integration of building standards that are designed to resist the effects of strong ground motion, ground shaking within the project site could cause some structural damage to the facility structures or, at least, cause unsecured objects to fall. During a stronger seismic event, ground shaking could result in structural damage or collapse of electrical distribution facilities. Given the potentially hazardous nature of the project facilities, the potential impact of ground motion during an earthquake is considered a significant impact, as proposed structures, such as the substation and transmission lines could be damaged. However, implementation of Mitigation Measure GEO-1, which requires preparation of a design-level geotechnical report, would reduce the potential impacts associated with ground shaking to a level less than significant.

Mitigation Measure(s)

GEO-1 **Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures.** Facility design for all project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following:

- Site preparation
- Soil bearing capacity
- Appropriate sources and types of fill
- Potential need for soil amendments
- Structural foundations
- Grading practices
- Soil corrosion of concrete and steel
- Erosion/winterization
- Seismic ground shaking

PC ORIGINAL PKG

- Liquefaction
- Expansive/unstable soils

In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with strong seismic ground shaking would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

Impact 3.7-3 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Seismic related ground failure, including liquefaction?

As previously discussed above, the project site has not been mapped for liquefaction potential by the CGS (Appendix G of this EIR). Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content on the project site. Therefore, the potential for liquefaction exists at the project site. Additional geotechnical investigation would be required during the design phase of the project in order to assess the risk of liquefaction on the project site. The potential impact on liquefaction is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impact associated with liquefaction to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with liquefaction would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

Impact 3.7-4 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Landslides?

The project site has a relatively flat topographic gradient. Therefore, the project would not directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving landslides and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.7-5 Would the project result in substantial soil erosion or the loss of topsoil?

During the site grading and construction phases, large areas of unvegetated soil would be exposed to erosive forces by water for extended periods of time due to ICAPCD dust suppression requirements. Unvegetated soils are much more likely to erode from precipitation than vegetated areas because plants act to disperse, infiltrate, and retain water. Construction activities will involve demolition and grubbing, grading of the project site to establish access roads and pads for electrical equipment, trenching for underground electrical collection lines, and the installation of solar equipment and security fencing which could result in increased erosion and sedimentation to surface waters. Construction could produce sediment-laden stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality. If precautions are not taken to contain contaminants, construction-related erosion impacts are considered a significant impact.

As provided in Mitigation Measure GEO-1, during final engineering for the project, a design-level geotechnical study would identify appropriate measures for the project related to soil erosion. In addition, as part of Mitigation Measure HYD-1 provided in Section 3.10 Hydrology/Water Quality, potential impacts from erosion during construction activities would be reduced to a level less than significant with the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for sediment and erosion control and implementation of best management practices (BMPs) to reduce erosion from the construction site.

The project is not expected to result in substantial soil erosion or the loss of topsoil over the long term. The project applicant would be required to implement on-site erosion control measures in accordance with County standards, which require the preparation, review, and approval of a grading plan by the County. Therefore, with implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 identified in Section 3.10 Hydrology/Water Quality, impacts from construction-related erosion would be reduced to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 and Mitigation Measure HYD-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 in Section 3.10 Hydrology/Water Quality, potential impacts from erosion during construction activities would be

PC ORIGINAL PKG

reduced to a level less than significant with the preparation of a SWPPP and implementation of BMPs to reduce erosion from the construction site.

Impact 3.7-6 Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Landslides. The project site has a relatively flat topographic gradient. Therefore, the project would not result in on- or off-site landslides and no impact would occur.

Lateral Spreading. Based on a preliminary evaluation of on site subsurface conditions and general site topography, lateral spreading is not a considered a potential hazard on the project site. However, in areas where project components are planned adjacent to existing channels, there could be potential lateral spreading issues that may require further evaluation in future design phases. Additional geotechnical investigation would be required in order to assess the risk of lateral spreading to occur on the project site. The potential impact associated with lateral spreading is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with lateral spreading to a level less than significant.

Land Subsidence. The project site is not located in an area of known ground subsidence or within any delineated zones of subsidence due to groundwater pumping or oil extraction. However, according to the City of Calipatria's 2035 General Plan, natural subsidence occurs in the Salton Trough. Therefore, the potential for subsidence exists at the project site (Appendix G of this EIR). Additional geotechnical investigation would be required in order to assess the risk of subsidence to occur on the project site. The potential impact associated with subsidence is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with subsidence to a level less than significant.

Liquefaction. As described above, the project site has not been mapped for liquefaction potential by CGS. Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the project site (Appendix G of this EIR). Additional geotechnical investigation would be required in order to assess the risk of liquefaction on the project site. Therefore, the potential impact on liquefaction is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with liquefaction to a level less than significant.

Collapsible Soils. It is unknown whether collapsible soils are present on the project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the project site is possible. As such, the potential for collapsible soils exists at the project site. Additional geotechnical investigation would be required in order to assess the risk of collapsible soils to occur on the project site. The potential impact associated with collapsible soils is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with collapsible soils to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with lateral spreading, subsidence, liquefaction, and collapsible soils would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

Impact 3.7-7 Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

As stated above, expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures. Based on the available data, the onsite near-surface soil deposits primarily consist of granular soils (clayey sand and silty sands) and fine-grained soils (fat clay, lean clay, and silts). Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils. Clays are expected to be found at the project site. Therefore, the potential for expansive soils exists at the project site. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures and electrical connections producing shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material. These conditions could be worsened if structural facilities are constructed directly on expansive soil materials. This potential impact would be significant as structures could be damaged by these types of soils.

In addition, fine grained and potentially corrosive soils are expected to be encountered at the project site. Corrosive soils can damage underground utilities, including pipelines and cables, or weaken roadway structures. Generally, fine grained soils like clays are more likely to be corrosive. A site-specific geotechnical investigation would be required at the project site to determine the extent and effect of problematic soils. Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce potential impacts associated with expansive and corrosive soils to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with expansive and corrosive soils would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

PC ORIGINAL PKG

Impact 3.7-8 Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project applicant is proposing the use of a standard on-site septic tank and leach field for the treatment and disposal of on-site generated sanitary wastewater. This would occur only at the O&M building. Site specific studies will be required to determine that County Environmental Health standards are met in regard to soil percolation rates and separation of leach fields from groundwater.

Notwithstanding these design requirements, potential equipment failures or wastewater loading rates in excess of the design capacity of the treatment and disposal system could lead to water quality degradation. This potential impact is considered significant. Implementation of Mitigation Measure GEO-2 would reduce the impact associated with on-site water treatment and disposal to a level less than significant.

Mitigation Measure(s)

GEO-2 **Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements.** The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.

Significance after Mitigation

With implementation of Mitigation Measure GEO-2, potential impacts related to infiltration of wastewater into the soil column and water quality degradation would be reduced to a less than significant level through compliance with County performance standards.

Impact 3.7-9 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is in the Salton Basin near the shoreline of ancient Lake Cahuilla. The lake covered much of the Imperial Valley and created an extensive lacustrine environment. Lake Cahuilla experienced several fill recession episodes before it finally dried up about 300 years ago. In 1905, the Colorado River overflowed into the Salton Basin creating the present-day Salton Sea. As previously mentioned above, the project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla. Sediments from this formation have yielded fossilized remains of continental vertebrates, invertebrates, and plants at numerous previously recorded fossil sites in the Imperial Valley. Therefore, the project site is considered paleontologically sensitive.

Although unlikely, project construction has the potential to unearth and/or potentially destroy previously undiscovered paleontological resources. Surficial sediments that have been disturbed by agricultural activities or other human-made disturbances have low paleontological resource sensitivity

and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments would be considered a potentially significant impact. However, implementation of Mitigation Measure GEO-3 and GEO-4 would reduce the potential impact on paleontological resources to a level less than significant.

Mitigation Measure(s)

GEO-3 **Paleontological Resources Monitoring.** Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

GEO-4 **Paleontological Resources Worker Awareness Program.** Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.

PC ORIGINAL PKG

Significance after Mitigation

Implementation of Mitigation Measure GEO-3 and GEO-4 would reduce the potential impact on paleontological resources to a level less than significant. Mitigation Measure GEO-3 requires a qualified paleontological monitor to be present during excavation activities associated with project construction. The paleontological monitor will be equipped to salvage fossils as they are unearthed and are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Mitigation Measure GEO-4 requires all construction personnel to attend and complete a WEAP training, which will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance.

3.7.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Decommissioning and restoration of the project site at the end of its use as a solar facility would involve the removal of structures and restoration to prior (pre-solar project) conditions. No geologic or soil impacts associated with the restoration activities would be anticipated, and, therefore, no impact is identified.

No impact is anticipated from restoration activities as the ground disturbance and associated impacts on paleontological resources will have occurred during the construction phase of the project.

Residual

With implementation of Mitigation Measure GEO-1, impacts related to strong seismic ground shaking, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, and corrosive soils would be reduced to a level less than significant. With implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 in Section 3.10 Hydrology/Water Quality, potential impacts from erosion during construction activities would be reduced to a level less than significant. With the implementation of Mitigation Measure GEO-2, impacts resulting from new on-site wastewater treatment and disposal systems would be reduced to a less than significant level. Implementation of Mitigation Measure GEO-3 and GEO-4 would reduce the potential impact on paleontological resources to a level less than significant. The project would not result in residual significant and unmitigable impacts related to geology and soil resources.

This page is intentionally blank.

PC ORIGINAL PKG

3.8 Greenhouse Gas Emissions

This section includes an overview of existing greenhouse gas (GHG) emissions within the project area and identifies applicable federal, state, and local policies related to global climate change. The impact assessment provides an evaluation of potential adverse effects with regards to GHG emissions based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. Information contained in this section is summarized from the *Air Quality and Greenhouse Gas Emissions Technical Report* prepared by HDR Engineering, Inc. This report is included in Appendix D of this EIR.

3.8.1 Existing Conditions

Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the GHGs.

Water Vapor. Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher, leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere.

Carbon Dioxide. The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, each of these activities has increased in scale and distribution Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm).The International Panel on Climate Change (IPCC) indicates that concentrations were 379 ppm in 2005, an increase of more than 30 percent. Left unchecked, the IPCC projects that concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. This could result in an average global temperature rise of at least two degrees Celsius or 3.6 degrees Fahrenheit.

Methane. CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO_2. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO_2, N_2O, and CFCs). CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is also commonly used as an aerosol spray propellant.

Chlorofluorocarbons. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons. Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons. Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride. Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO_2. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols. Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

PC ORIGINAL PKG

Greenhouse Gas Emissions Inventory

CARB compiles GHG inventories for the State of California. The most updated inventory is referred to as the 2023 edition, which reports the State's GHG emissions inventory from calendar year 2021. Based on the 2021 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 381.3 $MMTCO_2e$ including emissions resulting from imported electrical power (Appendix D of this EIR). According to CARB, as of 2016, statewide GHG emissions dropped below the 2020 GHG Limit (431 $MMTCO_2e$) and have remained below the limit since that time, due in part to the state's GHG reduction programs (such as the RPS, Low Carbon Fuel Standard (LCFS), vehicle efficiency standards, and declining caps under the Cap and Trade Program). Table 3.8-1 identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2021 (i.e., the most recent year in which data are available from CARB) (Appendix D of this EIR). As shown in Table 3.8-1, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 38 percent in 2021.

Table 3.8-1. State of California Greenhouse Gas Emissions

Category	Total 1990 Emissions ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2021 Emissions ($MMTCO_2e$)	Percent of Total 2021 Emissions
Transportation	150.7	35%	145.6	38%
Electric Power	110.6	26%	62.4	16%
Commercial	14.4	3%	12.2	4%
Residential	29.7	7%	24.8	7%
Industrial	103.0	24%	73.9	19%
Recycling and Waste [a]	–	–	8.4	2%
High-GWP/Non-Specified [b]	1.3	<1%	21.3	6%
Agriculture/Forestry	23.6	6%	30.9	8%
Forestry Sinks [c]	-6.7		--	--
Net Total (IPCC AR4) [d]	**431**	**100%**	**381.3**	**100%**

Source: Appendix D of this EIR

[a] Included in other categories for the 1990 emissions inventory.

[b] High-GWP gases are not specifically called out in the 1990 emissions inventory.

[c] Revised methodology under development (not reported for 2021).

[d] CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California.

PC ORIGINAL PKG

The California Natural Resources Agency's Fourth Climate Change Assessment (Fourth Assessment) produced updated climate projections that provide state-of-the-art understanding of different possible climate futures for California. The science is highly certain that California (and the world) will continue to warm and experience greater impacts from climate change in the future. While the IPCC and the National Climate Assessment have released descriptions of scientific consensus on climate change for the world and the U.S., respectively, the Fourth Assessment summarizes the current understanding of climate impacts and adaptation options in California (California Natural Resources Agency 2018). Projected changes in California include:

- **Temperatures:** If GHG emissions continue at current rates then California will experience average daily high temperatures that are warmer than the historical average by:
  - 2.7 Fahrenheit (°F) from 2006 to 2039
  - 5.8°F from 2040 to 2069
  - 8.8°F from 2070 to 2100
- **Wildfire:** One Fourth Assessment model suggests large wildfires (greater than 25,000 acres) could become 50 percent more frequent by the end of century if emissions are not reduced. The model produces more years with extremely high areas burned, even compared to the historically destructive wildfires of 2017 and 2018. By the end of the century, California could experience wildfires that burn up to a maximum of 178 percent more acres per year than current averages.
- **Sea-Level Rise:** If emissions continue at current rates, the Fourth Assessment model results indicate that total sea-level rise by 2100 is expected to be 54 inches, almost twice the rise that would occur if GHG emissions are lowered to reduce risk.
- **Snowpack:** By 2050, the average water supply from snowpack is projected to decline to 2/3 from historical levels. If emissions reductions do not occur, water from snowpack could fall to less than 1/3 of historical levels by 2100. It should be noted that the sole source of water for IID (and the project) is the Colorado River, which is not affected by the California snowpack.
- **Agriculture:** Agricultural production could face climate-related water shortages of up to 16 percent in certain regions. Regardless of whether California receives more or less annual precipitation in the future, the state will be dryer because hotter conditions will increase the loss of soil moisture (California Natural Resources Agency 2018).

3.8.2 Regulatory Setting

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

Federal

At the federal level, there is currently no overarching law related to climate change or the reduction of GHGs. The U.S. EPA is developing regulations under the CAA to be adopted in the near future, pursuant to the U.S. EPA's authority under the CAA. Foremost amongst recent developments have been the settlement agreements between the U.S. EPA, several states, and nongovernmental organizations (NGO) to address GHG emissions from electric generating units and refineries; the U.S. Supreme Court's decision in Massachusetts v. EPA; and U.S. EPA's "Endangerment Finding," "Cause or Contribute Finding," and "Mandatory Reporting Rule." On September 20, 2013, the U.S. EPA issued

a proposal to limit carbon pollution from new power plants. The U.S. EPA is proposing to set separate standards for natural gas-fired turbines and coal-fired units.

Although periodically debated in Congress, no federal legislation concerning GHG limitations has yet been adopted. In Coalition for Responsible Regulation, Inc., et al. v. EPA, the United States Court of Appeals upheld the U.S. EPA's authority to regulate GHG emissions under CAA. Furthermore, under the authority of the CAA, the EPA is beginning to regulate GHG emissions starting with large stationary sources. In 2010, the U.S. EPA set GHG thresholds to define when permits under the New Source Review Prevention of Significant Deterioration (PSD) standard and Title V Operating Permit programs are required for new and existing industrial facilities. In 2012, U.S. EPA proposed a carbon pollution standard for new power plants.

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy (CAFE) standards were first introduced by Congress in 1975 to help reduce the country's dependence on foreign oil. CAFE standards are regulated by Department of Transportation's National Highway Traffic and Safety Administration (NHTSA). NHTSA sets and enforces the CAFE standards, while the USEPA calculates average fuel economy levels for manufacturers, and also sets related GHG standards. The regulations have become more stringent over time. The regulations at first applied only to passenger cars in 1978, then included light duty trucks up to 6,000 pounds in 1980, and finally increased to all vehicles up to 8,500 pounds the next year. Regulations varied during the 1980s for both cars and trucks before reaching a steady target for cars in 1990 through 2010, with trucks moderately increasing during the period from 20 to 21 miles per gallon (mpg) through 2005, then reaching 23.5 mpg by 2010.

On April 1, 2010, the USEPA and the NHTSA announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States. This rule required passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet fuel economy standards. In 2011, the USEPA and NHTSA issued a final rule for the first national standards to improve fuel efficiency of medium- and heavy-duty trucks and buses.

In 2020, the USEPA and NHTSA, issued the Safer Affordable Fuel Efficient (SAFE) Vehicles Rule which set new CAFE targets and tailpipe CO_2 emissions standards for passenger cars and lights trucks that increase 1.5 percent in stringency each year from model years 2021 through 2026. In 2021, President Biden signed an executive order (EO) directing the government to revise fuel economy standards, with the goal of further reducing emissions. NHTSA finalized the CAFE Standards for model years 2024-2026 in 2022. The final rule establishes standards that would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026 (NHTSA 2022). NHTSA projects the standards will cut greenhouse gases from the atmosphere, reduce air pollution, and reduce the country's dependence on oil (NHTSA 2021).

On July 28, 2023, NHTSA announced a proposal for new CAFE standards for passenger cars and light trucks built in model years 2027-2032, and new fuel efficiency standards for heavy-duty pickup trucks and vans built in model years 2030-2035. If finalized, the proposal would require an industry fleet-wide average of approximately 58 miles per gallon for passenger cars and light trucks in MY 2032, by increasing fuel economy by 2 percent year over year for passenger cars and by 4% year over year for light trucks. For heavy-duty pickup trucks and vans, the proposal would increase fuel efficiency by 10 percent year over year.

State

Executive Order S-3-05 – Statewide Greenhouse Gas Emissions Targets

On June 1, 2005, the Governor issued EO S-3-05 which set the following GHG mission reduction targets:

- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

This EO directed the secretary of the California EPA to oversee the efforts made to reach these targets, and to prepare biannual biennial reports on the progress made toward meeting the targets and on the impacts on California related to global warming. The first such Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years thereafter. This goal was further reinforced with the passage of AB 32 in 2006 and SB 32 in 2016.

Executive Order S-01-07

This order, signed by Governor Schwarzenegger, sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

Executive Order B-30-15

On April 20, 2015, Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. California's emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius, the warming threshold at which there will likely be major climate disruptions such as super droughts and rising sea levels.

Executive Order B-55-18

EO B-55-18, signed on September 10, 2018, established a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The EO requires the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bill 32 – California Global Warming Solutions Act

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlines measures to meet the 2020 GHG reduction goals. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by the end of 2020.

PC ORIGINAL PKG

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2017 Scoping Plan Update, addresses the 2030 target established by Senate Bill (SB) 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by Executive Order (EO) B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Renewable Portfolio Standard

The RPS promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "initial RPS"), the goals have been accelerated and increased by EOs S-14-08, S-21-09, SB 350, and SB 100.

The RPS is included in CARB's Scoping Plan list of GHG reduction measures to reduce energy sector emissions. It is designed to accelerate the transformation of the electricity sector through such means as investment in the energy transmission infrastructure and systems to allow integration of large quantities of intermittent wind and solar generation. Increased use of renewables would decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector.

Senate Bill 350

The RPS program was further accelerated in 2015 with SB 350 which mandated a 50 percent RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65 percent of RPS procurement to be derived from long-term contracts of 10 or more years.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. California must procure 100 percent of its energy from carbon free energy sources by the end of 2045.

Climate Change Scoping Plan

The Scoping Plan released by CARB in 2008 outlined the state's strategy to achieve the AB 32 goals. This Scoping Plan, developed by CARB in coordination with the Climate Action Team, proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by CARB at its meeting in December 2008. According to the Scoping Plan, the 2020 target of 427 million $MTCO_2e$ requires the reduction of 169 million $MTCO_2e$, or approximately 28.3 percent, from the state's projected 2020 BAU emissions level of 596 million $MTCO_2e$.

However, in August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document. This document includes expanded analysis of project alternatives as well as updates the 2020 emission projections in light of the current economic forecasts. Considering the updated 2020 BAU estimate of 507 million $MTCO_2e$, only a 16 percent reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions.

In May 2014, CARB developed; in collaboration with the Climate Action Team, the *First Update to California's Climate Change Scoping Plan* (Update), which shows that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In accordance with the United Nations Framework Convention on Climate Change (UNFCCC), CARB is beginning to transition to the use of the AR4's 100-year GWPs in its climate change programs. CARB has recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 million $MTCO_2e$; therefore, the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 million $MTCO_2e$ in the initial Scoping Plan.

CARB adopted the latest update to the Climate Change Scoping Plan in December 2022. ~~in December 2017~~. The *2022 Scoping for Achieving Carbon Neutrality* (2022 Scoping Plan) (CARB 2022) was adopted by CARB in November 2022. The 2022 Scoping Plan lays out a path for California to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

~~The 2017 Scoping Plan is guided by the EO B-30-15 GHG reduction target of 40 percent below 1990 levels by 2030. The 2017 Scoping Plan builds upon the framework established by the initial Scoping Plan and the First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources (CARB 2017).~~

~~The majority of the Scoping Plan's GHG reduction strategies are directed at the two sectors with the largest GHG emissions contributions: transportation and electricity generation. The GHG reduction~~

~~strategies for these sectors involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities. The reduction strategies employed by CARB are designed to reduce emissions from existing sources as well as future sources.~~

Senate Bill 97

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs Office of Planning and Research (OPR) to develop draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" by July 1, 2009, and directs the Resources Agency to certify and adopt the CEQA Guidelines by January 1, 2010.

On December 30, 2009, the Natural Resources Agency adopted amendments to the CEQA Guidelines in the CCR. The amendments went into effect on March 18, 2010, and are summarized below:

- Climate action plans and other GHG reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the GHG emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. In addition, consideration of several qualitative factors may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. The Guidelines do not set or dictate specific thresholds of significance.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of GHG emissions in Appendix G of the CEQA Guidelines.
- The Guidelines are clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- The Guidelines promote the advantages of analyzing GHG impacts on an institutional, programmatic level, and, therefore, approve tiering of environmental analyses and highlights some benefits of such an approach.
- EIRs must specifically consider a project's energy use and energy efficiency potential, pursuant to Appendix F of the CEQA Guidelines.

Senate Bill 375 – Regional Emissions Targets

SB 375 requires that regions within the state which have a metropolitan planning organization (MPO) must adopt a sustainable communities' strategy as part of their RTPs. The strategy must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that "it will be necessary to achieve significant additional GHG reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 provides that new CEQA provisions be enacted to encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32," and that "current planning models and analytical techniques used

for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives."

Regional

Southern California Association of Governments - ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The SCAG is the designated MPO for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

~~In September 2020, SCAG adopted the 2020-2045 RTP/SCS. The RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the NAAQS as set forth by the federal CAA (see Section 3.4, Air Quality, of this EIR). The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality~~

As a solar generation facility, the proposed project would improve air quality by reducing the use of fossil fuels in energy production.

Imperial Valley Regional Climate Action Plan

The Imperial County Transportation Commission is currently developing a Regional Climate Action Plan (RCAP), which is a strategy for how the region will work toward reducing its GHG emissions in accordance with statewide targets. The Imperial County Transportation Commission is committed to a collaborative and inclusive process and is conducting extensive outreach about the strategies that are to be included within the RCAP. The RCAP encompasses all of Imperial Valley, including Imperial County, and the seven incorporated cities: Calipatria, Calexico, Brawley, El Centro, Holtville, Imperial, and Westmorland. The RCAP is intended to facilitate the reduction of GHG emissions throughout Imperial County in a way that is practical, efficient, and beneficial to the community and enhances Imperial County's desirable characteristics and qualities. The foundation for developing emission reduction and climate adaptation measures will be based on the County's existing work, as detailed in the region's extensive plans and programs. The RCAP has not been finalized or adopted nor has it been qualified in accordance with CEQA Guidelines Section 15183.5 but is included for disclosure purposes.

Local

County of Imperial

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the CEQA Guidelines to provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts. Formal CEQA thresholds for lead agencies must always be established through a public hearing process. Imperial County has not established formal quantitative or qualitative thresholds through a public rulemaking process, but CEQA permits the lead agency to establish a project-specific threshold of significance if backed by substantial evidence, until such time as a formal threshold is approved.

3.8.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to GHG emissions are considered significant if any of the following occur:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs

As discussed in Section 15064.4 of the CEQA Guidelines, the determination of the significance of GHG emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

1. Quantify greenhouse gas emissions resulting from a project; and/or
2. Rely on a qualitative analysis or performance based standards.

A lead agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

South Coast Air Quality Management District Significance Threshold

The ICAPCD has not adopted a GHG significance threshold. As previously described, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). Thus, in the absence of any GHG emissions significance thresholds, the County has relied upon the SCAQMD quantitative thresholds, as discussed below.

In December 2008, the SCAQMD adopted a 10,000 $MTCO_2e$ per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards applicable to this project, the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is the most relevant GHG significance threshold and is used as a benchmark for the proposed project. It should be noted that the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold (Appendix D of this EIR).

A project is considered to have a significant impact and cumulatively considerable impact if it exceeds the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year.

PC ORIGINAL PKG

Methodology

The project-related direct and indirect emissions of GHGs were estimated using the similar methods for quantification of criteria air pollutants, as described in Section 3.4 Air Quality. Emissions were estimated using existing conditions, project construction and operations information, as well as a combination of emission factors from various sources. Where GHG emission quantification was required, emissions were modeled using the CalEEMod, version 2022. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects.

Impact Analysis

Impact 3.8-1 Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and operation of the project would result in a relatively small amount of GHG emissions. The project would generate GHG emissions during construction and routine operational activities at the Project site.

Construction. During construction, GHG emissions would be generated from the operation of off-road equipment, haul-truck trips, and on-road worker vehicle trips. Table 3.8-2 shows the project's unmitigated and mitigated construction-related GHG emissions. During the approximate 24-month construction period, the proposed project would generate an estimated 3,470 $MTCO_2e$, or approximately 116 $MTCO_2e$ annually amortized over a 30-year period. Therefore, the proposed project's construction emissions are less than the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year and this is considered a less than significant impact.

Table 3.8-2. Annual Construction GHG Emissions ($MTCO_2e$ per year)

Year/Description	GHG Emissions
2026	2,666
2027	691
2050	2,016
Project Total	3,357
Amortized Construction Emissions	**112**

Source: Appendix D of this EIR

Operation. Once the project is constructed and operational, the proposed project would have minimal amounts of emissions generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. It is assumed the project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects. This would thereby reduce the project's on-site staff to below the anticipated 4 to 10 full-time employees. Additionally, there are no expected sources of stationary emission sources (i.e. emergency generators). Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and operational GHG emissions would be less than significant.

As shown in Table 3.8-2, the estimated total GHG emissions for the project would not exceed the SCAQMD threshold of 10,000 MT CO_2e per year. Projects below this significance criterion would have

a minimal contribution to global emission and are considered to have less than significant impacts. Therefore, construction and operational GHG impacts associated with the project would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.8-2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

As discussed in Impact 3.8-1, the proposed project would generate a relatively small amount of GHG emissions. The project would generate an incremental contribution to and a cumulative increase in GHG emissions, however, the proposed project-generated GHG emissions would not exceed the SCAQMD significance threshold, which was prepared with the purpose of complying with statewide GHG-reduction efforts. Below is a discussion of the proposed project's consistency with the 2022 Scoping Plan Update, the 2020-2045 RTP/SCS, and Imperial Valley Climate Action Plan.

2022 Scoping Plan Update

The 2022 Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions.

Many of the measures and programs included in the 2022 Scoping Plan would result in the reduction of project-related GHG emissions, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (low-carbon fuel standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy). Although the project would introduce GHGs into the environment, once construction is complete, the project would be a producer of renewable energy, which generates substantially less GHG emissions compared with the more common types of fossil-fueled energy generation facilities. It is anticipated the project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The contribution of renewable resource energy production to meet the goals of the Renewable Portfolio Standard (Scoping Plan Measure E-3) and would result in a net cumulative reduction of GHG emissions, a key environmental benefit (Scoping Plan Measure E-3, Renewable Portfolio Standard, of the Climate Change Scoping Plan requires that all investor-owned utility companies generate 60 percent of their energy demand from renewable sources by year 2030). Therefore, the short-term minor generation of GHG emissions during construction, which is necessary to create a new, low-GHG-emitting power-generating facility, as well as the negligible amount generated during ongoing maintenance operations, would be more than offset by GHG emission reductions associated with solar-generated energy during operation. As such, the project is consistent with measures in the 2022 Scoping Plan.

2020-2045 RTP/SCS

At the regional level, the 2020–2045 RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs. Typically, a project would be consistent with the RTP/SCS if the project does not exceed the underlying growth. assumptions within the RTP/SCS. As previously discussed, the project would include 4 to 10 new employees and would be consistent with the growth projections for the air quality management plan. Therefore, the project would not conflict with implementation of the strategies identified in the 2020 RTP/SCS to reduce GHG emissions.

PC ORIGINAL PKG

Imperial Valley Regional Climate Action Plan

As previously mentioned, the RCAP has not been adopted nor been qualified in accordance with CEQA Guidelines. However, the project would be consistent with Strategy E-2: Increase Renewable and Zero-Carbon Energy Generation, and Strategy E-3: Develop Clean Energy Jobs within the RCAP, as it is a solar project and would generate 4 to 10 new jobs. Therefore, the project would not conflict with the RCAP.

Given the project's consistency analysis with applicable GHG plans, policies and regulations adopted for the purpose of reducing GHG emissions and emissions below the significance threshold, impacts would be less than significant. While the project would emit some GHG emissions during construction and a very small amount during operations, the contribution of renewable resource energy production to meet the goals of the RPS (Scoping Plan Measure E-3) would result in a net cumulative reduction of GHG emissions, a key environmental benefit. Scoping Plan Measure E-3 of the Climate Change Scoping Plan requires that all investor-owned utility companies generate 60 percent of their energy demand from renewable sources by the year 2030. Therefore, the short-term minor generation of GHG emissions during construction which is necessary to create a new, low-GHG emitting power-generating facility, as well as the negligible amount generated during ongoing maintenance operations, would be more than offset by GHG emission reductions associated with solar-generated energy during operation.

Furthermore, increasing sources of solar energy is one of the measures identified under the Scoping Plan to reduce statewide GHG emissions. The proposed project would reduce GHG emissions in a manner consistent with SB 32 and other California GHG-reducing legislation by creating a new source of solar power to replace the current use of fossil-fuel power and reduce GHG emissions associated with power generation and use. Implementation of the proposed project would result in a less than significant impact associated with the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHG.

Mitigation Measure(s)

No mitigation measures are required.

3.8.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

Similar to construction activities, decommissioning and restoration would result in GHG emissions below allowable thresholds. Construction activities during decommissioning and restoration would adhere to Mitigation Measures AQ-1 and AQ-2 outlined in Section 3.4, Air Quality of this EIR, further reducing GHG emissions. Therefore, the impact is considered less than significant.

Residual

The proposed project's GHG emissions would result in a less than significant impact. Project operation, subject to the provision of CUPs, would generally be consistent with statewide GHG emission goals and policies including SB 32. Project consistency with applicable plans, policies, and regulations adopted to reduce GHG emissions would ensure that the project would not result in any residual significant and unavoidable impacts with regards to global climate change.

This page is intentionally blank.

PC ORIGINAL PKG

3.9 Hazards and Hazardous Materials

This section addresses potential hazards and hazardous materials for construction and operational impacts. Information contained in this section is summarized from the *Phase I Environmental Site Assessment* prepared by HDR. This report is included as Appendix H of this EIR.

3.9.1 Existing Conditions

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Phase I ESA

The Phase I ESA prepared for the project site was used to assess the potential hazards and hazardous materials found on-site or adjacent to the project site. The Phase I ESA included a records review, site reconnaissance, and interviews, which are summarized below.

Records Review

A review of historic aerial photographs, historic topographic maps, historic Sanborn Fire Insurance maps, governmental regulatory databases, and other regulatory and agency databases was performed to evaluate potential adverse environmental conditions resulting from previous ownership and uses of the project site.

Historical aerial photographs were reviewed from the EDR Aerial Photo Decade Package for the following years: 1937, 1949, 1953, 1976, 1985, 1996, 2002, 2006, 2009, 2012, 2016, and 2020. In 1937, the project site and adjacent properties were used for agricultural practices or were undeveloped floodplains/sloughs, alluvial fans/terraces, and arid shrublands. In 1953, the floodplain/slough areas located in the north-central portion of the project site and on adjacent properties were starting to be converted to agricultural land. The 1976 aerial photograph shows the project site and surrounding properties as being similar to the current agricultural use. Additionally, the irrigation canals in the north-central and eastern portions of the project site had been modified. In 2002, the property on the western boundary of the project site that burned down was no longer visible. The 2016 aerial photograph shows solar developments in alignment with the existing solar facilities. No substantial changes were noted in the 1949, 1984, 1996, 2006, 2009, 2012, and 2020 aerial photographs.

EDR was contracted by HDR to complete a database search of federal, state, local, and tribal environmental records for the project site. The database search was performed for the project site by

EDR on September 30, 2024. The databases searched included federal, state, local, tribal, and EDR proprietary databases for listings located within the project site, and an additional 1-mile search buffer zone. A complete copy of the EDR environmental database report and detailed maps are included in the Phase I ESA (Appendix H of this EIR).

The environmental database search identified 13 mapped listings for 8 sites within the project site, and 11 listings within the 1-mile search buffer. The listings within the project site and many of the listings within the search buffer were determined to be incorrectly mapped and are actually outside of the project site vicinity based on further review. The majority of these database listings were for the generation of regulated and/or hazardous wastes. Only one site, Jerry Preece Jr. Farms, located west of the project site at 2396 W Vaughn Road had any reported violations associated with waste/chemical storage and disposal, including violations for open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. Five violations remain open for this site, which is located northeast of the Big Rock 2 Cluster West site. A review of the violations indicates that conditions noted are generally localized to this property and are unlikely to impact the project site. Therefore, this is not considered a recognized environmental condition (REC).

Site Reconnaissance

A site reconnaissance was performed on October 22, 2024. The reconnaissance consisted of visual observation of surficial conditions at the project site and observation of adjoining properties to the extent that they were visible from public areas. Due to the size of the property, HDR was unable to inspect the entirety of the property. However, due to the agricultural and undeveloped nature of the property, this limitation does not represent a significant data gap. The following is a summary of observations made by HDR during the site reconnaissance.

All the plots observed appeared to be fallow or actively cultivated. Features observed throughout the plots included unlined or concrete-lined canals with water control gates, sprinklers, unpaved roads, an electrical pump, two approximately 1,600-gallon ASTs labelled “Green Touch” (likely an agrichemical), a 275-gallon tote, and piles of hay. An electrical pump and storage containers were observed on the southeastern portion of the project site. Although the exact contents of the ASTs and storage tote could not be specified, due to the lack of spills or leakage observed in the vicinity of the containers and the use of the project site for agricultural purposes, the presence of the ASTs did not represent an environmental concern.

Other features observed within the project site included asphalt-paved roads, creeks, and a few structures. A residence was noted on the southwest side of the intersection of Jessup Road and Campbell Road, and a metal shed was present on the northwest side of the intersection. Nothing was stored along the exterior areas of the shed. Access to the interior of the shed or residence was not provided. It was noted that the metal shed was built above a concrete foundation.

Utilities and PCBs

HDR noted transmission lines, pole-mounted transformers, and signs indicating the presence of underground utilities owned by AT&T. The pole-mounted transformers were located near the metal shed and the electrical pump. The installation date of the transformers is unknown; therefore, the transformers could contain PCBs due to their age. However, no evidence of leaks, spills, or corrosion was observed in the vicinity of the transformers. Based on their good condition, the pole-mounted transformers were not an environmental concern.

PC ORIGINAL PKG

Vapor Intrusion

The potential for vapor intrusion was evaluated for the project site. Based on the current and historical use of the project area, and the lack of VOC sources in the immediate vicinity, vapor intrusion is not considered to be of concern for the project site.

Per-and Polyfluoroalkyl Substances

Potential sources of Per-and Polyfluoroalkyl Substances (PFAS) were evaluated for the project site. Federal and state PFAS databases were reviewed for PFAS-related sites/sources within the project site search buffer. No listings were identified. However, the following PFAS sources could be associated with the project site given known or common practices with agricultural properties:

- Potential application of municipal biosolids in agricultural fields.
- Use of insecticides (pesticides) and herbicides.

Previous incident records of spills or potential over application within the project site or adjacent properties have all been closed. The use of pesticides and herbicides on the project site is not considered a REC.

Interviews

Interviews were conducted with 8 out of 9 landowners of the project site. The responding landowners indicated that the properties have only been used for agricultural purposes under their ownership and there were no environmental concerns identified in the surveys completed. However, one of the landowners indicated that there was a homestead that burned down 20 years ago on their property, but site cleanup details were not provided. Based on historical aerials, it appears the homestead was located on the northwest corner of APN 051-290-019 (Big Rock 2 Cluster West site). Burned debris may have been buried in-place, which may contain asbestos containing materials or other hazardous building materials. The risk of encountering this debris does not meet the definition of a REC but is considered a Business Environmental Risk.

Proximity to Schools

The project site is located within 0.25 mile of the former Westside Elementary School (2295 West Vaughn Road), located approximately 200 feet from the closest boundary of the Big Rock 2 Cluster North site. However, according to the California Department of Education's California School Directory, Westside Elementary School closed on June 30, 2012 (California Department of Education 2017).

Proximity to Airports

The project site is not located within 2 miles of a public airport or a public use airport. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site.

Fire Hazard

The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low (County of Imperial 2022).

3.9.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over 5 years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. The Comprehensive Environmental Response, Compensation, and Liability Act established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified.

Emergency Planning Community Right-to-Know Act of 1986 (42 United States Code 11001 et seq.)

The Emergency Planning Community Right-to-Know Act was included under the Superfund Amendments and Reauthorization Act (SARA) law and is commonly referred to as SARA Title III. Emergency Planning Community Right-to-Know was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the disaster in Bhopal, India, in which more than 2,000 people suffered death or serious injury from the accidental release of methyl isocyanate. To reduce the likelihood of such a disaster in the U.S., Congress imposed requirements on both states and regulated facilities.

Emergency Planning Community Right-to-Know establishes requirements for federal, state, and local governments, Indian Tribes, and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. SARA Title III requires states and local emergency planning groups to develop community emergency response plans for protection from a list of Extremely Hazardous Substances (40 CFR 355). The Emergency Planning Community Right-to-Know provisions help increase the public’s knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. In California, SARA Title III is implemented through the California Accidental Release Prevention.

Federal Insecticide, Fungicide, and Rodenticide Act

The objective of Federal Insecticide, Fungicide, and Rodenticide Act is to provide federal control of pesticide distribution, sale, and use. All pesticides used in the U.S. must be registered (licensed) by the EPA. Registration assures that pesticides would be properly labeled and that, if used in accordance with specifications, they would not cause unreasonable harm to the environment. Use of each registered pesticide must be consistent with use directions contained on the label or labeling.

PC ORIGINAL PKG

Federal Water Pollution Control Act (Clean Water Act)

The objective of the Federal Water Pollution Control Act, commonly referred to as the CWA, is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. The oil SPCC Program of the CWA specifically seeks to prevent oil discharges from reaching waters of the U.S. or adjoining shorelines. Further, farms are subject to the SPCC rule if they:

- Store, transfer, use, or consume oil or oil products
- Could reasonably be expected to discharge oil to waters of the U.S. or adjoining shorelines. Farms that meet these criteria are subject to the SPCC rule if they meet at least one of the following capacity thresholds:
    - Aboveground oil storage capacity greater than 1,320 gallons
    - Completely buried oil storage capacity greater than 42,000 gallons

However, the following are exemptions to the SPCC rule:

- Completely buried storage tanks subject to all the technical requirements of the underground storage tank regulations
- Containers with a storage capacity less than 55 gallons of oil
- Wastewater treatment facilities
- Permanently closed containers
- Motive power containers (e.g., automotive or truck fuel tanks)

Hazardous Materials Transport Act – Code of Federal Regulations

The Hazardous Materials Transportation Act was published in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any “particular quantity or form” of a material that “may pose an unreasonable risk to health and safety or property.”

Occupational Safety and Health Administration

Occupational Safety and Health Administration’s (OSHA) mission is to ensure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA standards are listed in 29 CFR Part 1910.

The OHSA Process Safety Management of Highly Hazardous Chemicals (29 CFR Part 110.119) is intended to prevent or minimize the consequences of a catastrophic release of toxic, reactive, flammable, or explosive highly hazardous chemicals by regulating their use, storage, manufacturing, and handling. The standard intends to accomplish its goal by requiring a comprehensive management program integrating technologies, procedures, and management practices.

Resource Conservation and Recovery Act

The goal of the Resource Conservation and Recovery Act, a federal statute passed in 1976, is the protection of human health and the environment, the reduction of waste, the conservation of energy and natural resources, and the elimination of the generation of hazardous waste as expeditiously as possible. The Hazardous and Solid Waste Amendments of 1984 significantly expanded the scope of RCRA by adding new corrective action requirements, land disposal restrictions, and technical requirements. The corresponding regulations in 40 CFR 260-299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste.

State

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources

The Division of Oil, Gas, and Geothermal Resources was formed in 1915 to address the needs of the state, local governments, and industry by regulating statewide oil and gas activities with uniform laws and regulations. The Division supervises the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells, preventing damage to: (1) life, health, property, and natural resources; (2) underground and surface waters suitable for irrigation or domestic use; and (3) oil, gas, and geothermal reservoirs. The Division's programs include: well permitting and testing; safety inspections; oversight of production and injection projects; environmental lease inspections; idle-well testing; inspecting oilfield tanks, pipelines, and sumps; hazardous and orphan well plugging and abandonment contracts; and subsidence monitoring.

California Department of Toxic Substances Control

DTSC regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff are responsible for ensuring that companies and individuals handle, transport, store, treat, dispose of, and clean-up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment.

On January 1, 2003, the Registered Environmental Assessor program joined DTSC. The program certifies environmental experts and specialists as being qualified to perform a number of environmental assessment activities. Those activities include private site management, Phase I ESAs, risk assessment, and more.

California Division of Occupational Safety and Health

The California Division of Occupational Safety and Health protects workers and the public from safety hazards through its programs and provides consultative assistance to employers. California Division of Occupational Safety and Health issues permits, provides employee training workshops, conducts inspections of facilities, investigates health and safety complaints, and develops and enforces employer health and safety policies and procedures.

PC ORIGINAL PKG

California Environmental Protection Agency

California Environmental Protection Agency and the SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act
- Porter-Cologne Water Quality Control Act

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law.

California Emergency Response Plan

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is managed by the State Office of Emergency Services (OES), which coordinates the responses of other agencies including Cal-EPA, the California Highway Patrol, CDFW, RWQCB, Imperial County Sheriff's Department, ICFD, and the City of Imperial Police Department.

Local

Imperial County General Plan

The Seismic and Public Safety Element identifies goals and policies that will minimize the risks associated with natural and human-made hazards, and specify the land use planning procedures that should be implemented to avoid hazardous situations. The purpose of the Seismic and Public Safety Element is to reduce the loss of life, injury, and property damage that might result from disaster or accident. In addition, the Element specifies land use planning procedures that should be implemented to avoid hazardous situations. The policies listed in the Seismic and Public Safety Element are not applicable to the proposed project, as they address human occupancy development. The proposed project is a solar and BESS project and does not propose residential uses.

Imperial County Public Health Department

DTSC was appointed the Certified Unified Program Agency (CUPA) for Imperial County in January 2005. The Unified Program is the consolidation of 6 state environmental programs into one program under the authority of a CUPA. The CUPA inspects businesses or facilities that handle or store hazardous materials, generate hazardous waste, own or operate ASTs or USTs, and comply with the California Accidental Release Prevention Program. The CUPA Program is instrumental in

accomplishing this goal through education, community and industry outreach, inspections and enforcement.

Office of Emergency Services

As part of the ICFD, the County OES is mandated by the California Emergency Services Act (Chapter 7, Division 1, Title 2 of Government Code) to serve as the liaison between the State and all the local government in the County. The OES provides centralized emergency management during major disasters, and coordinates emergency operations between various local jurisdictions within the County. The OES has developed several plans, consistent with federal and state policy guidance, to provide the County and participating local jurisdictions and agencies a framework for conducting emergency planning, response, and recovery operations, and handling of hazardous substances.

3.9.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering Project impacts related to hazards and hazardous materials, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, Project impacts related to hazards and hazardous materials are considered significant if any of the following occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment
- For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the Project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description to result in significant impacts related to hazards and hazardous materials on or within the 1-mile buffer

PC ORIGINAL PKG

zone of the project site. This analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

A Phase I ESA has been prepared for the project site. The information obtained from the Phase I ESA was reviewed and summarized to present the existing conditions, in addition to identifying potential environmental impacts, based on the significance criteria presented above. Impacts associated with hazards and hazardous materials that could result from project construction and operational activities were evaluated qualitatively based on site conditions; expected construction practices; materials, locations, duration of project construction, and related activities. The conceptual site plan for the project was also used to evaluate potential impacts.

Impact Analysis

Impact 3.9-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Although considered minimal, it is anticipated that the project will generate the following materials during construction, operation, and long-term maintenance: insulating oil (used for electrical equipment), lubricating oil (used for maintenance vehicles), various solvents/detergents (equipment cleaning), and gasoline (used for maintenance vehicles). These materials have the potential to be released into the environment as a result of natural hazard (i.e., earthquake) related events, or because of human error. However, all materials contained on site will be stored in appropriate containers (not to exceed a 55-gallon drum) protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact. In addition, if the on-site storage of hazardous materials necessitate, at any time during construction and/or operations and long-term maintenance, quantities in excess of 55-gallons, a hazardous material management program (HMMP) would be required. The HMMP developed for the project will include, at a minimum, procedures for:

- Hazardous materials handling, use and storage
- Emergency response
- Spill control and prevention
- Employee training
- Record keeping and reporting

Additionally, hazardous material storage and management will be conducted in accordance with requirements set forth by the ICFD, Imperial County OES, DTSC, and CUPA for storage and handling of hazardous materials. Further, construction activities would occur according to OSHA regulatory requirements; therefore, it is not anticipated that the construction activities for the proposed Project would release hazardous emissions or result in the handling of hazardous or acutely hazardous materials, substances, or waste. This could include the release of hazardous emissions, materials, substances, or wastes during operational activities. With the implementation of an HMMP and adherence to requirements set forth by the ICFD, Imperial County OES, DTSC, OSHA regulatory requirements and CUPA would reduce the impact to a level of less than significant.

Battery Energy Storage System

In conjunction with the construction of the solar facility, a battery energy storage system will be constructed to store the energy generated by the solar panels. Transportation of hazardous materials relating to the battery system includes electrolyte and graphite and would occur during construction, operation (if replacement of batteries is needed) and decommissioning (removal of the batteries). All of these various materials would be transported and handled in compliance with DTSC regulations. Therefore, likelihood of an accidental release during transport or residual contamination following accidental release is not anticipated.

Lithium-ion batteries used in the storage system contain cobalt oxide, manganese dioxide, nickel oxide, carbon, electrolyte, and polyvinylidene fluoride. Of these chemicals, only electrolyte should be considered hazardous, inflammable and could react dangerously when mixed with water. The U.S. Department of Transportation (DOT) regulates transport of lithium-ion batteries under the DOT's Hazardous Materials Regulations (HMR; 49 C.F.R., Parts 171-180). The HMR apply to any material DOT determines is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Lithium-ion batteries must conform to all applicable HMR requirements when offered for transportation or transported by air, highway, rail, or water (DOT 2020). Additionally, carbon (as graphite) is flammable and could pose a fire hazard. Fire protection is achieved through project design features, such as monitoring, diagnostics and a fire suppression system. The project would be required to comply with state laws and county ordinance restrictions, which regulate and control hazardous materials handled on site.

Construction wastes would be disposed of in accordance with local, state, and federal regulations, and recycling will be used to the greatest extent possible. In this context, with adherence to requirements set forth by the ICFD, Imperial County OES, DTSC, OSHA regulatory requirements and CUPA, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The project site has been used for agricultural production with irrigation canals since at least 1915. Typical agricultural practices in the Imperial Valley consist of aerial and ground application of pesticides and the application of chemical fertilizers to both ground and irrigation water. However, the Federal Insecticide, Fungicide, and Rodenticide Act provides federal control of pesticide distribution, sale, and use. Pesticides used in the United States must be registered by the EPA to assure that pesticides are properly labeled and that they will not cause unreasonable harm to the environment. The construction phase, operations and long-term maintenance of the facility would not result in additional application of pesticides or fertilizers.

As stated above, construction of the proposed project will involve the use of limited use of hazardous materials, such as fuels and greases to fuel and service construction equipment, and during operation regular and routine maintenance of the proposed project may result in the potential to handle hazardous materials. However, the hazardous materials handled on-site would be limited to

PC ORIGINAL PKG

small amounts of everyday use cleaners and common chemicals used for maintenance. The applicant will be required to comply with State laws and County Ordinance restrictions, which regulate and control hazardous materials handled on-site. Therefore, a less than significant impact has been identified for this issue area.

Hazardous Materials

The environmental database search identified 13 mapped listings (for 8 sites) within the project site, and 11 listings within the 1-mile search buffer. The listings within the project site and many of the listings within the search buffer were determined to be incorrectly mapped outside the project site vicinity based on further review. The majority of these database listings were for the generation of regulated and/or hazardous wastes. Only one site, Jerry Preece Jr. Farms, located west of the project site at 2396 W Vaughn Road had any reported violations associated with waste/chemical storage and disposal, including violations for open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. Five violations remain open for the Jerry Preece Jr. Farms site, which is located northeast of the Big Rock 2 Cluster West site. A review of the violations indicates that conditions noted are generally localized to the Jerry Preece Jr. Farms site and are unlikely to impact the project site. Therefore, this is not considered a REC.

One of the landowners indicated that there was a homestead that burned down 20 years ago on their property (northwest corner of APN 051-290-019 (Big Rock 2 Cluster West site)), but site cleanup details were not provided. Burned debris may have been buried in-place, which may contain asbestos containing materials or other hazardous building materials. However, the risk of encountering this debris does not meet the definition of a REC. This is considered a less than significant impact.

Battery Energy Storage System

Protection would be provided as part of the project design by housing the battery units in enclosed structures to provide containment should a fire break out or for potential spills. Any potential fire risk that the traditional lithium-ion cells have will most likely be caused by over-charging or through short circuit due to age. This risk will be mitigated through monitoring and a fire suppression system that includes water and or a suppression agent (eg FM-200, Novatech) with smoke detectors, control panel, alarm, piping and nozzles. The fire protection system will be designed by a certified fire protection engineer and installed by a fire protection system contractor licensed in California and in accordance with all relevant building and fire codes in effect in the County at the time of building permit submission. Fire protection systems for battery systems would be designed in accordance with California Fire Code and would take into consideration the recommendations of the National Fire Protection Association (NFPA) 855.

The fire protection plan is anticipated to include a combination of prevention, suppression, and isolation methods and materials. The general approach to fire mitigation at the project site would be prevention of an incident, followed by attempts to isolate and control the incident to the immediately affected equipment, then to suppress any fire with a clean agent so as to reduce damage to uninvolved equipment. Fire suppression agents such as Novec 1230 or FM 2000, or water may be used as a suppressant. In addition, fire prevention methods would be implemented to reduce potential fire risk, including voltage, current, and temperature alarms. Energy storage equipment would comply with Underwriters Laboratory (UL)-95401 and test methods associated with UL-9540A. For lithium-ion batteries storage, a system would be used that would contain the fire event

PC ORIGINAL PKG

and encourage suppression through cooling, isolation, and containment. Suppressing a lithium-ion (secondary) battery is best accomplished by cooling the burning material.

To mitigate potential hazards, redundant separate methods of failure detection would be implemented. These would include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off gas detection would be implemented, as applicable. These are in addition to other potential protective measures such as ventilation, overcurrent protection, battery controls maintaining batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Remote alarms would be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan would be implemented. In this context, impacts would be considered less than significant for this impact area.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-3 Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The project site is located within 0.25 mile of the former Westside Elementary School (2295 West Vaughn Road), located approximately 200 feet from the closest boundary of the Big Rock 2 Cluster North site. However, according to the California Department of Education's California School Directory, Westside Elementary School closed on June 30, 2012 (California Department of Education 2017). Therefore, the proposed project would not pose a risk to nearby schools and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-4 Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

As previously discussed above, the environmental database search identified 13 mapped listings for 8 sites within the project site, and 11 listings within the 1-mile search buffer. However, the listings within the project site and many of the listings within the search buffer were determined to be incorrectly mapped and are actually outside of the project site based on further review. Therefore, implementation of the proposed project would result in no impact related to the project site being located on a listed hazardous materials site.

Mitigation Measure(s)

No mitigation measures are required.

PC ORIGINAL PKG

Impact 3.9-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not located within 2 miles of a public airport or a public use airport. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site. Therefore, implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area and no impact would occur. No impact is identified for this issue area.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-6 Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Imperial County Operational Area Emergency Operations Plan (Imperial County OES 2016) does not identify specific emergency roadway routes as part of their emergency operations plan (EOP). The City of Calexico General Plan, Section 8.0 Safety Element, identifies the major evacuation routes as SR 111, SR 98, and I-8. The project is not expected to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The applicant for the proposed project will be required, through the Conditions of Approval, to prepare a road improvement plan for the proposed project that will include emergency access points and safe vehicular travel. Additionally, local building codes would be followed to minimize flood, seismic, and fire hazard. Therefore, the proposed project would result in a less than significant impact associated with the possible impediment to emergency response plans or emergency evacuation plans.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-7 Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan (County of Imperial 2022), the potential for a major fire in the unincorporated areas of the County is generally low.

Proposed project facilities would be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health, and safety requirements (e.g., CPUC safety standards). A Fire Management Plan will be prepared in accordance with Fire Department requirements for project construction activities as well as long-term operations, including establishing appropriate emergency access to the project site for first responders, and identifying project-specific onsite fire protection or suppression systems that comply with Imperial County requirements. The project will incorporate many fire safety features to be described in detail in the Fire Management

Plan, including access gates and service roads along the perimeter of the project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems.

Because the proposed project is not located in proximity to an area susceptible to wildland fires, implementation of the proposed Project would result in a less than significant impact related to the possible risk to people or structures caused by wildland fires.

Mitigation Measure(s)

No mitigation measures are required.

3.9.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

During decommissioning and restoration of the project site, the applicant or its successor in interest would be responsible for the removal, recycling, and/or disposal of all solar arrays, inverters, battery storage system, transformers and other structures on the project site. The project applicant anticipates using the best available recycling measures at the time of decommissioning. Any potentially hazardous materials located on the site would be disposed of, and/or remediated prior to construction of the project. At the end of a lithium-ion module's useful life (typically estimated to be 10 to 20+ years) and final project decommissioning, the batteries would be decommissioned and recycled per manufacturer guidelines. Certain manufacturers allow for the batteries to be returned to the manufacturing facility or a third-party recycling facility where the batteries are disassembled, and certain materials are recovered from the battery for reuse.

The operation of the solar facility would not generate hazardous wastes and therefore, implementation of applicable regulations and mitigation measures identified for construction and operations would ensure restoration of the project site to pre-project conditions during the decommissioning process in a manner that would be less than significant. Furthermore, decommissioning/restoration activities would not result in a potential impact associated with Airport Land Use Consistency Plan (ALUCP) consistency (structures would be removed and the site would remain in an undeveloped condition), wildfires (fire protection measures), or impediment to an emergency plan (the undeveloped condition as restored, would not conflict with emergency plans).

Residual

Adherence to federal, state and local regulations will ensure that impacts related to the transportation of hazardous materials and potential fires would be reduced to levels less than significant. Based on these circumstances, the proposed project would not result in residual significant and unmitigable impacts related to hazards and hazardous materials.

PC ORIGINAL PKG

3.10 Hydrology/Water Quality

This section provides a description of existing water resources within the project area and pertinent local, state, and federal plans and policies. Each subsection includes descriptions of existing hydrology/drainage, existing flooding hazards, and the environmental impacts on hydrology and water quality resulting from implementation of the proposed project, and mitigation measures where appropriate. The impact assessment provides an evaluation of potential adverse effects to water quality based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. The information for this section is summarized from the *Aquatic Resources Delineation Report* and the *Water Supply Assessment* prepared by Dudek *(*Appendix E2 and J of this EIR, respectively).

3.10.1 Existing Conditions

The project site is located in the Imperial Valley Planning Area of the Colorado River Basin. The Colorado River Basin Region covers approximately 13 million acres (20,000 square miles) in the southeastern portion of California. It includes all of Imperial County and portions of San Bernardino, Riverside, and San Diego Counties. The Colorado River Basin Region is divided into seven major planning areas on the basis of different economic and hydrologic characteristics (California RWQCB 2019). The Imperial Valley is characterized as a closed basin and, therefore, all runoff generated within the watershed discharges into the Salton Sea (California RWQCB 2019).

As shown in Figure 3.10-1, the project site is contained within the Salton Sea Subbasin Hydrologic Unit Code (HUC 18100204). Within this watershed, the proposed project site overlaps with the Salt Creek Slough Subwatershed (HUC 181002040807) and the Upper New River Subwatershed (HUC 181002040902) within the New River Watershed (HUC 181002040902). The New River Watershed comprises approximately 328 square miles (209,920 acres) and contains the New River, which flows north from the United States/Mexico border, south of the site. The river flows approximately 66 miles across the Imperial Valley to its terminus in the Salton Sea. The Upper New River Subwatershed comprises approximately 7 square miles (4,480 acres) within the New River Watershed (Appendix E2 of this EIR).

The western portion of the project site overlaps with the Salt Creek Slough Subwatershed, a catchment area of 34 square miles (21,760 acres) that sits within the larger Coyote Wash Watershed, which directs intermittent flows eastward from the Jacumba Mountains and has an area of 340 square miles (217,600 acres) (Appendix E2 of this EIR).

Localized Drainage Conditions

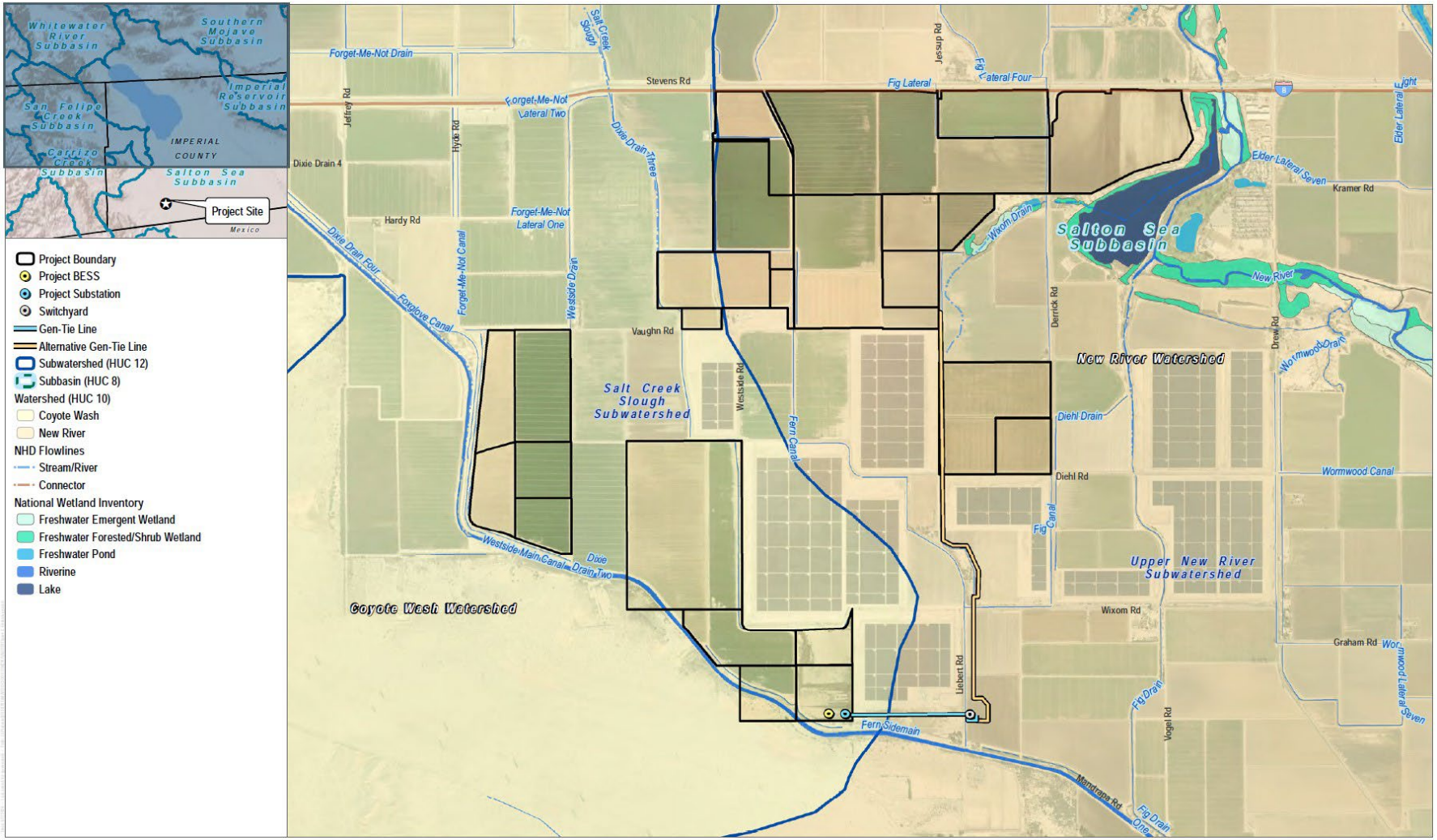
The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site. Lateral canals and ditches that intersect the project site include: Fern Side Main, Fig Canal, Fern Canal, Fern Lateral 2, Fern Lateral 3, Foxglove Canal, and Foxglove Lateral 1.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.10-1. Watershed



Source: Appendix E2 of this EIR

This page is intentionally blank.

PC ORIGINAL PKG

Flooding

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM) (Map Numbers 06025C1700C and 06025C2050C) (FEMA 2008), the project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. However, the northeastern portion of the project site is adjacent to the New River, which is within the 100-year floodplain, and subject to a 1 percent chance of annual flood risk (FEMA 2008).

Surface Water Quality

The surface waters of the Imperial Valley depend primarily on the inflow of irrigation water from the Colorado River via the All-American Canal. Excessive salinity concentrations have long been one of the major water quality problems of the Colorado River, a municipal and industrial water source to millions of people, and a source of irrigation water for approximately 700,000 acres of farmland. The heavy salt load in the Colorado River results from both natural and human activities. Land use and water resources are unequivocally linked. A variety of natural and human factors can affect the quality and use of streams, lakes, and rivers. Surface waters may be impacted from a variety of point and non-point discharges. Examples of point sources may include wastewater treatment plants, industrial discharges, or any other type of discharge from a specific location (commonly a large-diameter pipe) into a stream or water body. In contrast, non-point source pollutant sources are generally more diffuse in nature and connected to a cumulative contribution of multiple smaller sources. There are no comprehensive water quality monitoring stations located within in the project site, and water quality data are limited.

Common non-point source contaminants within the project area may include, but are not limited to: sediment, nutrients (phosphorous and nitrogen), trace metals (e.g., lead, zinc, copper, nickel, iron, cadmium, and mercury), oil and grease, bacteria (e.g., coliform), viruses, pesticides and herbicides, organic matter, and solid debris/litter. Vehicles account for most of the heavy metals, fuel and fuel additives (e.g., benzene), motor oil, lubricants, coolants, rubber, battery acid, and other substances. Nutrients result from excessive fertilizing of agricultural areas, while pesticides and herbicides are widely used in agricultural fields and roadway shoulders for keeping right-of-way (ROW) areas clear of vegetation and pests. Surface waters mostly drain towards the Salton Sea. The New and Alamo Rivers convey agricultural irrigation drainage, surface runoff, and some treated municipal waste from the Imperial Valley. The flow in the New River also contains agricultural drainage, treated and untreated sewage, and industrial waste discharges from Mexicali, Mexico (California RWQCB 2019).

Based on the 2020-2022 305(b)/303(d) Integrated Report prepared by the Colorado River Basin RWQCB, the water features in the project vicinity include the Imperial Valley Drains, New River, and the Salton Sea (California RWQCB 2022). Specific impairments listed for each of these water bodies (or Category 5) are identified below:

- Imperial Valley Drains: Impaired for Ammonia, chlordane, chlorpyrifos, dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyltrichloroethane (DDT), dieldrin, disulfoton, imidacloprid, Polychlorinated biphenyls (PCBs), sedimentation/siltation, selenium, toxaphene, and toxicity.

- New River: Impaired for ammonia, bifenthrin, chlordane, chloride, chlorpyrifos, cyhalothrin, lambda, cypermethrin, dichlorodiphenyldichloroethane (DDD), DDE, DDT, diazinon, dieldrin, disulfoton, hexachlorobenzene/HCB, imidacloprid, indicator bacteria, malathion, mercury, naphthalene, nutrients, organic enrichment/low dissolved oxygen, PCBs, pyrethroids, sediment, selenium, toxaphene, toxicity, and trash.
- Salton Sea: Impaired for ammonia, arsenic, chloride, chlorpyrifos, DDE, DDT, enterococcus, low dissolved oxygen, nutrients, salinity, and toxicity (California RWQCB 2022).

Groundwater Hydrology

The project site overlies the Imperial Valley Groundwater Basin (Basin), which is designated by the Department of Water Resources (DWR) as a very low priority basin with respect to the Sustainable Groundwater Management Act. Accordingly, groundwater is not managed under a Groundwater Sustainability Plan. Groundwater usage is regulated by Imperial County's Groundwater Ordinance contained in Title 9, Division 22, of the Land Use Ordinance, Section 92201.01. The Basin is located in the southeastern part of California and extends from the Salton Sea south to the international border with Mexico. The Basin covers approximately 1,200,000 acres, or 1,870 square miles (Appendix J of this EIR).

Groundwater level data in the Basin are sparse, with the highest density and quality of measurements located in the eastern portion of the Basin where groundwater levels have historically been impacted by recharge, and subsequent lining, of the All-American canal. Near the project site, groundwater levels are monitored at two wells: 16S11E27F01S (located approximately 6 miles northwest of the project site) and 16S11E23B01S (located approximately 5 miles northwest of the project site).

Well 16S11E27F01S is completed to a depth of 134.5 feet below ground surface. Groundwater at this well is encountered at a depth of approximately 100 feet below ground surface. Groundwater levels measured at this well have declined by about 3 feet over the past 50 years. Well 16S11E23B01S is completed to a depth of 114.7 feet below ground surface. Groundwater at this well is encountered at a depth of approximately 50 feet below ground surface. Historical groundwater level measurements indicate that groundwater levels at this well experienced a period of decline in the later 1980s to early 1990s. During this time, groundwater levels declined by approximately 10 feet. Since the mid- to late-1990s, groundwater levels have declined by approximately 2 feet (Appendix J of this EIR).

Groundwater level measurements at wells 16S11E27F01S and 16S11E23B01S indicate that groundwater levels, which are a proxy for the volume of groundwater in storage, within the vicinity of the project site have historically been, and are currently, stable. Because groundwater development opportunities in the Basin are limited, groundwater storage and levels in the vicinity of the project site are not expected to experience large changes from current conditions.

Groundwater in the Basin is generally of poor quality and unsuitable for most domestic and irrigation uses. The primary groundwater quality concern is total dissolved solids. Additional constituents that occur at concentrations that are higher than recommended for drinking water include nitrate, fluoride, sulfate, boron, and selenium (Appendix J of this EIR).

PC ORIGINAL PKG

Precipitation

The project area is characterized by a typical desert climate with dry, warm winters, and hot, dry summers. The project area receives an average of 2.56 inches of precipitation annually (Appendix E2 of this EIR).

3.10.2 Regulatory Setting

Federal

Clean Water Act

The U.S. EPA is the lead federal agency responsible for managing water quality. The CWA of 1972 is the primary federal law that governs and authorizes the U.S. EPA and the states to implement activities to control water quality. The various elements of the CWA that address water quality and that are applicable to the project are discussed below. Wetland protection elements administered by the USACE under Section 404 of the CWA, including permits for the discharge of dredged and/or fill material into waters of the United States, are discussed in Section 3.5, Biological Resources.

Under federal law, the U.S. EPA has published water quality regulations under Volume 40 of the CFR. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the U.S. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question; and (2) criteria that protect the designated uses. Section 304(a) requires the U.S.EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. The U.S. EPA is the federal agency with primary authority for implementing regulations adopted under the CWA. The U.S. EPA has delegated the State of California the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act), described below.

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the U.S. must obtain a water quality certification from the SWRCB in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate.

CWA Section 402 establishes the National Pollution Discharge Elimination System (NPDES) permit program to control point source discharges from industrial, municipal, and other facilities if their discharges go directly to surface waters. The 1987 amendments to the CWA created a new section of the CWA devoted to regulating storm water or nonpoint source discharges (Section 402[p]). The U.S. EPA has granted California primacy in administering and enforcing the provisions of the CWA and the NPDES program through the SWRCB. The SWRCB is responsible for issuing both general and individual permits for discharges from certain activities. At the local and regional levels, general and individual permits are administered by RWQCBs.

Clean Water Act Section 303(d) Impaired Waters List

CWA Section 303(d) requires states to develop lists of water bodies that will not attain water quality standards after implementation of minimum required levels of treatment by point-source dischargers. Section 303(d) requires states to develop a total maximum daily load (TMDL) for each of the listed pollutants and water bodies. A TMDL is the amount of loading that the water body can receive and still

be in compliance with applicable water quality objectives and applied beneficial uses. TMDLs can also act as a planning framework for reducing loadings of a specific pollutant from various sources to achieve compliance with water quality objectives. TMDLs prepared by the state must include an allocation of allowable loadings to point and nonpoint sources, with consideration of background loadings and a margin of safety. The TMDL must also include an analysis that shows links between loading reductions and the attainment of water quality objectives.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations that limit development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRM) that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection covered by the FIRM is established by FEMA, with the minimum level of flood protection for new development determined to be the 1-in-100 (0.01) annual exceedance probability) (i.e., the 100-year flood event).

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act, also known as the California Water Code, is California's statutory authority for the protection of water quality. Under this act, the state must adopt water quality policies, plans, and objectives that protect the state's waters. The act sets forth the obligations of the State Water Resources Control Board (SWRCB) and RWQCBs pertaining to the adoption of Water Quality Control Plans and establishment of water quality objectives. Unlike the CWA, which regulates only surface water, the Porter-Cologne Act regulates both surface water and groundwater.

Water Quality Control Plan for the Colorado River Basin

The Water Quality Control Plan for the Colorado River Basin (or Basin Plan) prepared by the Colorado River RWQCB (Region 7) identifies beneficial uses of surface waters within the Colorado River Basin region, establishes quantitative and qualitative water quality objectives for protection of beneficial uses, and establishes policies to guide the implementation of these water quality objectives.

Water bodies that have beneficial uses that may be affected by construction activity and post-construction activity include the Imperial Valley Drains, New River, and the Salton Sea. Table 3.10-1 identifies the designated beneficial uses established for the project site's receiving waters. The following are definitions of the applicable beneficial uses:

- Aquaculture (AQUA) – Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
- Freshwater Replenishment (FRSH) – Uses of water for natural or artificial maintenance of surface water quantity or quality.
- Industrial Service Supply (IND) – Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.

PC ORIGINAL PKG

- Water Contact Recreation (REC I) – Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, and use of natural hot springs.
- Non-contact Water Recreation (REC II) – Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
- Warm Freshwater Habitat (WARM) – Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- Wildlife Habitat (WILD) – Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- Preservation of Rare, Threatened, or Endangered Species (RARE) – Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Table 3.10-1. Beneficial Uses of Receiving Waters

Beneficial Uses	Imperial Valley Drains	New River	Salton Sea
AQUA	--	--	X
FRSH	X	X	--
IND	--	P	P
REC I	X	X	X
REC II	X	X	X
WARM	X	X	X
WILD	X	X	X
RARE	X	X	X

Source: SWRCB 2021

AQUA=aquaculture; FRSH=freshwater replenishment; IND=industrial service supply; P=Potential Uses; RARE=Preservation of Rare, Threatened, or Endangered Species; REC 1= water contact recreation; REC II=non-contact water recreation; WARM=Warm Freshwater Habitat; WILD=Wildlife Habitat; X=existing beneficial uses

National Pollution Discharge Elimination System General Industrial and Construction Permits

The NPDES General Industrial Permit requirements apply to the discharge of stormwater associated with industrial sites. The permit requires implementation of management measures that will achieve

the performance standard of the best available technology economically achievable and best conventional pollutant control technology. Under the statute, operators of new facilities must implement industrial BMPs in the projects' SWPPP and perform monitoring of stormwater discharges and unauthorized non–stormwater discharges.

Construction activities are regulated under the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) which covers stormwater runoff requirements for projects where the total amount of ground disturbance during construction exceeds 1 acre. Coverage under a General Construction Permit requires the preparation of a SWPPP and submittal of a Notice of Intent (NOI) to comply with the General Construction Permit. The SWPPP includes a description of BMPs to minimize the discharge of pollutants from the sites during construction. Typical BMPs include temporary soil stabilization measures (e.g., mulching and seeding), storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or stormwater, and using filtering mechanisms at drop inlets to prevent contaminants from entering storm drains. Typical post-construction management practices include street sweeping and cleaning stormwater drain inlet structures. The NOI includes site-specific information and the certification of compliance with the terms of the General Construction Permit.

Local

County of Imperial General Plan

The Water Element and the Conservation and Open Space Element of the General Plan contain policies and programs, created to ensure water resources are preserved and protected. Table 3.10-2 identifies the General Plan policies and programs for water quality and flood hazards that are relevant to the project and summarizes the project's consistency with the General Plan. While this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.10-2. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Conservation and Open Space Element		
Goal 6: The County will conserve, protect, and enhance water resources in the County.	Consistent	The proposed project would protect water quality during construction through compliance with Imperial County design and detention requirements and the NPDES General Construction Permit, as well as preparation and implementation of project-specific SWPPP, which will incorporate the requirements referenced in the State Regulatory Framework, design features, and BMPs.

PC ORIGINAL PKG

Table 3.10-2. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Objective 6.3: Protect and improve water quality and quantity for all water bodies in Imperial County.	Consistent	The proposed project would protect water quality during construction through compliance with the NPDES General Construction Permit, SWPPP, and BMPs. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The proposed project will be designed to include site design, source control, and treatment control BMPs. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution.
Program: Structural development normally shall be prohibited in the designated floodways. Only structures which comply with specific development standards should be permitted in the floodplain.	Consistent	The project does not contain a residential component nor would it place housing or other structures within a 100-year flood hazard area.
Water Element		
Policy: Adoption and implementation of ordinances, policies, and guidelines which assure the safety of County ground and surface waters from toxic or hazardous materials and/or wastes.	Consistent	The project would preserve ground and surface water quality from hazardous materials and wastes during construction, operation and decommissioning activities. The proposed project would protect water quality during construction through compliance with the NPDES General Construction Permit and SWPPP, which will incorporate the requirements referenced in the State Regulatory Framework and BMPs. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The proposed project will be designed to include site design, source control, and treatment control BMPs. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. It is anticipated that project decommissioning activities would be subject to similar, or more stringent ground and surface water regulations than those currently required.
Program: The County of Imperial shall make every reasonable effort to limit or preclude the contamination or degradation of all groundwater and surface water resources in the County.	Consistent	Mitigation measures will require that the project applicant prepare a site-specific drainage plan and water quality management plan to minimize adverse effects to local water resources.

PC ORIGINAL PKG

Table 3.10-2. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Program: All development proposals brought before the County of Imperial shall be reviewed for potential adverse effects on water quality and quantity and shall be required to implement appropriate mitigation measures for any significant impacts.	Consistent	See response for Water Element Policy above.

Source: County of Imperial 2016; County of Imperial 1997

County of Imperial Land Use Ordinance, Title 9

The County's Ordinance Code provides specific direction for the protection of water resources. Applicable ordinance requirements are contained in Division 10, Building, Sewer and Grading Regulations, and summarized below.

Chapter 10 – Grading Regulations. Section 91010.02 of the Ordinance Code outlines conditions required for issuance of a Grading Permit. These specific conditions include:

1. If the proposed grading, excavation or earthwork construction is of irrigatable land, said grading will not cause said land to be unfit for agricultural use.
2. The depth of the grading, excavation or earthwork construction will not preclude the use of drain tiles in irrigated lands.
3. The grading, excavation or earthwork construction will not extend below the water table of the immediate area.
4. Where the transition between the grading plane and adjacent ground has a slope less than the ratio of 1.5 feet on the horizontal plane to 1 foot on the vertical plane, the plans and specifications will provide for adequate safety precautions.

Imperial County Engineering Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County

Based on the guidance contained in the County's *Engineering Guidelines Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County* (2008), the following drainage requirements would be applicable to the project.

III A. GENERAL REQUIREMENTS

1. All drainage design and requirements are recommended to be in accordance with the IID "Draft" Hydrology Manual or other recognized source with approval by the County Engineer and based on full development of upstream tributary basins. Another source is the Caltrans I-D-F curves for the Imperial Valley.
3. Permanent drainage facilities and ROW, including access, shall be provided from development to point of satisfactory disposal.
4. Retention volume on retention or detention basins should have a total volume capacity for a three (3) inch minimum precipitation covering the entire site with no C reduction factors.

PC ORIGINAL PKG

Volume can be considered by a combination of basin size and volume considered within parking and/or landscaping areas.

There is no guarantee that a detention basin outletting to an IID facility or other storm drain system will not back up should the facility be full and unable to accept the project runoff. This provides the safety factor from flooding by ensuring each development can handle a minimum 3-inch precipitation over the project site.

8. The developer shall submit a drainage study and specifications for improvements of all drainage easements, culverts, drainage structures, and drainage channels to the Department of Public Works for approval. Unless specifically waived herein, required plans and specifications shall provide a drainage system capable of handling and disposing of all surface waters originating within the subdivision and all surface waters that may flow onto the subdivision from adjacent lands. Said drainage system shall include any easements and structures required by the Department of Public Works or the affected Utility Agency to properly handle the drainage on-site and off-site. The report should detail any vegetation and trash/debris removal, as well as address any standing water.
9. Hydrology and hydraulic calculations for determining the storm system design shall be provided to the satisfaction of the Director, Department of Public Works. When appropriate, water surface profiles and adequate field survey cross-section data may also be required.
11. The County is implementing a storm water quality program as required by the SWRCB, which may modify or add to the requirements and guidelines presented elsewhere in this document. This can include ongoing monitoring of water quality of storm drain runoff, implementation of BMPs to reduce storm water quality impacts downstream or along adjacent properties. Attention is directed to the need to reduce any potential of vectors, mosquitoes, or standing water.
12. A Drainage Report is required for all developments in the County. It shall include a project description, project setting including discussions of existing and proposed conditions, any drainage issues related to the site, summary of the findings or conclusions, off-site hydrology, onsite hydrology, hydraulic calculations and a hydrology map.

Imperial Irrigation District

The IID is an irrigation district organized under the California Irrigation District Law, codified in Section 20500 et seq. of the California Water Code. Critical functions of IID include diversion and delivery of Colorado River water to the Imperial Valley, operation and maintenance of the drainage canals and facilities, including those in the project area, and generation and distribution of electricity. Several policy documents govern IID operations and are summarized below:

- The Law of the River and historical Colorado River decisions, agreements and contracts
- The Quantification Settlement Agreement and Transfer Agreements
- The ~~Definite Plan, now referred to as the Systems Conservation Plan~~ IID's Water Conservation Plan, which defines the rigorous agricultural water conservation practices being implemented by growers and IID to meet the Quantification Settlement Agreement commitments

PC ORIGINAL PKG

- The Equitable Distribution Plan, which defines how IID will apportion its available water supply in order to prevent overruns and stay within the 3.1 million acre-feet annual consumptive use cap ~~on the~~ of Colorado River water ~~rights~~
- Existing IID standards and guidelines for evaluation of new development and define IID's role as a responsible agency and wholesaler of water
- IID's Interim Water Supply Policy for Non-Agricultural Water Users to provide a mechanism to address new water supply requests for proposed projects being developed within the IID water service area

Integrated Water Resources Management Plan

In relation to the project, IID maintains regulation over the drainage of water into their drains~~, including the design requirements of stormwater retention basins. IID requires that retention basins be sized to handle an entire rainfall event in case the IID system is at capacity.~~ Additionally, IID requires that outlets to IID facilities be no larger than 12 inches in diameter and must contain a backflow prevention device (IID 2012).

3.10.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to hydrology/water quality are considered significant if any of the following occur:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater water quality
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - Result in substantial erosion or siltation on- or off-site
  - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite
  - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
  - Impede or redirect flood flows
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

PC ORIGINAL PKG

Methodology

The drainage design will be conducted in accordance with the County of Imperial's design criteria, which establishes that 100 percent of the 100-year storm (3 inches of rain) will be stored on-site and released into the IID drainage system using existing drainage connections.

Impact Analysis

Impact 3.10-1 Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater water quality?

Construction

Construction of the proposed project includes site preparation, foundation construction, erection of major equipment and structures, installation of electrical systems, control systems, and startup/testing. In addition, the construction of transmission lines, utility pole pads, conductors, and associated structures will be required.

During the construction phase, sedimentation and erosion can occur because of tracking from earthmoving equipment, erosion and subsequent runoff of soil, or improperly designed stockpiles. The utilization of proper erosion and sediment control BMPs is critical in preventing discharge to surface waters/drains. The project would employ proper SWPPP practices to minimize any discharges in order to meet the Best Available Technology/Best Conventional Technology standard set forth in the Construction General Permit.

The project has the potential to affect surface water quality. Many different types of hazardous compounds will be used during the construction phase, with proper application, management, and containment being of high importance. Poorly managed construction materials can lead to the possibility for exposure of potential contaminants to precipitation. When this occurs, these visible and/or non-visible constituents become entrained in storm water runoff. If they are not intercepted or are left uncontrolled, the polluted runoff would otherwise freely sheet flow from the project to the IID Imperial Valley Drains and could result in the accumulation of these pollutants in the receiving waters. This is considered a potentially significant impact. With the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a level less than significant.

Prior to construction and grading activities, the project applicant is required to file an NOI with the SWRCB to comply with the General NPDES Construction Permit and prepare a SWPPP, which addresses the measures that would be included during construction or the project to minimize and control construction and post-construction runoff to the "maximum extent practicable." In addition, NPDES permits require the implementation of BMPs that achieve a level of pollution control to the maximum extent practical. With implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a level less than significant through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction. In addition, given that site decommissioning would result in similar activities as identified for construction, these impacts could also occur in the future during site restoration activities.

Operation

As runoff flows over developed surfaces, water can entrain a variety of potential pollutants including, but not limited to, oil and grease, pesticides, trace metals, and nutrients. These pollutants can become suspended in runoff and carried to receiving waters. These effects are commonly referred to as non-point source water quality impacts.

Long-term operation of the solar facility poses a limited threat to surface water quality after the completion of construction. The project would be subject to the County's Grading Regulations as specified in Section 91010.02 of the Ordinance Code. However, since the project site is located in unincorporated Imperial County and not subject to a Municipal Separate Storm Sewer System or NPDES General Industrial Permit, there is no regulatory mechanism in place to address post-construction water quality concerns. Based on this consideration, the project has the potential to result in both direct and indirect water quality impacts that could be significant. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's final drainage plan. Implementation of the project-specific source control and treatment BMPs into the final drainage plan would result in a decreased potential for storm water pollution.

While source control and treatment control BMPs would be finalized during preparation of the final drainage plan, the following are examples of BMPs that could be utilized to reduce the potential for storm water pollution.

Source Control BMPs. Source control BMPs (both structural and non-structural) means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Table 3.10-3 identifies examples of source control BMPs that could be implemented into the proposed project.

Treatment Control BMPs. Treatment control BMPs include both short-term and long-term drainage solutions to ensure the proper sequencing of drainage facilities and treatment of runoff generated from project impervious surfaces prior to off-site discharge.

Table 3.10-3. Source Control Best Management Practices

Design Concept		Description
1	Design Trash Storage Areas to Reduce Pollution Introduction	Design outdoor trash storage areas so that run-on from adjoining areas cannot enter. Screen or wall trash enclosures to prevent the off-site transport of trash.
2	Activity Restrictions	Restrict activities that have the potential to create adverse impacts on water quality.
3	Non-storm Water Discharges	Provide educational materials on illegal dumping and spill response to employees.
4	Outdoor Loading and Unloading	Handle materials in a manner that prevents any storm water pollution.
5	Spill Prevention, Control, and Cleanup	Require a Spill Prevention, Control, and Countermeasure Plan, and a Hazardous Materials Business Plan in accordance with Federal and State requirements.
6	Education	Provide employees with materials for storm water pollution prevention in the form of brochures and other information in a format approved by the County of Imperial.

PC ORIGINAL PKG

Table 3.10-3. Source Control Best Management Practices

	Design Concept	Description
7	Integrated Pest Management	Reduce the need for pesticide use on site by: • Keeping pests out of buildings using barriers, screens, and caulking • Eliminating pests through squashing, trapping, washing or pruning • Relying on natural enemies to eat pests • Using pesticides correctly as a last line of defense
8	Vehicle and Equipment Fueling, Cleaning, and Repair	Service all vehicles off site whenever possible. If servicing is required on site, it must be conducted in an area isolated from storm drain inlets or drainage ditch inlets. The area must be bermed and precluded from run-on. Any spillage must be fully contained and captured and disposed of per County of Imperial Hazardous Waste requirements.
9	Waste Handling and Disposal	Dispose of materials in accordance with Imperial County Hazardous Material Management guidelines. Under no circumstances shall any waste or hazardous materials be stored outside without secondary containment.

Mitigation Measure(s)

HYD-1 **Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration.** The project applicant or its contractor shall prepare a SWPPP specific to the project and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories:

- Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching)
- Sediment control practices (e.g., temporary sediment basins, fiber rolls)
- Temporary and post-construction on- and off-site runoff controls
- Special considerations and BMPs for water crossings and drainages
- Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity
- Waste management, handling, and disposal control practices
- Corrective action and spill contingency measures
- Agency and responsible party contact information

PC ORIGINAL PKG

- Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP

The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.

HYD-2 **Incorporate Post-Construction Runoff BMPs into Project Drainage Plan.** The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval. Should the drainage plan involve modifications to the off-site IID drainage system, the Drainage Plan shall be approved by the IID.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a less than significant level through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction.

With the implementation of Mitigation Measure HYD-2, potential water quality impacts resulting from post-construction discharges during operation for the project would be reduced to a less than significant level. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution.

Impact 3.10-2 ***Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

The proposed project would not require the construction of a groundwater well and/or the direct use of groundwater for construction or operation. As described in Chapter 2 Project Description, water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. For this reason, the project would not carry the potential to create drawdown effects that could otherwise adversely affect adjacent wells.

Further, groundwater recharge in the area will not be significantly affected as the majority of the project site will feature a pervious landscape in both the existing and proposed conditions. Any runoff from solar panel washing would evaporate or percolate through the ground, as a majority of the surfaces in the solar field would remain pervious. The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. No significant impacts on groundwater supply or recharge would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.10-3 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Result in substantial erosion or siltation on- or off-site?

Construction

Project construction activities, specifically grading and excavation, have the potential to temporarily alter the existing drainage pattern of the project site such that soil erosion occurs. However, to the extent feasible, site preparation would be planned and designed to minimize the amount of earth movement. Compaction of the soil to support building and traffic loads as well as the PV module supports may be required and is dependent on final engineering design. During construction, erosion would be controlled in accordance with County standards which include preparation, review, and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (ICAPCD Rule 801); and compliance with the NPDES General Construction Permit. Additionally, with implementation of Mitigation Measure HYD-1, which requires the preparation of a project-specific SWPPP and construction BMPs, project construction would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial on- or off-site erosion or siltation. This is considered a less than significant impact after mitigation has been incorporated.

Operation

After construction is complete, all existing roads would be left in a condition equal to or better than their pre-construction condition. All other areas disturbed by construction activities would be recontoured and decompacted. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that erosion increases when compared to existing conditions. The project site would remain largely pervious over the operational life of the project. Additionally, the project would implement site design BMPs, as outlined in Table 3.10-3, which would reduce soil disturbance during operation. The proposed project would result in less than significant impacts associated with the alteration of drainage patterns resulting in substantial erosion or siltation on- or off-site.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-1 are required.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-1, potential impacts associated with the alteration of drainage patterns resulting in substantial erosion or siltation on- or off-site would be reduced to a level less than significant through compliance with County standards, implementation of a Dust Control Plan (ICAPCD Rule 801), and compliance with the NPDES General Construction Permit and project-specific SWPPP.

Impact 3.10-4 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Construction

Project implementation would not substantially alter the existing drainage pattern of the site or area. The majority of the project site would continue to sheet flow through the pervious native soils. The project will be designed to meet County of Imperial storage requirements (100 percent of the 100-year storm (3 inches of rain)) (refer to the County's *Engineering Guidelines Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County* (2008) for storm water runoff, which will result in an impoundment of runoff in excess of the anticipated volume of runoff to be generated by the 100-year storm event. Additionally, implementation of Mitigation Measure HYD-2 requires that the project's Drainage Plan adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. As such, infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary.

Operation

Additionally, after construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that flooding (on- or off-site) increases when compared to existing conditions. Lastly, the project site would remain largely impervious over the operational life of the project. Therefore, the proposed project would result in no significant impacts associated with the alteration of drainage patterns resulting in on- or off-site flooding.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-2 are required.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-2, impacts on existing drainage patterns as a result of potentially substantial increases to runoff would be reduced to a level less than significant.

PC ORIGINAL PKG

Implementation of Mitigation Measure HYD-2 would require the project's Drainage Plan to adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems.

Impact 3.10-5 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

Project implementation would not substantially alter the existing drainage pattern of the site or area. During construction, erosion and associated pollutants would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (ICAPCD Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1 (see Impact 3.10-1 for additional details).

Operation

After construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted. The proposed project is not anticipated to generate a significant increase in the amount of runoff water when compared to existing conditions. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that runoff increases would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The project site would remain largely ~~im~~pervious over the operational life of the project. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious. The proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This is considered a less than significant impact.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-1 are required.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-1, impacts on the existing drainage pattern by the project that could result in substantial or polluted runoff would be reduced to a level less than significant through compliance with County standards, implementation of a Dust Control Plan (ICAPCD Rule 801), and compliance with the NPDES General Construction Permit and project-specific SWPPP.

Impact 3.10-6 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Impede or redirect flood flows?

Project implementation would not substantially alter the existing drainage pattern of the site or area. The proposed project is not anticipated to generate a significant increase in the amount of runoff water from water use involving solar panel washing. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious.

According to the FEMA's FIRM (Map Numbers 06025C1700C and 06025C2050C) (FEMA 2008), the project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. Although the northeastern portion of the project site is adjacent to the New River, which is within the 100-year floodplain, and subject to a 1 percent chance of annual flood risk, no structures would be placed within this zone. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows, and impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.10-7 In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is not located near any large bodies of water. The Salton Sea is located over 20 miles north of the project site. Because of the distance, the Salton Sea does not pose a danger of inundation from seiche or tsunami as related to the project site. Furthermore, the project site is over 100 miles inland from the Pacific Ocean. In addition, the project site is relatively flat. Therefore, there is no potential for the project site to be inundated by seiches or tsunamis. No impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.10-8 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As described under Impact 3.10-1 above, with the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a less than significant level through the inclusion of focused BMPs for the protection of surface water resources. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's Drainage Plan. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. Additionally, the project would not require the direct use of groundwater. Therefore, the proposed project would not pose a significant threat to local surface water features or shallow groundwater resources, and, as such would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Implementation of Mitigation Measures HYD-1 and HYD-2 would reduce impacts to a level less than significant.

PC ORIGINAL PKG

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-1 and HYD-2 are required.

Significance after Mitigation

With the implementation of Mitigation Measures HYD-1 and HYD-2, the potential water quality impacts resulting during construction and operation of the project would be reduced to a level less than significant.

3.10.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

Decommissioning and restoration activities would result in similar impacts on hydrology and water quality as would occur during construction of the proposed project. The primary water quality issue associated with decommissioning/restoration would be potential impacts on surface water quality, as the decommissioning activities would be similar to construction activities, and would be considered a significant impact. However, during decommissioning, soil erosion would be controlled in accordance with NPDES General Construction Permit(s) and project-specific SWPPP. Compliance with requirements and best available control technologies in place at the time of decommissioning are anticipated to be similar to, or more stringent than, those currently required. Compliance with all applicable water quality regulations would reduce the project's impacts during decommissioning to a level less than significant. Impacts on other water resource issues, including alteration of drainage patterns, contributing to off-site flooding, impacts on groundwater recharge and supply, would be less than significant. There would be no impact associated with inundation from flooding or mudflows.

Residual

With implementation of the mitigation measures listed above, implementation of the project would not result in any residual significant impacts related to increased risk of flooding from stormwater runoff, from water quality effects from long-term urban runoff, or from short-term alteration of drainages and associated surface water quality and sedimentation. With the implementation of the required mitigation measures during construction and decommissioning of the project, water quality impacts would be minimized to a less than significant level. Based on these circumstances, the project would not result in any residential significant and unmitigable adverse impacts on surface water hydrology and water quality.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.11 Land Use/Planning

This section provides information regarding current land use, land use designations, and land use policies within and in the vicinity of the project site. Section 15125(d) of the CEQA Guidelines states that "[t]he EIR shall discuss any inconsistencies between the project and applicable general plans and regional plans." This section fulfills this requirement for the project. In this context, this section reviews the land use assumptions, designations, and policies of the County General Plan and other applicable federal, state, and local requirements, which governs land use within the project area and evaluates the project's potential to conflict with policies adopted for the purpose of avoiding or mitigating significant environmental effects. Where appropriate, mitigation is applied and the resulting level of impact identified.

3.11.1 Existing Conditions

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico.

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course to the east of the project. The I-8 and Union Pacific Railroad transportation corridors are located to the north of the project. To the south of the project site, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

The project applicant is seeking approval of four separate CUPs associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility, which together define the project site. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East: CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The entire project site comprises 1,849 acres of privately-owned land, comprising 24 assessor parcels. Table 3.11-1 identifies the individual APNs associated with the project site with their respective acreage, and zoning.

Table 3.11-1. Project Assessor Parcel Numbers, Acreages, and Zoning

Name	APN	Zoning	Acreage
Big Rock 2 Cluster North (CUP #24-0006)	051-270-020	A-2-R	101.8
	051-270-028	A-2	52.3
	051-270-036	A-2	67.4
	051-270-041	A-2-R	279.0
	051-280-054	A-2	149.5
	051-300-011	A-2	79.6
	051-300-016	A-2	10.8
	051-300-026	A-2	13.4
	051-300-035	A-3	40.3
	051-300-037	A-3	28.9
	051-300-032 (northern portion)	A-2	85.5
	Subtotal		***910.0***
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
	051-300-036 (to be re-entitled)	A-3-RE	40.3
	Subtotal Big Rock Cluster North		***1,030***
Big Rock 2 Cluster South (CUP 24-0007)	051-330-003	A-3	246.5
	051-350-004	A-3	57.4
	051-350-006	A-3	26.3
	051-350-007	A-3	40.0
	051-350-008	A-3	40.0
	Subtotal Big Rock Cluster North		***410.0***

PC ORIGINAL PKG

Big Rock 2 Cluster East (CUP 24-008)	051-310-027	A-2-R-RE	120.0
	051-310-028	A-2-R-RE	39.9
	Subtotal Big Rock Cluster East		***160.0***
Big Rock 2 Cluster West (CUP 24-009)	051-290-018	A-2-R	79.8
	051-290-019	A-3	48.7
	051-320-005	A-3	45.0
	051-320-006	A-3	39.9
	051-320-007	A-3	35.3
	Subtotal Big Rock Cluster West		***249.0***
TOTAL ACREAGE			**1,849**

Notes:
APN=Assessor Parcel Number; A-2=General Agriculture; A-2-R=General Agriculture/Rural; A-3=Heavy Agriculture; RE=Renewable Energy

Big Rock 2 Cluster North

The Big Rock 2 Cluster North site is located on 13 parcels comprising approximately 1,030 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster North site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster North site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster North site are zoned A-2 (General Agriculture), A-2-RE (General Agriculture with a RE Overlay Zone), A-2-R (General Agriculture Rural), A-3 (Heavy Agriculture), and A-3-RE (Heavy Agriculture with a RE Overlay Zone).

Big Rock 2 Cluster South

The Big Rock 2 Cluster South site is located on five parcels comprising approximately 410 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster South site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster South site is designated as Agriculture under the County's General Plan. As shown Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster South site are zoned A-3 (Heavy Agriculture).

Big Rock 2 Cluster East

The Big Rock 2 Cluster East site is located on two parcels comprising approximately 160 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster East site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster East site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster East site are zoned A-2-R-RE (General Agriculture Rural with RE Overlay Zone).

Big Rock 2 Cluster West

The Big Rock 2 Cluster West site is located on five parcels comprising approximately 249 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster West site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster West site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster West site are zoned A-2-R (General Agriculture Rural) and A-3 (Heavy Agriculture).

Renewable Energy Overlay Zone

As discussed in Chapter 2, the County adopted the Renewable Energy and Transmission Element, which includes a RE Zone (RE Overlay Map). The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

Residential Communities

There are no established residential neighborhoods immediately adjacent to the project site. One residence is located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. The following are off-site rural residences located in the vicinity of the project site:

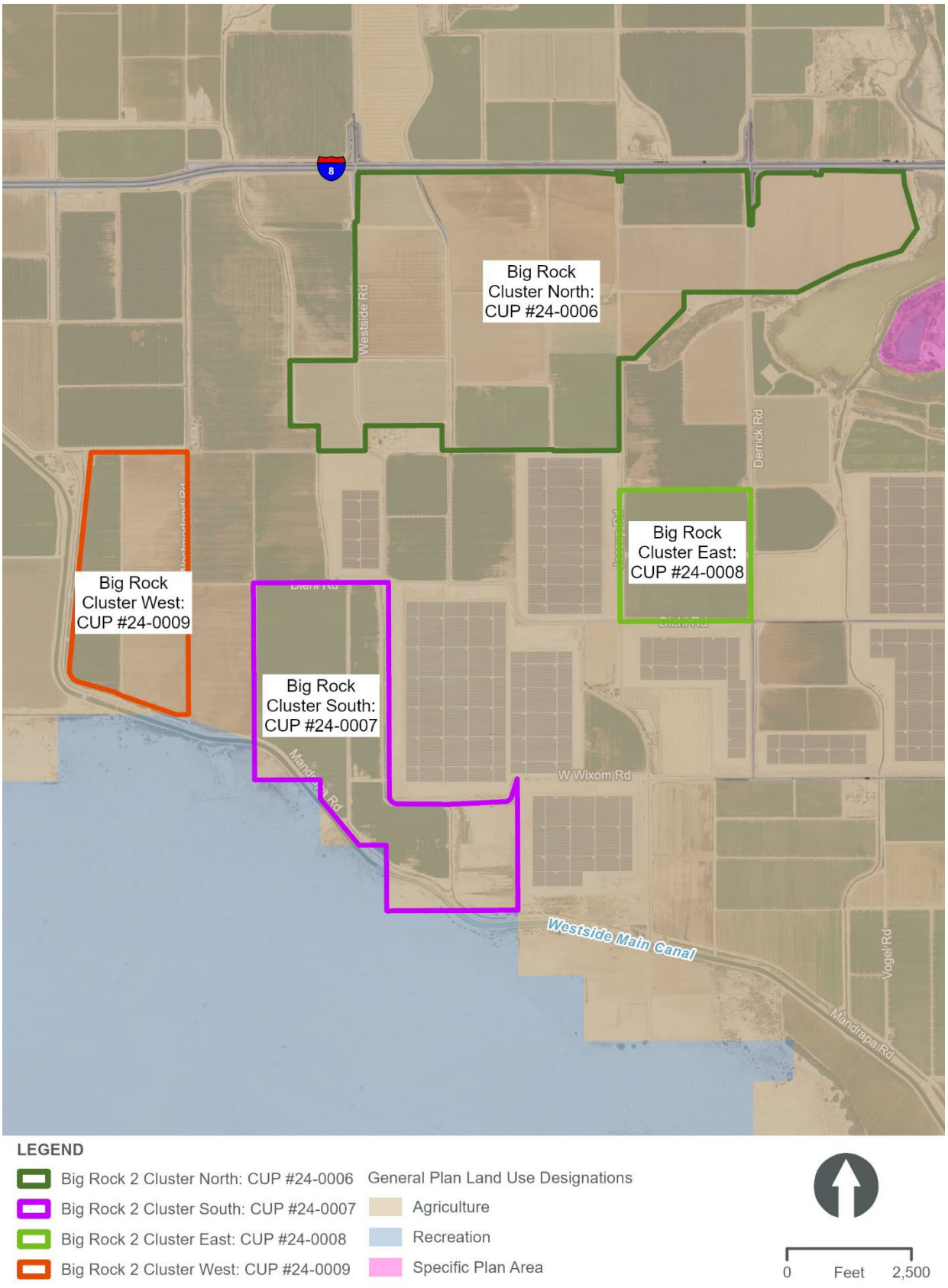
- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

Nearby Airports

There are no public airports or public use airports located within two miles of the project site. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site.

PC ORIGINAL PKG

Figure 3.11-1. General Plan Land Use Designations

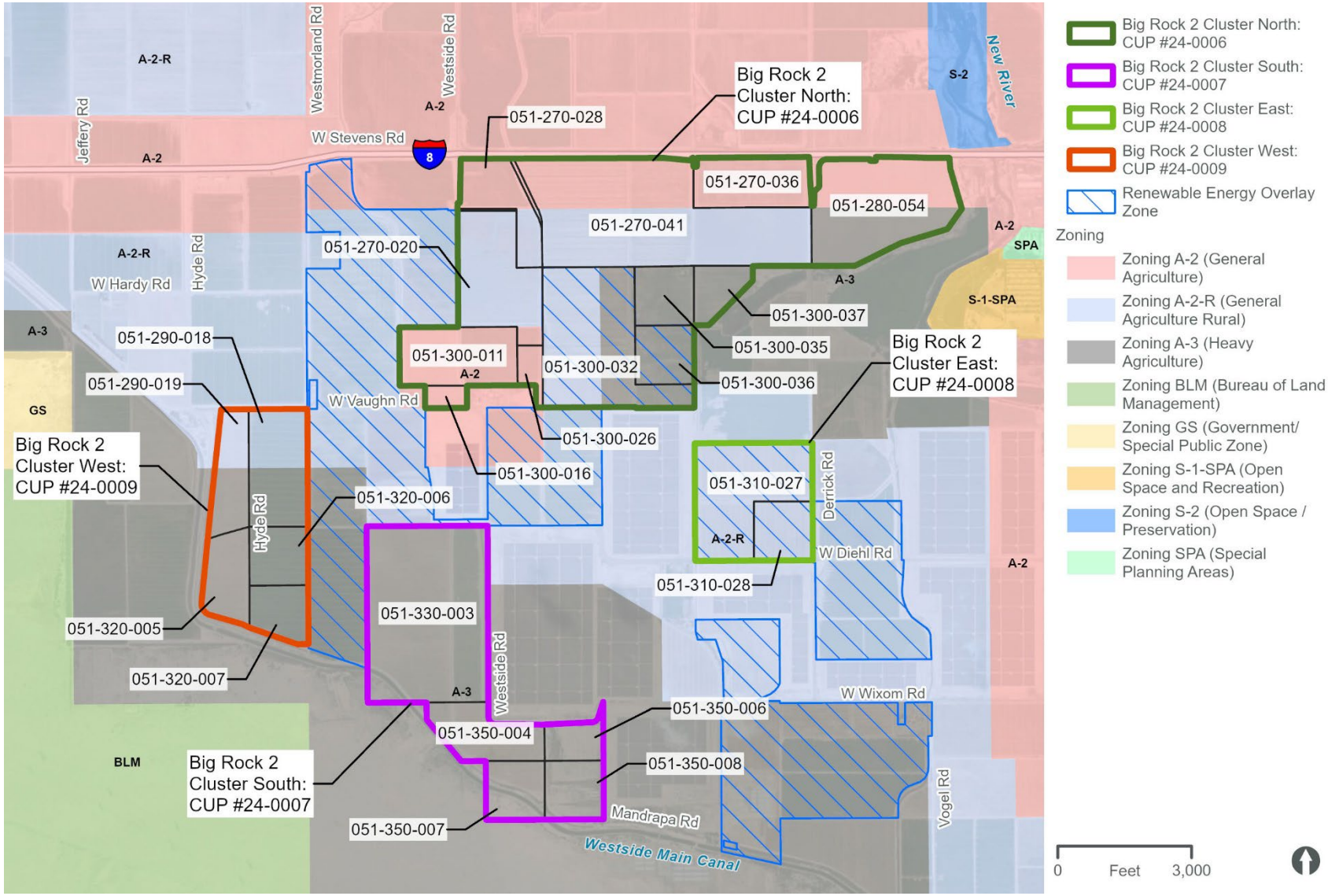


PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.11-2. Zoning Designations



This page is intentionally blank.

PC ORIGINAL PKG

3.11.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

State

State Planning and Zoning Laws

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning.

The general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year period or more.

The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific zone district, are required to be consistent with the general plan and any applicable specific plans.

Regional

~~Southern California Association of Governments – 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)~~

Southern California Association of Governments – ~~2020-2045~~ Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. ~~CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.~~

The most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was approved by SCAG's Regional Council in April 2024. As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning

approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels, all of which is further detailed in the Equity Analysis Technical Report.

The following SCAG policies are applicable to the project:

- Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts.
- Encourage the conservation and viability of agricultural lands to protect the regional and local food supply and ensure the sustainability of local agriculture as a vital part of the region's economy.

~~On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:~~

- ~~Reduce greenhouse gas emissions and improve air quality.~~
- ~~Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats~~

Local

County of Imperial General Plan

The purpose of the County's General Plan (as amended through 2008) is to direct growth, particularly urban development, to areas where public infrastructure exists or can be provided, where public health and safety hazards are limited, and where impacts on the County's abundant natural, cultural, and economic resources can be avoided. The following 10 elements comprise the County's General Plan: Land Use; Housing; Circulation and Scenic Highways; Noise; Seismic and Public Safety; Conservation and Open Space; Agricultural; Renewable Energy and Transmission Element; Water; and Parks and Recreation. Together, these elements satisfy the seven mandatory general plan elements as established in the California Government Code. Goals, objectives, and implementing policies and actions programs have been established for each of the elements.

Imperial County received funding from the CEC's Renewable Energy and Conservation Planning Grant to amend and update the County's General Plan in order to facilitate future development of renewable energy projects. The Geothermal/Alternative Energy and Transmission Element was last updated in 2006. Since then, there have been numerous renewable projects proposed, approved and constructed within Imperial County as a result of California's move to reduce greenhouse gas emissions, develop alternative fuel sources and implement its Renewable Portfolio Standard. The

County has recently prepared an update to the Geothermal/Alternative Energy and Transmission Element of its General Plan, called the Renewable Energy and Transmission Element. This Element is designed to provide guidance and approaches with respect to the future siting of renewable energy projects and electrical transmission lines in the County. The County adopted this element in 2016.

The RE and Transmission Element includes a RE Zone (RE Overlay Map). The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of RE projects, with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of RE facilities while minimizing the impact to other established uses. As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone.

An analysis of the project's consistency with the General Plan goals and objectives relevant to the project is provided in Table 3.11-2. While this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Planning Commission and Board of Supervisors retain final authority for the determination of the project's consistency with the General Plan.

Table 3.11-2. Project Consistency with Applicable General Plan Policies

Applicable Policies	Consistency Determination	Analysis
Land Use Element		
Public Facilities, Objective 8.7. Ensure the development, improvement, timing, and location of community sewer, water, and drainage facilities will meet the needs of existing communities and new developing areas.	Consistent	The project includes the necessary supporting infrastructure and would not require new community-based infrastructure. The project would be required to construct supporting drainage consistent with County requirements and mitigation measures prescribed in Section 3.10, Hydrology/Water Quality, of the EIR. Once the project is operational, water would be required for solar panel washing, fire protection, and domestic use (within the O&M building only). The project site is within the IID's boundary and therefore, would receive water service from the IID. Water demand for the proposed project is expected to be less than current water demands to support irrigated agriculture.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Public Facilities, Objective 8.8. Ensure that the siting of future facilities for the transmission of electricity, gas, and telecommunications is compatible with the environment and County regulation.	Consistent	The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. The County's General Plan and Land Use Ordinance allows that for renewable energy projects proposed on land classified in a non-RE Overlay zone, that the land on which the project is located may be included/classified in the RE Overlay Zone if the renewable energy project: 1) would be located adjacent to an existing RE Overlay Zone; 2) is not located in a sensitive area; 3) is located in proximity to renewable energy infrastructure; and, 4) and would not result in any significant environmental impacts. As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining project parcels into the RE Overlay Zone. With the approval of the General Plan Amendment, CUPs, and zone change the proposed project can be implemented.
Public Facilities, Objective 8.9. Require necessary public utility rights-of-way when appropriate.	Consistent	The project would include the dedication of necessary ROW to facilitate the placement of electrical distribution and transmission infrastructure.
Protection of Environmental Resources, Objective 9.6. Incorporate the strategies of the Imperial County AQAP in land use planning decisions and as amended.	Consistent	Dust suppression will be implemented in accordance with a dust control plan approved by the ICAPCD. Section 3.4, Air Quality, discusses the project's consistency with the AQAP in more detail.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Circulation and Scenic Highways Element		
Safe, Convenient, and Efficient Transportation System, Objective 1.1. Maintain and improve the existing road and highway network, while providing for future expansion and improvement based on travel demand and the development of alternative travel modes.	Consistent	The project would include limited operational vehicle trips and would not be expected to reduce the current level of service at affected intersections, roadway segments, and highways. The project does not propose any forms for residential or commercial development and therefore would not require new forms of alternative transportation to minimize impacts on existing roadways.
Safe, Convenient, and Efficient Transportation System, Objective 1.2. Require a traffic analysis for any new development which may have a significant impact on County roads.	Consistent	As described in Section 3.13, Transportation, a traffic study was prepared for the project and demonstrated that project operations would have a less than significant impact on the circulation network.
Noise Element		
Noise Environment. *Objective 1.3*. Control noise levels at the source where feasible.	Consistent	Where construction-related and operational noise would occur in close proximity to noise sensitive land uses (e.g. less than 500 feet), the County would condition the project to maintain conformance with County noise standards.
Project/Land Use Planning. *Goal 2:* Review Proposed Actions for noise impacts and require design which will provide acceptable indoor and outdoor noise environments.	Consistent	The project would be required to comply with the County's noise standards during both construction and operation.
Conservation and Open Space Element		
Conservation of Environmental Resources for Future Generations Goal 1: Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value.	Consistent	The project site would be converted from agricultural land to a solar energy facility. The proposed project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, it would also replace existing sources of non-renewable energy. The power generated by the proposed project would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts (i.e., air quality and GHG emissions). The proposed project would ensure future generations have access to a broad array of renewable energy sources, providing the public with alternative choices to fossil fuels.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Conservation of Biological Resources. Goal 2: The County will integrate programmatic strategies for the conservation of critical habitats to manage their integrity, function, productivity, and long-term viability.	Consistent	A biological resources survey was conducted for the project site. As discussed in Section 3.5, Biological Resources, there are potentially sensitive biological resources located within the project site. However, with the implementation of mitigation identified in Section 3.5, Biological Resources, these impacts would be reduced to a level less than significant.
Preservation of Cultural Resources. Objective 3.1: Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.	Consistent	A cultural resource inventory report was prepared for the project site. As discussed in Section 3.6, Cultural Resources, the proposed project has the potential to encounter undocumented archaeological resources and human remains. Mitigation Measures CUL-1 through CUL-3 have been identified to reduce potential impacts to a level less than significant.
Conservation of Water Resources. Objective 6.1: Ensure the use and protection of all the rivers, waterways, and groundwater sources in the County for use by future generations.	Consistent	As discussed in Section 3.10, Hydrology/Water Quality, the project applicant will prepare a site-specific drainage plan and water quality management plan to minimize adverse effects to local water resources; as well as coordinate with the IID for water consumption during construction and operation of the project.
Protection of Air Quality and Addressing Climate Change. Goal 7: The County shall actively seek to improve the quality of air in the region.	Consistent	The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from a fossil fuel burning facility. Therefore, the proposed project is consistent with this goal.
Protection of Air Quality and Addressing Climate Change. Objective 7.1: Ensure that all project and facilities comply with current Federal, State and local requirements for attainment of air quality objectives.	Consistent	The proposed project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Further, the proposed project would comply with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Air Quality Measures (Mitigation Measure AQ-2). Therefore, the proposed project is consistent with this objective.
Protection of Air Quality and Addressing Climate Change. Objective 7.2: Develop management strategies to mitigate fugitive dust. Cooperate with all federal and state agencies in the effort to attain air quality objectives.	Consistent	The project applicant would cooperate with all federal and State agencies in the effort to attain air quality objectives through compliance with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Air Quality Measures (Mitigation Measure AQ-2). Therefore, the proposed project is consistent with this objective.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Protection of Open Space and Recreational Opportunities. Objective 8.2: Focus all new renewable energy development within adopted Renewable Energy Overlay Zones.	Consistent	As shown in Figure 3.11-2, the majority of the project site is located outside of the RE Overlay Zone. The project applicant is requesting a General Plan Amendment and Zone Change to include/classify the remaining project parcels into the RE Overlay Zone. With the approval of the General Plan Amendment, Zone Change, and four CUPs, the proposed project can be implemented.
Renewable Energy and Transmission Element		
Objective 1.4: Analyze potential impacts on agricultural, natural, and cultural resources, as appropriate.	Consistent	This EIR has been prepared to meet the requirements of CEQA for purposes of evaluating the potential environmental impacts associated with the proposed project, which includes analysis on applicable environmental topics that analyze impacts on agricultural, natural, and cultural resources.
Objective 1.5: Require appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities.	Consistent	Please refer to Section 3.3, Agricultural Resources, for a description of existing agricultural resources within the project site and a discussion of potential impacts attributable to the project. A biological technical report has been prepared for the project, which is summarized in Section 3.5, Biological Resources, along with potential impacts attributable to the project. With incorporation of mitigation identified in Sections 3.3, Agricultural Resources and 3.5, Biological Resources, less than significant impacts would result.
Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.	Consistent	Water use during construction would be used primarily for dust control, and obtained from local IID irrigation canals or laterals in conformance with IID construction water acquisition requirements. The project applicant will also coordinate with IID to purchase water needed for maintenance activities (i.e. PV module washing) to ensure efficient use of water resources.
Objective 1.7: Assure that development of renewable energy facilities and transmission lines comply with Imperial County Air Pollution Control District's regulations and mitigation measures.	Consistent	Because of the minimal grading of the site during construction and limited travel over the site during operations, local vegetation is anticipated to remain largely intact which will assist in dust suppression. Furthermore, dust suppression will be implemented including the use of water and soil binders during construction. Section 3.4, Air Quality, discusses the project's consistency with the ICAPCD in more detail.
Objective 2.1: To the extent practicable, maximize utilization of IID's transmission capacity in existing easements or rights-of-way. Encourage the location of all major transmission lines within designated corridors easements, and rights-of-way.	Consistent	The project involves the construction and operation of new renewable energy infrastructure that would interconnect with existing and approved IID transmission infrastructure thereby maximizing the use of existing facilities.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Seismic and Public Safety Element		
Land Use Planning and Public Safety. Goal 1: Include public health and safety considerations in land use planning.	Consistent	Division 5 of the County Land Use Ordinance has established procedures and standards for development within earthquake fault zones. Per County regulations, construction of buildings intended for human occupancy which are located across the trace of an active fault are prohibited. An exception exists when such buildings located near the fault or within a designated Special Studies Zone are demonstrated through a geotechnical analysis and report not to expose a person to undue hazard created by the construction. Since the project site is located in a seismically active area, the project is required to be designed in accordance with the CBC. With implementation of the mitigation requirements outlined in the impact analysis, the risks associated with seismic hazards would be minimized. A preliminary geotechnical report has been prepared for the proposed project. The preliminary geotechnical report has been referenced in this environmental document. Additionally, a design-level geotechnical investigation would be conducted to evaluate the potential for site specific hazards associated with seismic activity.
Land Use Planning and Public Safety. Objective 1.1: Ensure that data on geological hazards is incorporated into the land use review process, and future development process.		
Land Use Planning and Public Safety. Objective 1.3: Regulate development adjacent to or near all mineral deposits and geothermal operations.		
Land Use Planning and Public Safety. Objective 1.4: Require, where possessing the authority, that avoidable seismic risks be avoided; and that measures, commensurate with risks, be taken to reduce injury, loss of life, destruction of property, and disruption of service.		
Land Use Planning and Public Safety. Objective 1.7: Require developers to provide information related to geologic and seismic hazards when siting a proposed project.		
Emergency Preparedness. Goal 2: Minimize potential hazards to public health, safety, and welfare and prevent the loss of life and damage to health and property resulting from both natural and human-related phenomena.		
Emergency Preparedness. Objective 2.2: Reduce risk and damage due to seismic hazards by appropriate regulation.		
Emergency Preparedness. Objective 2.5: Minimize injury, loss of life, and damage to property by implementing all state codes where applicable.		
Emergency Preparedness. Objective 2.8: Prevent and reduce death, injuries, property damage, and economic and social dislocation resulting from natural hazards including flooding, land subsidence, earthquakes, other geologic phenomena, levee or dam failure, urban and wildland fires and building collapse by appropriate planning and emergency measures.		

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Water Element		
Protection of Water Resources from Hazardous Materials. Program: The County of Imperial shall make every reasonable effort to limit or preclude the contamination or degradation of all groundwater and surface water resources in the County.	Consistent	Mitigation measures will require that the applicant of the proposed project prepare a site-specific drainage plan and water quality management plan to minimize adverse effects to local water resources.
Protection of Water Resources from Hazardous Materials. Program: All development proposals brought before the County of Imperial shall be reviewed for potential adverse effects on water quality and quantity, and shall be required to implement appropriate mitigation measures for any significant impacts.	Consistent	See previous response for Water Element above.
Housing Element		
Not Applicable. The proposed project is a solar energy and BESS project and does not include the development of housing.		

Source: ICPDS 2008
AQAP = air quality attainment plan; CUP = conditional use permit; EIR = environmental impact report; GV = growth visioning; ICAPCD = Imperial County Air Pollution Control District; IID = Imperial Irrigation District; MW = megawatt; RE = renewable energy' ROW = right-of-way;

County of Imperial Land Use Ordinance

The County's Land Use Ordinance provides the physical land use planning criteria for development within the jurisdiction of the County. The Land Use Ordinance identifies the permitted and conditional uses within a zoning designation. Uses identified as conditionally permitted require a CUP, which is subject to the discretionary approval of the County Board of Supervisors per a recommendation by the County Planning Commission.

A-2 Zoning. As shown in Table 3.11-1 and Figure 3.11-2, portions of the project site are zoned A-2, A-2-RE, A-2-R, and A-2-R-RE. Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*

- *Solar energy electrical generator*

Height Limit in A-2 Zone. Section 90508.07 of the Land Use Ordinance limits the height of all non-residential structures and specifically states in Section 90508.07(c) that, "Non-Residential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height, and as may be required by the ALUC plan."

A-3 Zoning. As shown in Table 3.11-1 and Figure 3.11-2, portions of the project site are zoned A-3 and A-3-RE. Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

Height Limit in A-3 Zone. Section 90509.07 of the Land Use Ordinance limits the height of all non-residential structures and specifically states in Section 90509.07(c) that, "Non-Residential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height, and as may be required by the ALUC plan."

RE Resources. According to Title 9, Division 17 of the Land Use Ordinance, the purpose of the RE Resources regulations are to "facilitate the beneficial use of renewable energy resources for the general welfare of the people of Imperial County and the State of California; to protect renewable energy resources from wasteful or detrimental uses; and to protect people, property, and the environment from detriments that might result from the improper use of renewable energy resources" (County of Imperial 2017).

Title 9, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved CUP. Uses that are conditionally permitted require a CUP subject to the discretionary approval of the County Board of Supervisors (Board) per a recommendation by the County Planning Commission.

Imperial County Airport Land Use Compatibility Plan

The Imperial County Airport Land Use Compatibility Plan (ALUCP) provides the criteria and policies used by the Imperial County Airport Land Use Commission to assess compatibility between the principal airports in Imperial County and proposed land use development in the areas surrounding the airports. The ALUCP emphasizes review of local general and specific plans, zoning ordinances, and other land use documents covering broad geographic areas.

PC ORIGINAL PKG

There are no public airports or public use airports located within two miles of the project site. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site. According to Figure 3G (Compatibility Map – Naval Air Facility El Centro) of the ALUCP, no portion of the project site is located within the Naval Air Facility El Centro land use compatibility zones (County of Imperial 1996).

3.11.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to land use and planning, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to land use and planning are considered significant if any of the following occur:

- Physically divide an established community
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

Impact Analysis

Impact 3.11-1 Would the project physically divide an established community?

The project site is located in a sparsely populated portion of Imperial County. There is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. There are two off-site rural residences located within 500 feet of the project site:

- One residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- One residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)

However, there are no established residential neighborhoods immediately adjacent to the project site. Therefore, implementation of the proposed project would not divide an established community and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.11-2 Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project's consistency with applicable land us plans, policies, and regulations is evaluated below.

SCAG ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~

As noted above, the ~~2020-2045~~ RTP/SCS ~~(Connect SoCal) (SCAG 2020)~~ identifies two goals which include reducing GHG emissions to improve air quality ~~(Goal 5)~~, and to ~~promote~~ encourage conservation and viability of ~~natural and~~ agricultural lands ~~(Goal 10)~~.

The ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~ identifies strategies to support the goal of reducing regional GHG and improve air quality, such as~~.~~ ~~Strategies include~~ coordinating with local, regional, state and federal partners to meet federal and state ambient air-quality standards and improve public health ~~leveraging technological innovations including incorporating solar energy, hydrogen fuel cell power storage, and power generation~~. The proposed project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Overall, the proposed project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities. Once in operation, the proposed project would contribute to SCAG's goal in reducing GHG emissions and improving air quality.

The ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~ also discusses the ~~decline~~ loss of agricultural land as an issue for the economy. As discussed in Section 3.3, Agricultural Resources, the project site is designated as Farmland of Statewide Importance and Prime Farmland.

The project would temporarily convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. However, as a condition of project approval (CUP condition), the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to its pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. Therefore, no impacts due to a conflict with the ~~2020-2045~~ RTP/SCS ~~(Connect SoCal)~~ would occur.

County of Imperial General Plan

The County's General Plan applies to the solar energy facility, BESS, gen-tie line, and supporting infrastructure associated with the project. An analysis of the project's consistency with the General Plan goals and objectives relevant to the project is provided in Table 3.11-2. As shown in Table 3.11-2, the proposed project would generally be consistent with the goals and objectives of the General Plan, with the exception of the RE and Transmission Element.

The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone, and as stated in the Renewable Energy and Transmission Element:

> CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. An amendment to the overlay zone would only be approved by the County Board of Supervisors if a future renewable energy project met one of the following two conditions:

1) Adjacent to the Existing RE Overlay Zone: An amendment may be made to allow for development of a future renewable energy project located adjacent to the existing RE Overlay Zone if the project:
    - Is not located in a sensitive area
    - Would not result in any significant impacts
2) "Island Overlay": An amendment may be made to allow for development of a future renewable energy project that is not located adjacent to the existing RE Overlay Zone if the project:
    - Is located adjacent (sharing a common boundary) to an existing transmission source
    - Consists of the expansion of an existing renewable energy operation
    - Would not result in any significant environmental impacts.

As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the project applicant is seeking a zone change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE) and approval of all four CUPs by the County to allow for the construction and operation of the proposed solar energy facility with an integrated BESS. The project site is located adjacent to an existing RE Overlay Zone; therefore, the project would meet the criteria identified for the "Adjacent to the Existing RE Overlay Zone" to obtain approval of an amendment to the RE Overlay Zone. Table 3.11-3 provides an analysis of the project's consistency with the "Adjacent to the Existing RE Overlay Zone" criteria.

With approval of the General Plan Amendment and Zone Change, the project applicant will be able to request for approval of all four CUPs to allow the construction and operation of the proposed solar facility with integrated BESS.

Table 3.11-3. Project Consistency with "Adjacent to the Existing RE Overlay Zone" Criteria

Criteria	Criteria Met?
Is not located in a sensitive area?	The project site is not in a recognized species corridor or habitat linkage. However, portions of the project site are designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. The project would temporarily convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. However, as a condition of project approval (CUP condition), the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to its pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. Furthermore, the project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have already been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar became operational in September 2013 and is located on multiple APNs that are adjacent to the project site. The project would be an expansion of existing renewable energy operation in the area.
Would not result in any significant environmental impacts?	As detailed in Sections 3.2 through 3.16 of this EIR, no unavoidable or unmitigable significant impacts were identified. Where significant impacts have been identified, mitigation measures are proposed, that when implemented, would reduce the impact level to less than significant. Therefore, the proposed project would not result in a residual significant impact.

EIR = environmental impact report; MW = megawatt; RE = renewable energy

PC ORIGINAL PKG

County of Imperial Land Use Ordinance

Development of the solar energy facility, BESS, and supporting infrastructure is subject to the County's zoning ordinance. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

The proposed project may involve construction of transmission towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance(s) for any transmission structures that exceed this height limit. Therefore, with approval of the four CUPs and variance(s), the proposed project would

not conflict with the County's zoning ordinance. Therefore, the proposed project would not conflict with the County's zoning ordinance and impacts would be less than significant.

Imperial County Airport Land Use Compatibility Plan

As previously discussed above, the Naval Air Facility in El Centro is located approximately three miles northeast of the project site. According to Figure 3G (Compatibility Map – Naval Air Facility El Centro) of the ALUCP, no portion of the project site is located within the Naval Air Facility El Centro land use compatibility zones (County of Imperial 1996). Therefore, the proposed project would not conflict with the Imperial County ALUCP and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

3.11.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

No impacts on land use and planning are anticipated to occur during decommissioning and restoration of the project site. Decommissioning and restoration would not physically divide an established community or conflict with any applicable land use plan, policy, or regulation. Through the project's decommissioning and subsequent restoration to pre-project conditions, the uses of the project site (agricultural) would remain consistent with the General Plan and zoning designations of the site, which allow agricultural uses. Therefore, no impact is identified and no mitigation is required.

Residual

With mitigation as prescribed in other sections of this EIR, issues related to the conversion of Important Farmland to non-agricultural use would be mitigated and reduced to a less than significant level. Similarly, with the implementation of the four CUPs and reclamation plan to address post-project decommissioning, the project would generally be consistent with applicable federal, state, regional, and local plans and policies. Based on these circumstances, the project would not result in any residual significant and unmitigable land use impacts.

PC ORIGINAL PKG

3.12 Noise and Vibration

This section identifies the ambient noise environment for the project area and describes applicable federal, state, and local regulations, potential project-related noise and vibration impacts, and recommended mitigation measures to avoid or reduce potential impacts of the proposed project.

3.12.1 Existing Conditions

Noise is defined as unwanted sound. Pressure waves traveling through air exert a force registered by the human ear as sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level), which is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. Consequently, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz and above 5,000 hertz to imitate the human ear's decreased sensitivity to low and extremely high frequencies. This emulation of the human ear's frequency sensitivity is referred to as A-weighting and is expressed in units of dBA. Frequency A weighting follows an international standard method of frequency de-emphasis and is typically applied to community noise measurements. In practice, the specific sound level from a source is measured using a meter incorporating an electrical filter corresponding to the A-weighting curve. All noise levels reported are A-weighted unless otherwise stated.

Noise Exposure and Community Noise

Community noise varies continuously over a period of time with respect to the sound sources contributing to the community noise environment. Community noise is primarily the product of many distant noise sources that constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. Community noise is constantly changing throughout the day because of short duration single event noise sources, such as aircraft flyovers, vehicle passbys, and sirens. These successive additions of sound to the community noise environment vary the community noise level from instant to instant. This requires the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below (Caltrans 1998):

- L_{eq}: the equivalent level (L_{eq}), s used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The L_{eq} is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- L_{max}: the instantaneous maximum noise level (L_{max}) for a specified period of time.
- L_{dn}: 24-hour day and night (L_{dn}) A-weighed noise exposure level, which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10 p.m. and 7 a.m. is weighted (penalized) by adding 10 dB to take into account the greater annoyance of nighttime noises. Similar to L_{dn}, community noise equivalent Level (CNEL) adds a 5 dBA "penalty" for the evening hours

between 7 p.m. and 10 p.m. in addition to a 10 dBA penalty between the hours of 10 p.m. and 7 a.m.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

1. Subjective effects of annoyance, nuisance, dissatisfaction
2. Interference with activities such as speech, sleep, learning
3. Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial settings can experience noise in the last category. A satisfactory method for measuring the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction does not exist. However, a wide variation in individual thresholds of annoyance does exist, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted; i.e., the "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans 1998):

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived
- Outside of the laboratory, a 3 dBA change is considered a perceivable difference
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected
- A 10 dBA change is subjectively heard as approximately a doubling in loudness and can cause adverse response

These relationships occur in part because of the logarithmic nature of sound and the dB system. The human ear perceives sound in a nonlinear fashion hence the dB scale was developed. Because the dB scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather they combine logarithmically. For example, if two identical noise sources produce noise levels of 50 dB, the combined sound level would be 53 dB, not 100 dB. Because of this sound characteristic, if there are two noise emission sources, one producing a noise level greater than 9 dB than the other, the contribution of the quieter noise source is negligible and the sum of the noise sources is that of the louder noise source.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites.

Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans 1998).

Existing Ambient Noise

The project site is comprised of 24 assessor parcels that are designated as A-2 (General Agriculture), A-2-R (General Agricultural Rural), A-2-R-RE (General Agricultural Rural - Renewable Energy Overlay), A-2-RE (General Agriculture - Renewable Energy Overlay), A-3 (Heavy Agriculture), and A-3-RE (Heavy Agriculture - Renewable Energy Overlay).

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

The predominant sources of noise in the project area includes vehicular traffic on local roads and highways and agricultural operations. Activities involving the use of heavy-duty equipment such as front-end loaders, forklifts, and diesel-powered trucks are common noise sources typically associated with agricultural uses. Noise typically associated with agricultural operations, including the use of heavy-duty equipment, can reach maximum levels of approximately 85 dBA at 50 feet (Caltrans 1998). With the soft surfaces characterizing the agricultural landscape, these noise levels attenuate to ~60 dBA at distances over 800 feet. Based on field observations of the project site, the existing noise environment is generally influenced by the noise produced from the following sources:

- Vehicle traffic along roadways including Derrick Road, Drew Road, Westside Road, Diehl Road, and I-8
- Agricultural operations throughout the project area including the operation of heavy equipment and vehicles

Based on the availability of a previously prepared noise study in conjunction with the approved Campo Verde Solar Project (SCH No. 2011111049) and the proximity of the measurements to the project site, the previously-acquired noise measurements are considered to be representative of existing conditions and appropriate for use in this EIR. Based on this circumstance, these measurements were used to characterize ambient noise conditions for the project site.

Noise measurements were taken at two monitoring locations at the Campo Verde Solar Project site. Monitoring Location 1 was located roughly 30 feet from Westside Road near the intersection of West Vaughn Road. Monitoring Location 2 was taken in the eastern portion of the Campo Verde Solar Project site approximately 30 feet from Drew Road at the intersection of West Diehl Road. The noise measurements were monitored for a time period of 15 minutes each. According to the Campo Verde Solar Project Final EIR (SCH No. 2011111049), the ambient L_{eq} noise levels measured in the area of the project during the late morning and mid-day were found to be between 50-55 dBA L_{eq} on the western portion of the site and 90 percent (L90) the noise levels were 36-38 dBA. The existing noise levels in the project area consisted primarily of low traffic volumes along Drew Road and Westside Road and background noise from existing agricultural operations in the distances both on and adjacent to the site. The existing noise levels were found to be below County thresholds for all sensitive land uses.

Sensitive Receptors

Although noise pollution can affect all segments of the population, certain groups and land uses are considered more sensitive to ambient noise levels than others, sensitivity being a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups.

Residential land uses are also generally more sensitive to noise than commercial and industrial land uses. There are no established residential neighborhoods immediately adjacent to the project site. The nearest residence is located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby residences include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

Based on a review of GoogleEarth aerial imagery, the Westside Elementary School (2295 West Vaughn Road) is located approximately 200 feet from the closest boundary of the Big Rock 2 Cluster North site. However, according to the California Department of Education's California School Directory, Westside Elementary School closed on June 30, 2012 (California Department of Education 2017).

Proximity to Airports

The project site is not located within 2 miles of a public airport or a public use airport. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site.

Groundborne Vibration

Groundborne vibration consists of rapidly fluctuating motions or waves, which are also measured in dB. Construction activities, train operations, and street traffic are some of the most common external sources of vibration that can be perceptible inside structures. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. High frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances.

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases. While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures

PC ORIGINAL PKG

hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise.

Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 hertz), or when the structure and the source of vibration are connected by foundations or utilities, such as sewer and water pipes. To assess a project's vibration impacts, the Caltrans 2013 vibration impact assessment, entitled the "Transportation and Construction-Induced Vibration Guidance Manual," was utilized. The guidance manual uses peak particle velocity (PPV) to quantify vibration amplitude. PPV is defined as the maximum instantaneous peak of the vibratory motion (Caltrans 2013). As a point of reference, a strongly perceived transient source is 0.90 PPV at 25 feet, and 0.10 PPV at 25 feet for an intermittent source. Table 3.12-1 identifies acceptable vibration limits for transportation and construction projects based on guidelines prepared by Caltrans.

Table 3.12-1. California Department of Transportation Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inch/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013

Notes:

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV=peak particle velocity

3.12.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

No federal regulations govern offsite (community) noise. The Occupational Safety and Health Act of 1970 specifies measures designed to protect workers against the effects of noise exposure and lists permissible noise level exposure as a function of the amount of time to which a worker is exposed. Occupational Safety and Health Administration (OSHA) regulations also dictate hearing conservation program requirements and workspace noise monitoring requirements. OSHA requirements limit worker noise exposure to 90 dBA over an 8-hour work shift. Furthermore, if 8-hour worker noise

PC ORIGINAL PKG

exposure at a work site exceeds 85 dBA, the area must be posted as a noise hazard zone; and a hearing conservation program would be required.

United States Fish and Wildlife Service (USFWS) has established a level of 60 dBA equivalent continuous noise level (L_{eq}) as the maximum permissible noise level to which certain riparian bird species may be subjected during the mating and nesting seasons.

State

The state has also established noise insulation standards for new multi-family residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (CCR, Title 24). The noise insulation standards set forth an interior standard of Ldn 45 dB for any habitable room. They also require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than Ldn 60 dB. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

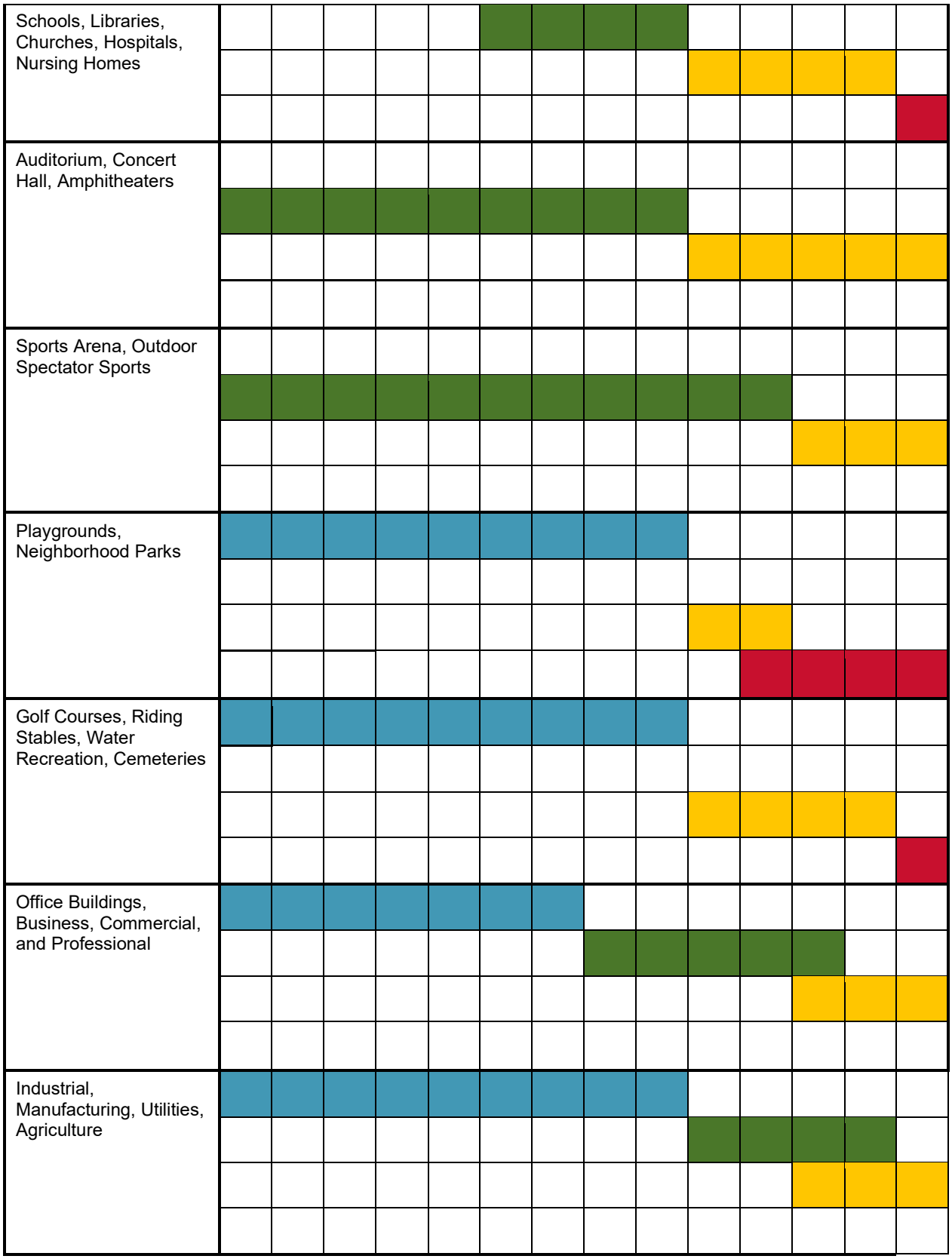
The State of California General Plan Guidelines, published by the OPR in 1998, also provides guidance for the acceptability of projects within specific CNEL/Ldn contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The County of Imperial has utilized the adjustment factors provided and has modified the state's Land Use Compatibility standards for the purpose of implementing the Noise Element of its General Plan.

Table 3.12-2 summarizes the acceptable and unacceptable community noise exposure limits for various land use categories as currently defined by the State of California. These community noise exposure limits are also incorporated into the County of Imperial General Plan Noise Element.

Table 3.12-2. Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure – L_{dn} or CNEL (dBA)						
	50	55	60	65	70	75	80
Residential							
Transient Lodging – Motel, Hotel							

PC ORIGINAL PKG



PC ORIGINAL PKG

	Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
	Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable	New construction or development should generally not be undertaken.

Source: California Office of Planning and Research 1998
Notes:
CNEL=community noise equivalent level; dBA=a-weighted decibel; L_{dn}=day-night average sound level

Local

Imperial County General Plan Noise Element

The County of Imperial General Plan Noise Element identifies and defines existing and future environmental noise levels from sources of noise within or adjacent to the County of Imperial; establishes goals and objectives to address noise impacts, and provides Implementation Programs to implement adopted goals and objectives. Table 3.12-3 summarizes the project's consistency with the applicable General Plan noise policies.

Noise Impact Zones. The County identifies Noise Impact Zones for sensitive receptors likely to be exposed to significant noise (greater than 60 dB CNEL or 75 dB L_{eq}) from roadways, railroads, airports, and agricultural activities. The purpose of the Noise Impact Zone is to define areas and properties where an acoustical analysis of a Project is required to demonstrate project compliance with land use compatibility requirements and other applicable environmental noise standards. Any property within 1,500 feet of an interstate highway or 1,100 feet of a State highway is within a Noise Impact Zone, as is any property within 0.25 mile (1,320 feet) of existing farmland that is in an agricultural zone.

An acoustical analysis is required for any action that would be located, all or in part, in a Noise Impact Zone. According to the Noise Element, if the future noise levels from the action are within the normally acceptable noise level guideline but result in an increase of 5 dBA CNEL or greater, the action would have a potentially significant noise impact and mitigation measures must be considered. If the future noise level after the action is completed is greater than the normally acceptable noise level, a noise increase of 3 dBA CNEL or greater should be considered a potentially significant noise impact; and mitigation measures must be considered.

Land use compatibility defines the acceptability of a land use in a specified noise environment. Noise/Land Use Compatibility Guidelines are provided in the Noise Element to evaluate potential noise impacts and provide criteria for environmental impact findings and conditions for project approval. An

acoustical analysis is required to demonstrate conformance of a project with Noise/Land Use Compatibility Guidelines. These guidelines categorize noise levels at residential land uses as "normally acceptable" up to 60 dBA day-night average sound level (L_{dn}) or CNEL and as "conditionally acceptable" up to 70 dBA L_{dn} or CNEL.

Table 3.12-3. Consistency with Applicable General Plan Noise Policies

General Plan Policies	Consistency with General Plan	Analysis
1. Acoustical Analysis of proposed projects. The County shall require the analysis of proposed discretionary projects, which may generate excessive noise, or which may be impacted by existing excessive noise levels.	Consistent	Under existing conditions, the ambient noise environment is characterized as relatively quiet with peak noise levels influenced by vehicular traffic and off-site agricultural operations. Given that the project is not characterized as a sensitive land use, project facilities would be unaffected by existing noise levels. The project facilities would be constructed within areas zoned for agricultural use with noise levels up to 70 dBA identified as normally acceptable. Project operations are expected to produce noise levels that would not exceed County standards and, hence impacts are expected to be less than significant. This EIR provides an analysis of the potential short- and long-term noise impacts of the project. As discussed, short-term and long-term noise levels were found to be less than significant
2. Noise/Land Use Compatibility. Where acoustical analysis of a proposed project is required, the County shall identify and evaluate potential noise/land use conflicts that could result from the implementation of the project. Projects which may result in noise levels that exceed the "Normally Acceptable" criteria of the Noise/Land Use Compatibility Guidelines shall include mitigation measures to eliminate or reduce the adverse noise impacts to an acceptable level.	Consistent	Noise levels associated with project operations are unlikely to exceed noise limits for the A-2, A-2-R, and A-3 zones. See Section 3.11.3 for additional discussion.
4. Interior Noise Environment. Where acoustical analysis of a proposed project is required, the County shall identify and evaluate projects to ensure compliance to the California (Title 24) interior noise standards and the additional requirements of this Element.	Consistent	As described under General Plan Noise Policy 1, short-term and long-term noise impacts would be minimized through the implementation of the prescribed mitigation. Noise levels associated with project operations would be unlikely to exceed noise limits for the A-2, A-2-R, and A-3 zones.

PC ORIGINAL PKG

5. New Noise Generating projects. The County shall identify and evaluate projects which have the potential to generate noise in excess of the Property Line Noise Limits. An acoustical analysis must be submitted which demonstrates the project's compliance.	Consistent	As described under General Plan Noise Policy 1, short-term and long-term noise impacts would be minimized through the implementation of the prescribed mitigation. Noise levels associated with project operations would be unlikely to exceed noise limits for the A-2, A-2-R, and A-3 zones.
6. Projects Which Generate Off-site Traffic Noise. The acoustical analysis shall identify and evaluate projects which will generate traffic and increase noise levels on off-site roadways. If the project site has the potential to cause a significant noise impact on sensitive receptors along those roadways, the acoustical analysis report shall consider noise reduction measures to reduce the impact to a level less than significant.	Consistent	As described in Chapter 3, the project would involve a minimal number of operational related vehicle trips and therefore, is unlikely to produce any increase in traffic noise levels on local roadways.

Source: County of Imperial 2015c
Notes:
dBA=a=weighted decibel; EIR=environmental impact report

Construction Noise Standards

Construction noise standards included in the Noise Element restrict construction equipment noise levels to 75 dBA L_{eq} when averaged over an eight-hour period and measured at the nearest sensitive receptor. This standard assumes a construction period, relative to an individual sensitive receptor of days or weeks. In cases of extended length construction times, the standard may be tightened so as not to exceed 75 dB L_{eq} when averaged over a one-hour period. In addition, construction equipment operation is limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. Further, no commercial construction operations are permitted on Sunday or holidays.

County of Imperial Noise Ordinance

The County enforces construction and operation noise standards specified in the Noise Element through the Noise Ordinance. Noise-generating sources in Imperial County are regulated under the Imperial County Codified Ordinances, Title 9, Division 7 (Noise Abatement and Control) (Imperial County 2022). The noise standards of the Ordinance limit the hours of construction and the level of noise emitted by the construction, as well as the operational noise levels at various land uses for day, evening, and night. Noise limits are established in Chapter 2 of this ordinance and shown in Table 3.12-4.

PC ORIGINAL PKG

Table 3.12-4. Imperial County Property Line Noise Limits

Zone	Time	Average Hourly Sound (L_{eq})
Residential Zones	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
Multi-Residential Zones	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
Commercial Zones	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
Light Industrial/Industrial Park Zones	Anytime	70
General Industrial Zones	Anytime	75

Source: Imperial County Ordinance § 90702.00

Note: When the noise-generating property and the receiving property have different uses, the more restrictive standard shall apply. When the ambient noise level is equal to or exceeds the Property Line noise standard, the increase of the existing or proposed noise shall not exceed 3 dB Leq.

Property line noise limits apply to noise generation from one property to an adjacent property. The standards imply the existence of a sensitive receptor on the adjacent, or receiving, property. In the absence of a sensitive receptor, an exception or variance to the standards may be appropriate. These standards do not apply to construction noise. These standards are enforced through the County's code enforcement program on the basis of complaints received from persons impacted by excessive noise. The County may act to restrict disturbing, excessive, or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity residing in an area. Noise received at the property line of a residence is limited to 50 dBA L_{eq} in the daytime and 45 dBA L_{eq} at night.

Under Section 90702.00 of the County's Codified Ordinances, sound level limits for industrial noise are set at 75 dBA L_{eq} on or beyond the boundary of the property line at any time. Average hourly noise in residential areas is limited to 50 to 55 dBA from 7:00 a.m. to 10:00 p.m. and to 45 to 50 dBA from 10:00 p.m. to 7:00 a.m.

3.12.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts on noise and vibration, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to noise and vibration are considered significant if any of the following occur:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Generate excessive groundborne vibration or groundborne noise levels

- For a project located in the vicinity of a private airstrip of an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Methodology

Noise generated by the proposed project will consist of: (1) short duration noise resulting from construction activities and (2) noise during normal facility operations. Vibration from the proposed project would only result during construction. Construction activities would take place only during daytime hours. An evaluation was performed of expected noise and vibration and compared to regulatory requirements.

Impact Analysis

Impact 3.12-1 Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

CONSTRUCTION

Construction noise, although temporary, can potentially affect nearby sensitive receptors, such as residences. Construction of the proposed project will require the use of heavy equipment that may be periodically audible at offsite locations. Received noise levels will fluctuate, depending on the construction activity, equipment type, and distance between noise source and receiver. Additionally, noise from construction equipment will vary dependent on the construction phase and the number and type of equipment at a location at any given time. Table 3.12-5 shows typical noise levels produced by various types of construction equipment at a distance of 50 feet. The construction period for the project is approximately 18 to 24 months. Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

The variation in power and usage of the various equipment types creates complexity in characterizing construction noise levels. However, as described in Chapter 2, Project Description, noise generated

PC ORIGINAL PKG

during construction activities would comply with the Imperial County Noise Ordinance (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

In addition, the average distance from the construction activities to these sensitive land uses is approximately 250 feet. Construction noise will attenuate with increased distance from the noise sources. As such, noise levels would not exceed the County's 75 dBA Leq construction noise threshold.

Table 3.12-5. Typical Noise Levels for Construction Equipment

Equipment	Noise Level, Lmax at 50 feet	Composite Noise Level (Leq 1-hour) at 50 feet
Vibratory Post Driver	85	87
Crawler/Tractor/Dozer	82	
Dump, Concrete, Tender Truck	79	
Forklift/Aerial Lift/Boom	81	
Generator/Compressor	81	
Grader/Scraper	85	
Roller/Compactor	80	
Tractor/Loader/Backhoe	79	
Vibratory Plate (handheld)	83	
Flatbed Truck	74	
Water Truck	79	

Source: Federal Highway Administration Roadway Construction Noise Model, FHWA 2006

Traffic noise associated with construction of the proposed project is not anticipated to be a significant source of noise. Traffic noise is not greatly influenced by lower levels of traffic, such as those associated with the proposed project's construction effort. For example, traffic levels would have to double in order for traffic noise on area roadways to increase by 3 dBA. The proposed project's construction traffic on area roadways would increase hourly traffic volumes by much less than double; therefore, the increase in construction related traffic noise would be less than 3 dBA and is not significant.

As such, construction activities would not exceed the Imperial County daytime noise standard for construction activities of 75 dBA Leq at the nearest sensitive receptor and nighttime activities would not result in perceptible noise levels at the nearest sensitive receptors. Therefore, impacts would be less than significant.

PC ORIGINAL PKG

OPERATION

The principal long-term, operational noise impacts resulting from the project would include light duty vehicle traffic for maintenance operations, including solar panel washing, central operations at the O&M building, including stationary mechanical equipment (e.g., heating, ventilation, and air-conditioning for the O&M building). The energy storage component facilities are not considered noise generators but would be equipped with air conditioning systems. The level of noise generated by these combined sources would depend on characteristics of the noise source, number of noise sources clustered together, type and effectiveness of building enclosure, and operational characteristics.

Operation of the O&M building, substation, and electrical distribution facilities would result in a minor increase in the use of motor vehicles, primarily associated with employees traveling to and from these facilities and routine maintenance and inspection activities. These trips for maintenance and inspection would be distributed through the roadway network. Because of the relatively low volume of project-generated traffic (refer to Section 3.14, Transportation), operation of the proposed project would not result in noticeable changes in the traffic noise along area roadways in relation to existing and projected roadway traffic volumes. As a result, long-term increases in traffic noise levels would be less than significant. The project would be required to comply with the County of Imperial Codified Ordinances Division 7 Noise Abatement and Control. This ordinance governs fixed operational noise within the project site. The 1-hour average sound level limit for the A-2, A-2-R, and A-3 zones is 75 dBA and noise levels up to 70 dBA L_{dn} are identified as normally acceptable. The noise generated during these collective operations would be required to comply with the noise standards contained in the County's Noise Ordinance. The noise associated with the O&M building or energy storage area do not represent a significant noise source as their operation does not involve the use of external equipment that is considered a significant noise source. ~~and would involve less intensive activities and operation of equipment as compared to existing agricultural operations in the area.~~ Therefore, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.12-2 Would the project generate excessive groundborne vibration or groundborne noise levels?

CONSTRUCTION

Construction would result in temporary ground vibration. Construction activities most likely to cause vibration include heavy construction equipment and drilling. The County does not have adopted limits for determining significance of vibration impacts on structures or persons. Caltrans and the Federal Transit Administration have developed two of the decisive works in the assessment of vibrations from transportation and construction sources (Caltrans 2013; Federal Transit Administration 2006). The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources.

The *Caltrans Transportation and Construction Vibration Guidance Manual* identifies two impact criteria for buildings and humans. Table 3.12-1 describes impact criteria for buildings, and Table 3.12-6 describes impact criteria for humans.

PC ORIGINAL PKG

Table 3.12-6. Caltrans Guideline Vibration Annoyance Potential

Human Response	Maximum PPV (inch/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans 2013

Notes:

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV=peak particle velocity

As impact pile drivers have higher vibration levels than vibratory pile drivers, the potential vibration impact calculations assume that impact pile drivers will be used. Other construction activities are less intensive than pile driving and would have lower PPV than pile driving. Therefore, vibration levels from pile driving are considered worst case for the project construction. Caltrans vibration guidance provides the following equation to calculate PPV at sensitive receptors:

$$\text{PPV Impact Pile Driver} = PPV_{Ref} (25/D)^{n} \times (E_{equip}/E_{Ref})0.5 \text{ (in/sec)}$$

Where:

PPV_{Ref} = 0.65 in/sec for a reference pile driver at 25 feet

D = distance from pile driver to the receiver in feet

n = 1.1 is a value related to the vibration attenuation rate through ground

E_{equip} is rated energy of impact pile driver in ft-lbs

E_{Ref} is 36,000 ft-lb (rated energy of reference pile driver)

Using the referenced formula and an assumed 2,400 ft-lb rated energy for the post driver, the calculated PPV at the nearest structure (assumed to be 250 feet) would be 0.013 PPV, which according to the Caltrans guidance in Table 3.12-6, would not damage buildings and would be barely perceptible.

Construction would result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Construction would result in additional heavy vehicle trips on local roadways accessing the project site. Rubber-tire heavy vehicles traveling on roadways typically will not produce perceptible vibration at adjacent buildings.

Construction activities most likely to cause vibration include heavy construction equipment and site grading operations. Although all heavy, mobile construction equipment has the potential to cause at least some perceptible vibration when operating close to buildings, the vibration is usually short term and is not of sufficient magnitude to cause building damage. Heavy equipment such as dozers, loaders, and drill rig equipment would not be operated close enough to any residences or structures to cause vibration impact. Therefore, impacts would be less than significant.

OPERATION

Operation of the project would not result in vibrations perceptible to nearby receptors. As such, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.12-3 For a project located in the vicinity of a private airstrip of an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project would not involve the construction of sensitive land uses. The project site is not located within 2 miles of a public airport or a private airstrip. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site. Therefore, the proposed project would not expose people to excessive airport noise levels and no impact is identified.

Mitigation Measure(s)

No mitigation measures are required.

3.12.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

At the end of the project's useful life, all equipment and facilities will be properly abandoned and dismantled. The solar facility requires the project applicant to implement a comprehensive reclamation plan that would restore the project site to pre-existing (pre-project) conditions following decommissioning of the project. Adhering to Imperial County standards for construction noise levels would reduce the noise and vibration impacts to below a level of significance.

All abandonment and decommissioning activities would be short-term and any noise from decommissioning equipment (e.g., cranes; excavators) would be similar to the construction impacts discussed above and would not be significant. Noise from energy operations would entirely cease with the discontinuation of geothermal energy generation activities/facilities.

Residual

Adhering to the Imperial County standards for construction noise levels would reduce the noise and vibration impacts to below a level of significance.

PC ORIGINAL PKG

3.13 Public Services

This section includes an evaluation of potential impacts for identified public services that could result from implementation of the proposed project. Public services typically include fire protection, law enforcement, schools, and other public facilities such as parks, libraries, and post offices. Each subsection includes descriptions of existing facilities, service standards, and potential environmental impacts resulting from implementation of the proposed project, and mitigation measures where appropriate. Section 3.16, Utilities/Service Systems, of this EIR evaluates impacts related to water supply, wastewater, and other utilities. The impact assessment provides an evaluation of potential adverse effects to public services based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description.

The IS/NOP prepared for this EIR determined that the project would not result in impacts on schools, parks and other public facilities (libraries and post offices). Therefore, these issue areas will not be discussed further. The IS/NOP is included in Appendix A of this EIR.

3.13.1 Existing Conditions

The project site is located approximately 8 miles southwest of the City of El Centro and approximately one mile southwest of Seeley, a census-designated place, in the unincorporated area of Imperial County. The project site is located within the Imperial County Fire Department/Office of Emergency Services (ICFD/OES) and the Imperial County Sheriff Department's areas of service.

Fire Protection Services

The project site is located within the ICFD/OES area of service. ICFD/OES currently has nine fire stations and six contracting agencies serving the entire 4,500 square miles of unincorporated Imperial County. The nine ICFD stations are located in the communities of Heber, Seeley, Ocotillo, Palo Verde, Niland, Winterhaven, Salton City, and the City of Imperial (ICFD 2019). Each of the county fire stations is staffed with a Captain, Firefighter, and Reserve Firefighter with the only exception being the Palo Verde station that is staffed with a Firefighter and Reserve Firefighter. Every fire station has a Type I engine as its primary apparatus. The City of Imperial and Heber stations also house a Ladder Truck along with the Type I engine. The Seeley and Heber stations also house Type III engines. The ICFD Emergency Units strive to respond immediately after receiving the initial tone for service. The actual response time would be determined by the area of response throughout the vast response area covered.

The closest fire station to the project site is the Seeley station located at 1828 Park Street in Seeley, California. This station is located approximately less than 3 miles northeast of the project site.

Police Protection Services

Imperial County's Sheriff's Department is responsible for police protection services in the unincorporated areas of Imperial County and the City of Holtville. The patrol function is divided between North County Patrol, South County Patrol, East County Operations, and City of Holtville. Deputies assigned to the Patrol Divisions are the "first responders" to a call for law enforcement service. The main patrol station is located in El Centro on Applestill Road. Sheriff substations are located in the communities of Brawley, Niland, Salton City, and Winterhaven with resident deputies located in the unincorporated community of Palo Verde. Under an existing mutual aid agreement,

additional law enforcement services would be provided if and when required by all of the cities within the county, as well as with Border Patrol and the California Highway Patrol. The California Highway Patrol provides traffic regulation enforcement, emergency accident management, and service and assistance on state roadways and other major roadways in the unincorporated portions of Imperial County.

The closest sheriff's station to the project site is the main patrol station in El Centro, located at 328 Applestill Road. This station is approximately 8 miles east of the project site.

3.13.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

State

Fire Codes and Guidelines

The California Fire Code (Title 24, Part 9 of the CCR) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

Local

Imperial County General Plan

The Imperial County General Plan Seismic and Public Safety Element contains goals and objectives that relate to fire protection and law enforcement pertinent to the proposed project. An analysis of the project's consistency with the applicable goals and objectives of the Seismic and Public Safety Element is provided in Table 3.13-1.

Table 3.13-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element

Applicable General Plan Goals/Policies	Consistency Determination	Analysis
Goal 1: Include public health and safety considerations in land use planning.	Consistent	The project's CUP applications and site plan will be reviewed by the Imperial County Fire Department to ensure that the facility complies with state and local fire codes and fire safety features are met. Additionally, the project applicant has included site design measures to reduce the potential for fire hazards

PC ORIGINAL PKG

Table 3.13-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element

Applicable General Plan Goals/Policies	Consistency Determination	Analysis
Objective 1.8: Reduce fire hazards by the design of new developments		including 100,000 gallon on-site fire water tanks for O&M and sufficient turnaround areas to allow clearance for fire trucks per fire department standards.
Goal 2: Minimize potential hazards to public health, safety, and welfare and prevent the loss of life and damage to health and property resulting from both natural and human-related phenomena.	Consistent	See response above for a discussion on how the project would implement all state and local fire codes and provide site design measures to reduce the potential for fire hazards. With regards to public safety and security, the project would include 7 to 10 foot tall perimeter security fencing. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the project.
Objective 2.5: Minimize injury, loss of life, and damage to property by implementing all state codes where applicable.		

Source: ICPDS 1997

CUP = conditional use permit

Imperial County Office of Emergency Services – Multi-Hazard Mitigation Plan

The ICFD is the local Office of Emergency services in Imperial County. Imperial County has developed the multi-jurisdictional hazard mitigation plan (MHMP) to create a safer community. The purpose of the MHMP is to significantly reduce deaths, injuries, and other disaster losses caused by natural and human-caused hazards in Imperial County. The MHMP describes past and current hazard mitigation activities and outlines goals, strategies, and actions for reducing future disaster losses. The Imperial County MHMP is the representation of the County's commitment to reduce risks from natural and other hazards and serves as a guide for decision-makers as they commit resources to reducing the effects of natural and other hazards. The jurisdictions included in the MHMP include the cities of Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial, and Westmoreland, the IID and the Imperial County Office of Education. The MHMP complies with all federal, state, and local laws guiding disaster management.

PC ORIGINAL PKG

Imperial County Emergency Operations Plan

The Imperial County Emergency Operations Plan (EOP) provides guidance and procedures for the County to prepare for and respond to emergencies. The EOP designates the Sheriff's Department as having jurisdiction in an emergency involving evacuation within the unincorporated areas of the county and within contract cities.

3.13.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to public services, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to public services are considered significant if the project would result in the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities

As mentioned previously, it was determined through the preparation of an IS/NOP that the project would not result in impacts on schools, parks, or other public facilities. Therefore, those issue areas will not be discussed further and are included in Chapter 6, Effects Found Not Significant, of this EIR.

Methodology

Evaluation of potential fire and police service impacts of the proposed project was based on consultation with the ICFD, Sheriff's Department and review of other development projects in the area.

Impact Analysis

Impact 3.13-1 Would the project result in the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan (County of Imperial 1997), the potential for a major fire in the unincorporated areas of the County is generally low.

PC ORIGINAL PKG

Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. Although the proposed project would be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health, and safety requirements, the project applicant will be required to consult with the Fire Department to address any fire safety and service concerns (i.e, BESS) so that adequate service is maintained. While the proposed project may result in a minor increase in demand for fire protection service, the project would not result in an increase in demand that would, in turn, result in a substantial adverse physical impact associated with the provision of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. In addition, the project applicant will be required to prepare a Fire Management Plan in accordance with ICFD requirements for project construction activities as well as long-term operations, including establishing appropriate emergency access to the project site for first responders, and identifying project-specific on-site fire protection or suppression systems that comply with Imperial County requirements. Additional fire safety features to be described in detail in the Fire Management Plan, include the following:

- Access gates and service roads along the perimeter of the project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.).
- PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems.
- Portable fire extinguishers would be provided at various locations throughout the project site.
- Fixed fire suppressions systems would be employed throughout the project site based on equipment manufacturer specifications and coordination with the Fire Department.
- On-site water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems.
- Best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities.

Based on these considerations, the project would not result in a need for fire facility expansion and a less than significant impact would occur.

Imperial County requires payment of impact fees for new development projects. Fire Impact Fees are imposed pursuant to Ordinance 1418 §2 (2006), which was drafted in accordance with the County's TischlerBise Impact Fee Study. The ordinance has provisions for non-residential industrial projects based on square footage. The project applicant will be required to pay the fire protection services' impact fees. These fees would be included in the Conditions of Approval for the CUPs. No new fire stations or facilities would be required to serve the project. Impacts would therefore be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.13-2 Would the project result in the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

The project does not include a residential component; therefore, it would not result in a substantial addition of residents to the Sheriff Department's service area. Although the potential is low, the proposed project may attract vandals or other security risks and the increase in construction-related traffic could increase demand on law enforcement services. Site security fencing would be installed around the perimeter of the project site at the commencement of construction and site access would be limited to authorized site workers. Points of ingress/egress would be accessed via locked gates. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the project. While the proposed project may result in a temporary increase in demand for law enforcement service, the project would not result in an increase in demand that would, in turn, result in a substantial adverse physical impact associated with the provision of new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. As conditions of approval of the project, the project applicant will be required to participate in the Imperial County Public Benefit Program for the life of the CUPs and shall at all times be a party to a public benefit agreement in a form acceptable to County Counsel in order to pay for all costs, benefits, and fees associated with the approved project, and the applicant will be required to reimburse the Sheriff's Department for any investigations regarding theft on the project site and related law enforcement. Approval of this public benefit agreement will be by the Board of Supervisors prior to the issuance of the first building permit. These potential impacts are less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.13.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

At the end of the project's useful life, all equipment and facilities will be properly dismantled. Decommissioning and restoration of the project site would occur and would not result in an increased need for fire and police protection services. Decommissioning of the project would occur through implementation of a required Reclamation Plan. These activities would be in the form of disassembling project components and then restoring the site to pre-project conditions, both of which would not create an increase in demand for police or fire service beyond the level required for proposed operations. Therefore, no impact is identified and no mitigation is required for this phase.

PC ORIGINAL PKG

Residual

With payment of the development impact fees for fire and police protection services, project impacts would be less than significant. No mitigation is required, and no residual significant and unmitigated impacts would result.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.14 Transportation

This section addresses the proposed project's impacts on traffic and the surrounding roadway network associated with construction and operation of the proposed project. The following discussion describes the existing conditions in the surrounding area, the existing regulations regarding transportation, and an analysis of the potential impacts of the proposed project. Information in this section is summarized from the *Transportation Impact Analysis* (TIA) prepared by Dudek. This report is included in Appendix I of this EIR.

The TIA prepared for the project includes both a CEQA and Non-CEQA assessment for the project, as described below.

CEQA Assessment – Vehicle Miles Traveled (VMT) Analysis

On September 27, 2013, Governor Brown signed SB 743, with the purpose of streamlining the CEQA review process for several categories of development projects, including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of level of service (LOS) in CEQA documents.

In November 2017, pursuant to SB 743, the Office of Planning and Research released the draft revised CEQA Guidelines, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, to provide guidance on VMT analysis (2018). In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their jurisdictions. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]). Subsequently in December 2018, the CEQA Guidelines were updated to add new Section 15064.3, Determining the Significance of Transportation Impacts, that describes considerations for evaluating a project's transportation impacts using the VMT methodology, formally replacing the LOS metric. This new methodology is required under CEQA beginning July 1, 2020.

The VMT screening and analysis in the TIA are based on the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA (2018).

Non-CEQA Assessment – LOS or Traffic Analysis

The County's new transportation guidelines that are currently under preparation could trigger an update to the Transportation/Circulation Element and the threshold of LOS C for street segments and intersections. However, LOS is no longer used as metric for determining transportation impacts under CEQA, but is used for determining traffic effects under the County's General Plan. Therefore, the LOS has been reported in the TIA for informational purposes, and the threshold of LOS C has been used to determine if any roadway improvements, or transportation demand management measures would be implemented by the project.

The County of Imperial has vehicle LOS standards in its Circulation and Scenic Highways Element that the County currently strives to maintain through various projects designed to improve local infrastructure. The LOS standards apply to any new development which may have a significant impact on County roads. The LOS analysis has been prepared to evaluate the short-term impacts of the project's construction on the County's roadway network.

3.14.1 Existing Conditions

Existing Circulation Network

The following is a description of the nearby roadway network:

Interstate 8 (I-8) is the primary east-west route through Imperial County between San Diego, California and Yuma, Arizona. In the vicinity of the project, I-8 provides two travel lanes in each direction with grade separation at all intersections. It serves as an interregional route for people and goods movement and provides access to desert recreational activities.

Evan Hewes Highway (S80) is an east-west two-lane undivided roadway. Bike lanes or bus stops are not provided, and the posted speed limit is 40 miles per hour (mph). Curbside parking is prohibited along both sides of the roadway.

County Route S29 – Drew Road is a north-south two-lane undivided roadway with a 24-foot paved width and unpaved shoulders from Evan Hewes Highway south to SR-98. Drew Road provides access to I-8 near the project. Bike lanes or bus stops are not provided along Drew Road. The posted speed limit is 55 mph. A portion of Drew Road from the Townsite of Seeley to Diehl Road is designated as a Class II bike route.

Dunaway Road is a north-south two-lane undivided roadway with a 20-foot paved width and unpaved shoulders from I-8 to Evan Hewes Highway. The posted speed limit is 55 mph. Dunaway Road does not have any sidewalks or bike routes.

The project site is served by numerous local two-lane rural roads, which are classified as Minor Collector – Local Collector roads in the County's Circulation and Scenic Highways Element (Imperial County 2008). The east-west roads, Evan Hewes Highway, Diehl Road and Wixom Road would serve as the primary access roads into the project site from north-south roads such as Derrick Road, and Westside Road, which would provide access to some of the project parcels.

Alternative/Public Transportation

Transit, Pedestrian, and Bicycle Transportation

Imperial Valley Transit (IVT) operates a fixed route transit system between, and within, the cities and rural communities in Imperial County. IVT has 12 routes running Monday through Friday, with over 20 buses in operation. The nearest bus service to the site is provided by IVT Route 4 along Evan Hewes Highway. The route operates between El Centro and Seely. The nearest bus stop is at the intersection of Drew Road and Even Hewes Highway, approximately 3 miles north of the Drew Road and Diehl Road intersection.

IVT Access provides curb to curb transportation services upon advance reservation, to functional and mobility disadvantaged persons. IVT Access provides transportation to and from any location in the Imperial Valley service area within a ¾ mile "corridor" and a 30 minute "window" of regular IVT bus services. This service area covers much of the County of Imperial for most of the day Monday through

Sunday. IVT Access also provides its services to the general public (when seating is available). There are also numerous private service providers including taxis, charter buses, and shuttles serving areas within Imperial County.

The project site is in a generally undeveloped area and there are no dedicated pedestrian or bicycle facilities in the vicinity of the project site or along the surrounding street network. The Imperial County Transportation Commission is in the process of developing a Regional Active Transportation Plan (ATP) (February 2022 Final) to help meet the County's goals and vision for providing a transportation system that supports walking, cycling, public transit, and automobiles. Imperial County also recently completed the Imperial County Pedestrian Master Plan (April 2021), however, given the rural nature of the study area, there are no planned improvements in the area.

Project Site Access

Regional access to the project site would be provided by I-8 and SR-98. Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels.

Existing Traffic Operations

This section details the existing traffic volumes and the existing intersection and roadway segment operations within the traffic study area. The traffic study area for the LOS analysis is generally based on intersections and roadway segments where a majority of project trips would be routed. The traffic study area intersections and roadway segments are listed in Table 3.14-1 and Table 3.14-2, respectively.

Intersection Operations

Table 3.14-1 summarizes the results of the intersection analysis for the AM and PM peak hours for existing conditions. As shown in Table 3.14-1, the study intersections are currently operating at satisfactory levels of service (LOS B or better) under existing conditions.

Table 3.14-1. Existing Weekday Peak Hour Intersection LOS

No.	Intersection	Traffic Control	Existing Conditions			
			AM Peak		PM Peak	
			Delay[1]	LOS	Delay[1]	LOS
1	Drew Road/Evan Hewes Road	AWSC	10.3	B	8.7	A
2	Drew Road/I-8 WB Ramps	TWSC	9.8	A	9.9	A
3	Drew Road/I-8 EB Ramps	TWSC	10.7	B	11.5	B
4	Drew Road/Kramar Road	TWSC	9.2	A	9.1	A
5	Drew Road/Diehl Road	TWSC	8.9	A	8.4	A
6	Drew Road/Wixom Road	TWSC	8.6	A	8.6	A

PC ORIGINAL PKG

7	Dunaway Road/I-8 EB Ramps	TWSC	9.0	A	9.2	A
8	Dunaway Road/I-8 WB Ramps	TWSC	8.6	A	8.8	A
9	Dunaway Road/Evan Hewes Highway	TWSC	9.1	A	9.1	A
10	Brown Road/Evan Hewes Highway	AWSC	8.8	A	10.0	B
11	Jeffrey Road/Evan Hewes Highway	TWSC	8.5	A	9.9	A
12	Westside Road/Evan Hewes Highway	TWSC	8.6	A	10.7	B
13	Huff Road/Evan Hewes Highway	TWSC	10.8	B	12.1	B
14	Derrick Road/Evan Hewes Highway	TWSC	11.2	B	11.1	B

Source: Appendix I of this EIR
Notes:
AWSC=all-way stop-controlled; EB=eastbound; LOS=Level of Service; TWSC=two-way stop-controlled; WB=westbound
[1] Delay measured in seconds per vehicle for unsignalized intersection (LOS is reported based on the worst delayed movement of the unsignalized intersection).

Roadway Segment Operations

Table 3.14-2 shows the results of the existing condition LOS analysis for the study area roadway segments. As shown in Table 3.14-2, all the study area roadway segments are operating at satisfactory ADT volume-to-capacity conditions under existing conditions.

Table 3.14-2. Existing ADT Roadway Segment Level of Service

No.	Roadway Segment	Classification (as built)	No. of Lanes	Capacity at LOS E	Existing Conditions		
					ADT[1]	V/C	LOS
1	Drew Road, north of I-8 WB Ramps	Minor Collector (Local Collector)	2	16,200	3,033	0.19	B
2	Drew Road, north of Diehl Road	Minor Collector (Local Collector)	2	16,200	33	0.00	A
3	Drew Road, between Diehl Road and Wixom Road	Minor Collector (Local Collector)	2	16,200	191	0.01	A
4	Drew Road, south of Wixom Road	Minor Collector (Local Collector)	2	16,200	319	0.019	A
5	Dunaway Road, between Evan Hewes Hwy and I-8 WB Ramps	Minor Collector (Local Collector)	2	16,200	751	0.05	A
6	Evan Hewes Hwy, between Brown Road and Dunaway Road	Minor Collector (Local Collector)	2	16,200	609	0.04	A

PC ORIGINAL PKG

7	Evan Hewes Hwy, between Westside Road and Huff Road	Minor Collector (Local Collector)	2	16,200	2,613	0.16	B
8	Evan Hewes Hwy, between Derrick Road and Drew Road	Minor Collector (Local Collector)	2	16,200	3,031	0.19	B

Source: Appendix I of this EIR
Notes: ADT=average daily traffic; LOS=Level of Service; Hwy=highway; V/C=volume-to-capacity; WB=westbound
[1] Volume provided from ADT counts conducted in March and September 2024.

3.14.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

State

California Department of Transportation

Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Specifically, Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System.

As it relates to the proposed project and potential construction access routes within the County, Caltrans District 11 is responsible for maintaining and managing I-8.

Regional

SCAG 2020-2045 RTP/SCS (Connect SoCal)

On September 3, 2020, SCAG adopted the 2020-2045 RTP/SCS (SCAG 2020). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2020-2045 RTP/SCS demonstrates how the region will reduce emissions from transportation sources to comply with SB 375 and meet the NAAQS set forth by the Clean Air Act.

The updated RTP/SCS contains thousands of individual transportation Projects that aim to improve the region's mobility and air quality and revitalize the economy. Since the RTP/SCS's adoption, the county transportation commissions have identified new project priorities and have experienced technical changes that are time-sensitive. Additionally, the new amendments for the plan have outlined minor modifications to Project scopes, costs and/or funding and updates to completion years. The amendments to the RTP/SCS do not change any other policies, programs, or projects in the plan.

Local

County of Imperial Circulation and Scenic Highways Element

The Circulation and Scenic Highways Element identifies the location and extent of transportation routes and facilities. It is intended to meet the transportation needs of local residents and businesses

and as a source for regional coordination. The inclusion of Scenic Highways provides a means of protecting and enhancing scenic resources within highway corridors in Imperial County. The purpose of the Circulation and Scenic Highways Element is to provide a comprehensive document which contains the latest knowledge about the transportation needs of the County and the various modes available to meet these needs. Additionally, the purpose of this Element is to provide a means of protecting and enhancing scenic resources within both rural and urban scenic highway corridors.

Coordination across jurisdictional standards for road classification and design standards was identified as a crucial component to the 2008 update of the Circulation and Scenic Highways Element. The intent of this element is to provide a system of roads and streets that operate at a LOS “C” or better (Imperial County Planning and Development 2008).

County of Imperial Bicycle Master Plan Update: Final Plan

In 2012, the County of Imperial adopted an updated Bicycle Master Plan to serve as the guiding document for the development of an integrated network of bicycle facilities and supporting programs designed to link the unincorporated areas and attractive land uses throughout the County. This document is an update to the previously adopted Countywide Bicycle Master Plan; and was prepared to accomplish the following goals:

1. To promote bicycling as a viable travel choice for users of all abilities in the County
2. To provide a safe and comprehensive regional connected bikeway network
3. To enhance environmental quality, public health, recreation and mobility benefits for the County through increased bicycling

The County of Imperial's General Plan, Circulation and Scenic Highways Element, and Conservation and Open Space Element, provide a solid planning basis for the Bicycle Master Plan. In spite of the fact that there are a limited number of bicycle facilities in Imperial County and no comprehensive bicycle system, there is a growing interest in cycling and numerous cyclists bike on a regular basis for both recreation and commuting to work and school.

3.14.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to transportation are considered significant if any of the following occur:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities
- Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access

Methodology

The assessment evaluates the potential for the project, as described in Chapter 2, Project Description, to result in transportation impacts during the construction and operational phases of the project. As

previously mentioned above, information in this section is summarized from the *Transportation Impact Analysis* (TIA) prepared by Dudek. This report is included in Appendix I of this EIR. The TIA prepared for the project includes both a CEQA (VMT) and Non-CEQA (LOS) assessment for the project.

Impact Analysis

Impact 3.14-1 Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

As previously mentioned above, the County of Imperial's new transportation guidelines that are currently under preparation could trigger an update to the Transportation/Circulation Element and the threshold of LOS C for street segments and intersections. However, LOS is not used as metric for determining transportation impacts under CEQA, but is used for determining traffic effects under the County's General Plan. Therefore, the project's LOS has been analyzed in the TIA and this EIR for informational purposes (Appendix I of this EIR).

Construction

Trip Generation

The construction phase of the project is anticipated to take approximately 18 to 24 months. The work would be completed between 6:00 A.M. and 7:00 P.M., Monday through Saturday, and would require a peak of approximately 500 workers and 8 vendor trucks, per day. Approximately 10 percent of the workers were assumed to carpool. Work shifts could begin prior the AM peak period (generally between 7:00 a.m.– 9:00 a.m.) and end after the PM peak period (generally between 4:00 p.m.– 6:00 p.m.). However, to provide a conservative analysis, approximately 80 percent of workers were assumed to arrive in the morning peak hour, and 80 percent are assumed to exit in the afternoon peak hour. Truck traffic to and from the site was evenly distributed assuming the 8-hour workday. It should be noted that these trips are considered temporary as they would not be generated once construction is completed. The project trips are presented in Table 3.14-3.

To address the effect caused by large over-sized trucks onto the roadway network, a factor called the passenger car equivalent (PCE) was developed and represents the number of passenger cars displaced by each truck in the traffic stream under mixed flow conditions. PCE factors generally range from 1.5 to 3.0 based on the number of axles in the truck. A PCE factor of 2.0 has been utilized to convert vendor truck trips, and a PCE factor of 3.0 has been utilized to convert haul truck trips into equivalent car trips for the project construction trip generation analysis. The peak phase of construction shown in includes worker trips and vendor truck trips only and does not include haul truck trips.

As shown in Table 3.14-3, the peak construction phase would temporarily generate approximately 1,016 total daily trips, 362 AM peak hour trips (361 inbound and 1 outbound), and 361 PM peak hour trips (1 inbound and 360 outbound). With the application of PCE factors to truck trips, the project would generate 1,032 total PCE daily trips, and 362 PCE trips during the AM peak hour (360 inbound and 2 outbound) and 364 PCE trips during the PM peak hour (2 inbound and 362 outbound).

Table 3.14-3. Project Construction Trip Generation Summary

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation								
Workers[1]	500 workers	1000	360	0	360	0	360	360
Vendor Trucks[2]	8 trucks	16	1	1	2	1	1	2
Total		**1,016**	**361**	**1**	**362**	**1**	**361**	**362**
Trip Generation w/ PCE								
Workers (1.0 PCE)	500 workers	1000	360	0	360	0	360	360
Vendor Trucks (2.0 PCE)	8 trucks	32	2	2	4	2	2	4
Total (w/ PCE)		**1,032**	**362**	**2**	**364**	**2**	**362**	**364**

Notes: PCE = Passenger car equivalent
1. 10% of all workers assumed to carpool to the site and 20% of the workers assumed to travel in the off-peak for the purposes of this analysis.
2. Vendor trucks assumed to be spread out evenly across the 8-hour workday.
Source: Appendix I of this EIR

TIA Analysis Scenarios

Intersection and roadway segment LOS analyses were prepared for the weekday AM and PM peak hours at the study area intersection and roadway segments for the following analysis scenarios:

- Existing Conditions: includes an LOS analysis of existing weekday AM and PM peak-hour and daily traffic volumes, for the study area intersections and roadway segments. The existing condition is representative of the year 2024. The LOS analysis for Existing Conditions is provided in Section 3.14.1 above.
- Existing plus Project: This condition includes analysis of LOS under existing conditions with project traffic added to the existing AM and PM peak hour and daily traffic volumes.
- Near Term Conditions: This condition includes analysis of LOS under Near Term conditions within a short-term horizon period of approximately three years where the proposed project would be in its construction phase. Near Term traffic volumes (ADT and AM and PM peak hour) include existing traffic volumes and traffic generated by other approved and pending projects in the study area as well as a background or ambient traffic growth.
- Near Term plus Project: This condition includes analysis of LOS under Near Term conditions with project traffic added to the Near-Term AM and PM peak hour and daily traffic volumes.

PC ORIGINAL PKG

EXISTING PLUS PROJECT TRAFFIC OPERATIONS

Intersections. Table 7 in the TIA (Appendix I of this EIR) summarizes the results of the intersection analysis for the AM and PM peak hours for Existing plus Project conditions. As shown in Table 7 of the TIA, the study area intersections are forecast to operate at LOS C or better under Existing plus Project conditions.

Roadway Segments. Table 8 in TIA (Appendix I of this EIR) shows the results of the Existing plus Project conditions LOS analysis for the study area roadway segments of Drew Road with the project-added traffic. As shown in Table 8 in the TIA, all the study area roadway segments are forecast to operate at LOS B or better conditions under Existing plus Project conditions.

NEAR TERM TRAFFIC OPERATIONS

Intersections. Table 11 in the TIA (Appendix I of this EIR) shows the results of the Near-Term condition LOS analysis for the study area roadway segments. As shown in Table 11 in the TIA, all study area intersections are forecast to operate at LOS C or better under Near Term conditions, with the exception of the following roadway segment:

- Derrick Road/Evan Hewes Highway intersection (LOS E - AM peak hour)

Roadway Segments. Table 12 in the TIA (Appendix I of this EIR) shows the results of Near Term condition LOS analysis for the study area roadway segments. As shown in Table 12 in the TIA, all the study area roadway segments are forecast to operate at satisfactory ADT volume-to-capacity conditions under Near Term conditions.

NEAR TERM PLUS TRAFFIC OPERATIONS

Intersections. As shown in Table 13 of Appendix I of this EIR, with the exception of Drew Road/Haskell Road-Evan Hewes Road intersection (in AM and PM peak hours), Drew Road/I-8 eastbound ramps (in PM peak hour) and Derrick Road/Evan Hewes Highway (in AM and PM peak hours), all other the study intersections are forecast to operate at LOS C or better under Near Term plus Project conditions.

Table 13 in the TIA (Appendix I of this EIR) shows the results of the intersection analysis for the AM and PM peak hours for Near Term plus project conditions. As shown in Table 13, all the study intersections are forecast to operate at LOS C or better under Near Term plus Project conditions, with the exception of the following intersections:

- Drew Road/Haskell Road-Evan Hewes Road intersection (LOS F – AM peak hour; LOS D – PM peak hour)
- Drew Road/I-8 eastbound ramps (LOS F – PM peak hour)
- Derrick Road/Evan Hewes Highway (LOS F – AM and PM peak hours)

Because the traffic impact caused by construction traffic from the proposed project under Near Term plus Project conditions at the study area intersections would be temporary and short-term, no roadway improvements are recommended. However, as a condition of approval under the project's CUP(s), a traffic control plan as part of a Construction Traffic Management Plan (CTMP) would be implemented by the project applicant or contractor at the three intersections that operate at LOS D or worse under the proposed project.

Roadway Segments. Table 14 in the TIA (Appendix I of this EIR) shows the results of the Near-Term condition LOS analysis for the study area roadway segments. As shown in Table 14 in the TIA, all the study area roadway segments are forecast to operate at LOS C or better under Near Term plus Project conditions.

Operation

Once the proposed project is complete, the site will be staffed with 4 to 10 onsite employees. During operations, the proposed project would generate up to 20 trips per day. Based on the low amount of operational trips generated and low existing traffic volumes on area roadways, no substantial transportation impacts are anticipated. This is considered a less than significant impact.

Transit, Bicycle, and Pedestrian Facilities

There is no regular bus service to the general area and project-related construction and operations and maintenance phases would not impact mass transit. The project site is in a generally undeveloped area and there are no dedicated pedestrian or bicycle facilities in the vicinity of the project site or along the surrounding street network. Therefore, the proposed project would have no impact on transit, bicycle, or pedestrian facilities.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.14-2 Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The County of Imperial is in the process of creating transportation guidelines for evaluating potential project-related impacts to VMT. In the interim, the OPR's Technical Advisory and CEQA Guidelines Section 15064.3(b) Criteria for Analyzing Transportation Impacts have been used to evaluate the proposed project. It should be noted that the methodology for VMT screening and analysis used in this report is consistent with requirements for VMT analysis of solar and BESS projects that generate temporary construction trips and nominal operational trips.

CEQA Guidelines Section 15064.3(b) focuses on specific criteria (VMT) for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The CEQA Guidelines are accompanied by an OPR Technical Advisory, which includes specifications for how to estimate and forecast VMT for these subdivisions.

The proposed project is not a land use or transportation project, and therefore neither Section 15064.3(b)(1) nor Section 15064.3(b)(2) of the CEQA Guidelines apply. Instead, the proposed project would be categorized under Section 15064.3(b)(3) qualitative analysis. The following paragraph from the Section 15064.3(b)(3) provides guidance regarding qualitative analysis:

> If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

Construction

The project construction related vehicle-trip generation (for workers and trucks) is summarized in Table 3.14-3. Per OPR, heavy vehicle traffic is not required to be included in the estimation of a project's VMT. Construction-related trips are temporary and would not generate permanent trips. Therefore, for the purposes of this analysis, the VMT from construction is not required to be quantified per SB 743 requirements. The project construction would generally be consistent with typical construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. There would be no special conditions for constructing the project. Further, measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for temporary, construction related VMT.

The regional VMT per employee for the Imperial County region is estimated to be 18.59 VMT per employee per City of El Centro General Plan Update Transportation Impact Study. While worker and vendor trips would generate VMT, once construction is completed, the construction-related traffic would cease and VMT would return to pre-construction conditions. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Sections 15064.3(b)(3), and impacts related to VMT would be less than significant.

Operation

Even though the threshold of Small Projects is used to establish less-than-significant VMT impacts for land development projects, they can be used to screen projects that would generate nominal operation and maintenance traffic. Based on OPR guidance, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact. As mentioned previously, the operation of the project would require 4 to 10 full-time employees and therefore would generate up to 20 daily trips, and therefore would not generate significant VMT. Because the operational phase of the project generates less than 110 daily trips, it would screen out of conducting a detailed VMT analysis.

Therefore, utilizing the guidance provided by OPR, the operation of the project would not generate a significant number of trips and thereby not cause a substantial amount of VMT. Therefore, the operation and maintenance of the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)(1) and 15064.3(b)(3), and impacts related to VMT would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.14-3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would occur on privately-owned land located in a rural area. To accommodate emergency access, PV panels would be spaced to maintain proper clearance. Internal access roads, up to 30 feet wide, would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. Access roads would be graded and compacted (native soils) as required for construction, operations, maintenance, and emergency vehicle access. Additionally, any proposed haul routes would be submitted to the County for approval prior to construction. Therefore, the project would not substantially increase hazards due to a

geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.14-4 Would the project result in inadequate emergency access?

All proposed facilities would be constructed within the property boundaries of the project site and would not affect emergency vehicle access to the facility or any roadway. The project site would include both a primary and secondary access driveway (if required). PV panels would be spaced to maintain proper clearance for emergency access. Internal access roads, up to 30 feet wide, would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. Access roads would be graded and compacted (native soils) as required for construction, operations, maintenance, and emergency vehicle access. The access and service roads would also have turnaround areas at any dead-end to allow clearance for fire trucks per fire department standards. If needed, the access and service roads would also have turnaround areas at any dead-end to allow clearance for fire trucks per fire department standards.

At the time of final design for the project, and as a Condition of Approval of the project, the applicant will submit a final Haul Route Study that identifies what road improvements, if any, are requested by Department of Public Works and a cost estimate. The applicant would work with Department of Public Works to address the appropriate improvements and Applicant's responsibility for the cost of improvements, if required. The haul route study would include the following components:

1. Pictures and/or other documents to verify the existing conditions of the roads proposed to be utilized for haul routes
2. The haul route study shall evaluate impacts and provide recommendations on improvements, as well as quantity and cost estimates for such improvements

The County Department of Public Works will require a Roadway Maintenance Agreement, which would include a requirement that the applicant provide financial security to maintain the road(s) to be utilized during construction as identified on the approved haul route study. The applicant would be responsible to repair any damages caused by construction traffic during construction and maintain the applicable road(s) in a safe condition. The use of the proposed access roads is not otherwise anticipated to increase hazards because of design features or incompatible uses and no significant impact is identified.

Mitigation Measure(s)

No mitigation measures are required.

3.14.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

As presented above, construction traffic would not result in a significant impact on any of the project area roadway segments, intersections, and freeway segments. A similar scenario would occur during the decommissioning and site restoration stage for the proposed project. ADT would be similar to or less than the ADT required for construction. Similarly, the decommissioning activities would not result

in a significant impact related to possible safety hazards, or possible conflicts with adopted policies, plans, or programs as the decommissioning and subsequent restoration would revert the project site to pre-project conditions. Therefore, decommissioning and restoration of the project site would not generate traffic resulting in a significant impact on the circulation network. A less than significant impact is identified and no mitigation is required.

Residual

The construction and operation of the proposed project would not result in direct impacts on intersections, roadway segments, and freeway segments. Therefore, less than significant impacts have been identified. No mitigation is required and no residual unmitigated impacts would occur with implementation of the proposed project.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.15 Tribal Cultural Resources

This section discusses tribal cultural resources that may be potentially impacted by the proposed project. The following identifies the existing cultural resources within the project site, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project.

Information for this section is summarized from the *Cultural Resources Inventory Report* prepared by Dudek. This report is included in Appendix F1 of this EIR.

3.15.1 Existing Conditions

Tribal Cultural Setting

See Section 3.6, Cultural Resources of this EIR and the *Cultural Resources Inventory Report* (Appendix F of this EIR) for a description of the regional ethnohistory.

Sacred Lands File Results

The California Native American Heritage Commission (NAHC) identifies, catalogs, and protects Native American cultural resources on private and public lands in California. Cultural resources include graves, cemeteries, and places of special religious or social significance to Native Americans. The NAHC also records the historical territories of state recognized tribes into a database called the Sacred Lands File (SLF). A records search of the SLF is conducted to ensure that the tribes potentially affected by a project are properly notified and consulted.

A SLF search request was submitted on August 15, 2024 to the California NAHC. The search results were received on August 28, 2024, and were positive. The NAHC response provided contact information for the 13 tribes that may have information on cultural resources on the project site.

Letters requesting information were sent via certified mail on September 3, 2024. Emails were also sent to the contacts in an effort to elicit a quicker response. As of September 3, 2024, the Viejas Band of Kumeyaay Indians have requested to be involved with monitoring efforts. Communication with the remaining tribes is ongoing.

3.15.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Native American Graves Protection and Repatriation Act (1990); Title 25, United States Code Section 3001, et seq.

The Native American Graves Protection and Repatriation Act defines “cultural items,” “sacred objects,” and “objects of cultural patrimony;” establishes an ownership hierarchy; provides for review; allows excavation of human remains, but stipulates return of the remains according to ownership; sets penalties; calls for inventories; and provides for the return of specified cultural items.

State

Assembly Bill 52

AB 52 amends PRC 5097.94, and adds eight new sections to the PRC relating to Native Americans. AB 52 was passed in 2014 and took effect on July 1, 2015. It establishes a new category of environmental impacts that must be considered under CEQA called tribal cultural resources (PRC 21074) and establishes a process for consulting with Native American tribes and groups regarding potential impacts to tribal resources. Under AB 52, a project that may substantially change the significance of a tribal cultural resource is a project that may have a significant impact on the environment. If a project may cause a significant impact on a tribal cultural resource, the lead agency shall implement measures to avoid the impacts when feasible.

Senate Bill 18

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to approvals and amendments of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

Prior to the approval of any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts on, cultural places on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

Public Resources Code Section 21074

PRC Section 21074 defines a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, and any object with cultural value to a California Native American Tribe. A tribal cultural resource must be on or eligible for the CRHR or must be included in a local register of historical resources. The lead agency can determine if a tribal cultural resource is significant even if it has not been evaluated for the CRHR or is not included on a local register.

Assembly Bill 4239

AB 4239, passed in 1976, established the NAHC as the primary government agency responsible for identifying and cataloging Native American cultural resources. The bill authorized the Commission to act in order to prevent damage to and insure Native American access to sacred sites and authorized the Commission to prepare an inventory of Native American sacred sites located on public lands.

Public Resources Code Section 21074

PRC Section 21074 defines a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, and any object with cultural value to a California Native American Tribe. A tribal cultural resource must be on or eligible for the CRHR or must be included in a local register of historical resources. The lead agency can determine if a tribal cultural resource is significant even if it has not been evaluated for the CRHR or is not included on a local register.

PC ORIGINAL PKG

Public Resources Code 5097.97

No public agency and no private party using or occupying public property or operating on public property under a public license, permit, grant, lease, or contract made on or after July 1, 1977, shall in any manner whatsoever interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution; nor shall any such agency or party cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

Public Resources Code 5097.98 (b) and (e)

PRC 5097.98 (b) and (e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until he/she confers with the NAHC-identified most likely descendants (MLD) to consider treatment options. In the absence of MLDs or of a treatment acceptable to all parties, the landowner is required to reenter the remains elsewhere on the property in a location not subject to further disturbance.

California Health and Safety Code, Section 7050.5

California HSC 7050.5 makes it a misdemeanor to disturb or remove human remains found outside a cemetery. This code also requires a project owner to halt construction if human remains are discovered and to contact the County Coroner.

3.15.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to tribal cultural resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to tribal cultural resources are considered significant if the project causes a substantial adverse change in the significance of a tribal cultural resource defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k)
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe

Impact Analysis

Impact 3.15-1 ***Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***

Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)

A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

AB 52 requires a lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic areas of the proposed project. In accordance with AB 52, the County provided notification of the proposed project to Native American tribes that the County understands to be traditionally and culturally affiliated with the geographic area of the proposed project. Notification letters were provided and sent via certified mail on September 3, 2024 and emails were also sent to the contacts in an effort to elicit a quicker response. The County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians have requested to be involved with monitoring efforts. No other responses have been received at this time.

Ray Teran of the Viejas Band of Kumeyaay Indians (“Viejas”) responded via email on September 3, 2024, stating he had reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas. He further noted that cultural resources have been located within or adjacent to the project site and requested that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities. In addition, he requested that Viejas be informed of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains. Implementation of Mitigation Measures CUL-2 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance.

Mitigation Measure(s)

TCR-1 **Discovery of Unidentified Tribal Cultural Resources.** If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.

PC ORIGINAL PKG

Significance After Mitigation

The proposed project has the potential to impact unidentified tribal cultural resources during construction. However, implementation of Mitigation Measures CUL-2 and TCR-1 would reduce this potential impact to a less than significant level.

3.15.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

At the end of the project's useful life, all equipment and facilities will be properly dismantled. No impact is anticipated from restoration activities as the ground disturbance and associated impacts will have occurred during the construction phase of the proposed project.

Residual

With implementation of Mitigation Measures CUL-2 and TCR-1, potential impacts on unidentified tribal cultural resources would be reduced to a level less than significant. No unmitigable impacts on tribal cultural resources would occur with implementation of the proposed project.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.16 Utilities and Service Systems

This section includes an evaluation of potential impacts for identified Utilities/Service Systems that could result from implementation of the project. Utilities/Service Systems include wastewater treatment facilities, stormwater drainage facilities, water supply and treatment, and solid waste disposal. The impact analysis provides an evaluation of potential impacts to Utilities/Service Systems based on criteria derived from CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. The information for this section is summarized, in part, from the draft *Water Supply Assessment* (WSA) prepared for the project by Dudek. This report is included in Appendix J of this EIR.

The IS/NOP prepared for this EIR determined that impacts with regards to solid waste disposal, storm drainage, and wastewater treatment would be less than significant. Therefore, these impacts are not addressed in detail in this EIR; however, the rationale for eliminating these issues is discussed in Chapter 6.0, Effects Found Not Significant.

3.16.1 Existing Conditions

The Imperial Valley area is located within the south-central part of Imperial County and is bound by Mexico on the south, the Algodones Sand Hills on the east, the Salton Sea on the north and San Diego County on the northwest, and the alluvial fans bordering the Coyote Mountains and the Yuha Desert to the southwest. Imperial Valley depends on the Colorado River for its water, which the Imperial Irrigation District (IID) transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Golden State Water (which includes all or portions Calipatria, Niland, and some adjacent Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. The project site is located within IID's Imperial Unit and district boundary and as such is eligible to receive water service.

Imported Water

The sole source of imported water supply in Imperial County is Colorado River water. IID holds senior water rights to Colorado River water and imports raw (untreated) water via the All-American canal, an 80-mile gravity flow canal that conveys an average of approximately 3.1 million acre-feet (MAF), less water transfer obligations, to the Imperial Valley annually. IID provides Colorado River water to customers in their service area via three main branches (the East Highline, Central Main, and Westside Main) and their tributary lateral canals.

The project site is adjacent to the Westside Main Canal. Lateral canals and ditches that intersect the project site include: Fern Side Main, Fig Canal, Fern Canal, Fern Lateral 2, Fern Lateral 3, Foxglove Canal, and Foxglove Lateral 1. Project parcels were historically served imported Colorado River water from IID.

As of April 2025, IID delivers untreated Colorado River water to the project site for agricultural uses through 19 gates and laterals. The 10-year record for 2015-2024 of water delivery accounting is shown in Table 3.16-1. The data documents a 10-year 7,348 acre-feet per year average.

This page is intentionally blank.

PC ORIGINAL PKG

Table 3.16-1. Ten-Year Historic Delivery (AFY), 2015-2024

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Westside Main 14A (Brundy)	319.7	219.7	81.7	372.2	431.2	345.8	280.3	429.1	398.1	546.9
Foxglove 3 (Brundy)	507.3	322.6	530.9	585.1	527.9	502.5	395.6	525.8	477.9	582
Foxglove 1 (Downs)	437	444.7	393.4	391.4	310.8	396.3	401.4	395.2	423.3	437.5
Foxglove 2 (Downs)	426.4	462.5	394.6	386.3	316.3	347.2	413.2	398.1	404.5	465.7
Fern 15 (Gabrych/Kuhn)	431.5	232.1	380.9	310.9	288.5	304.8	356.7	330.4	228.6	243.2
Fern 22 (Gabrych/Kuhn)	793.5	0	0	408.5	993.6	1,029.4	1182.7	838.5	949.5	902.6
Fig 6 (Gabrych/Kuhn)	249.8	221.3	261	287	311.2	177.5	108.6	0	0	255.5
Fig 7 (Gabrych/Kuhn)	430.9	393.4	491	411.3	457.1	450.4	436.4	502.8	365.3	347.4
Fig 12A (Gabrych/Kuhn)	1,133.8	855.4	264	219.1	450.6	760.9	308.6	989.6	264	141.5
Fig 13 (Gabrych/Kuhn)	395.1	268.2	299.4	142.1	142.1	98.8	203.6	487	518.6	587
Fig 18 (Gabrych/Kuhn)	0	0	0	0	0	0	0	0	0	0
Westside Main 13 (LaValle Sabbia)	1,325.8	1,314.1	1,155.7	1,302.3	1,206.9	903.1	1,310.7	1,620.2	1,258.2	936.6
Westside Main 13A (LaValle Sabbia)	0	544.7	914.1	887.5	719.2	771.6	953.7	931.7	888.8	648.7

PC ORIGINAL PKG

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fern 17 (Tomlinson)	243.1	290.8	373.5	386.4	165.2	253.2	333	329	230.5	48.1
Fern 18 (Tomlinson)	27.9	69.6	113	52.8	37.9	43	46.8	47.4	131	8
Fern 20 (Tomlinson)	148.6	149.7	248.2	192.2	150.1	126.1	203.5	204.8	132.8	29.9
Fern 23 (Tomlinson)	638.4	603.1	827.6	811	817.6	603.1	680.4	778.8	209.4	0
Fern 29 (Tomlinson)	155	178.6	251.1	203.6	220.2	173.6	234.8	250.9	134.4	34.9
Fern FSM 12A (Whitmer)	0	0	0	0	0	0	0	0	0	0
TOTAL	**7,663.8**	**6,570.5**	**6,980.1**	**7,349.7**	**7,546.4**	**7,287.3**	**7,778**	**9,059.3**	**7,014.9**	**6,215.5**

Source: Appendix J of this EIR

PC ORIGINAL PKG

Groundwater

The project site overlies the Imperial Valley Groundwater Basin (Basin), which is designated by the Department of Water Resources (DWR) as a very low priority basin with respect to the Sustainable Groundwater Management Act. Accordingly, groundwater is not managed under a Groundwater Sustainability Plan. Groundwater usage is regulated by Imperial County's Groundwater Ordinance contained in Title 9, Division 22, of the Land Use Ordinance, Section 92201.01. The Basin is located in the southeastern part of California and extends from the Salton Sea south to the international border with Mexico. The Basin covers approximately 1,200,000 acres, or 1,870 square miles (California Department of Water Resources 2004)).

3.16.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

State

Senate Bill 610

With the introduction of Senate Bill 610, any project under CEQA shall provide a WSA if:

- The project meets the definition of the Water Code Section 10912:

  For the purposes of this part, the following terms have the following meanings:

  (a) ‘‘Project’’ means any of the following:

  (1) A proposed residential development of more than 500 dwelling units.

  (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.

  (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

  (4) A proposed hotel or motel, or both, having more than 500 rooms.

  (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

  (6) A mixed-use project that includes one or more of the projects specified in this subdivision.

  (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

  (b) If a public water system has fewer than 5,000 service connections, then ‘‘project’’ means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that

would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

After review of Water Code Section 10912, the proposed project is deemed a "project" because it is a proposed industrial use occupying more than 40 acres of land.

California Water Code

Water Code Sections 10656 and 10657 restrict state funding for agencies that fail to submit their urban water management plan to the DWR. Water Code Section 10631, directs that contents of the urban water management plans include further information on future water supply projects and programs and groundwater supplies.

In addition, Water Code Section 10910 describes the WSA that must be undertaken for projects referred under PRC Section 21151.9, including an analysis of groundwater supplies. Water agencies are given 90 days from the start of consultation in which to provide a WSA to the CEQA lead agency. Water Code Section 10910 also specifies the circumstances under which a project for which a WSA was once prepared would be required to obtain another assessment.

Local

~~*Imperial Integrated Regional Water Management Plan*~~

~~The Imperial Integrated Regional Water Management Plan (Imperial IRWMP) serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the City of Imperial City Council and the IID Board of Directors approved it in December 2012. Approval by these 3 stakeholders met the basic requirement of California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.~~

~~Importantly, the Imperial IRWMP provides an assessment of the primary water resource challenges facing the Imperial Valley and their impact on long-term water supplies. As described in Chapter 5 of the Imperial IRWMP, the primary water resource challenge facing the Imperial Valley is long-term availability of Colorado River water. Multiple investigators have evaluated the impacts of climate change on flows in the Colorado River and estimate that Colorado River flows may decrease by 1 million acre-feet (MAF) to 3 MAF annually. This anticipated reduction in flows, "should not impact IID's Priority 3(a) quantified amount of 3.1 MAFY of Colorado River water as reported at Imperial Dam" (IID 2012).~~

~~While IID does not anticipate that reduced Colorado River water flows will impact their appropriation of Colorado River water, the Imperial IRWMP notes that future water demands may exceed the 3.1 MAF annual Priority 3(a) quantified appropriative right. To address this, the Imperial IRWMP identifies a suite of projects that aim to:~~

- ~~Expand the size of the Imperial Valley water supply portfolio~~
- ~~Prevent or recapture water leaving the region~~

PC ORIGINAL PKG

- ~~Reapportion water within the water supply portfolio (IID 2012)~~

~~Implementation of the Imperial IRWMP provides an opportunity to actively prioritize projects, evaluate the need to implement these projects, and identify funding opportunities.~~

Equitable Distribution Plan

IID's Equitable Distribution Plan distributes ~~apportions~~ available water supply by Water Users Category (Agricultural Water Users, Potable Water Users, and Industrial/Commercial Water Users) and then apportions the water within each Water Users Category among the water users within that category. The Equitable Distribution Plan provides ~~a framework~~ for: (1) receiving Colorado River water apportionment, (2) aggregating apportionment between farm units, and (3) transferring ~~agricultural~~ water between water ~~agricultural~~ users within the same Water Users Category~~, and (4) receiving IID On-Farm Efficiency Conservation Program or Fallowing Program benefits~~. Implementation of this program is ~~a~~ critical for IID's management of its water supply within its annual entitlement and a component of IID's implementation of on-farm conservation and temporary fallowing programs.

Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects

The IID Interim Water Supply Policy (IWSP) provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP identifies ~~designates~~ up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects. The IWSP provides a mechanism and process to develop a water supply agreement for any appropriately permitted project, and establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed to offset the new demand.

Depending on the nature, complexity and water demands of the project, new projects may be charged a one-time Reservation Fee and annual Water Supply Development Fees for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project.

IID customers with new projects receiving water under the IWSP will be charged the appropriate water delivery rate based on measured deliveries. As of March 2025, IID has issued two water supply agreements and one "Will-Serve Letter" under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP (Appendix J of this EIR).

Temporary Land Conversion Fallowing Policy

Water demands for certain non-agricultural projects are typically less than those required for agricultural operations. To support conservation and provide additional water for other uses under IID's consumptive use cap, IID developed the Temporary Land Conversion Fallowing Policy. The Temporary Land Conversion Fallowing Policy supplements the IWSP for Non-Agricultural Projects and is consistent with the IID's Equitable Distribution Plan. Water conserved through this program can be used by IID to satisfy IID's conserved water obligation and for environmental mitigation purposes.

County of Imperial General Plan

The Imperial County General Plan provides goals, objectives, policies, and programs regarding the preservation and use of water. Table 3.16-2 provides a consistency analysis of the applicable Imperial County General Plan goals and objectives from the Conservation and Open Space Element, and Renewable Energy and Transmission Element, as they relate to the proposed project. While the EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.16-2. County of Imperial General Plan Consistency Analysis – Water Service

Applicable General Plan Goals and Policies	Consistency Determination	Analysis
Conservation and Open Space Element		
Preservation of Water Resources, Goal 6: The County will conserve, protect, and enhance water resources in the County.	Consistent	Since the project would temporarily convert agricultural land into a non-agricultural use, the proposed project would reduce the need for IID to fallow irrigation; thereby, reducing agricultural water demand.
Preservation of Water Resources, Objective 6.4: Eliminate potential surface and groundwater pollution through regulations as well as educational programs.	Consistent	Currently, groundwater quality in the region is poor. However, since the project would temporarily convert farmland into a non-agricultural use, the project would reduce the amount of water used on site; thereby, reducing potential surface and groundwater pollution from agricultural uses. Additionally, the project would be required to comply with NPDES permits and regulations to address pollutants from run-off that may result during construction and operation of the proposed project.
Renewable Energy and Transmission Element		
Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.	Consistent	Water for the project site will be used on-site during construction and operation for potable, non-drinking non-potable water needs. Additionally, as further detailed in Section 3.16.3, the project would result in a decrease in water use compared to the current active agricultural uses on the project site.

Source: County of Imperial 2016; 2015b.
IID = Imperial Irrigation District; NPDES = National Pollutant Discharge Elimination System

3.16.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to utilities and service systems are considered significant if any of the following occur:

Water Supply

- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

PC ORIGINAL PKG

Methodology

The WSA (Appendix J of this EIR) was prepared using project-specific data to calculate the project's water consumption during construction and at build-out collectively ("operational").

Impact Analysis

Impact 3.16-1 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for Municipal, Commercial, and Industrial (MCI) temporary water use. Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the project Applicant will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which provides IID the information needed to manage the IID-apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts.

Water for the proposed project will be needed on-site for operational demands including the O&M building, fire flow storage, and panel washing (no water for dust suppression during operation required). Untreated Colorado River water will be supplied to the project site via the adjacent Westside Main Canal and 19 delivery gates (listed in Table 3.16-1which are assumed to be in good condition. The proposed project is estimated to require up to 10 AFY over 30 years. The project's operational water uses are shown in Table 3.16-3.

The proposed project's water demand is a decrease of 7,338 AFY from the historical 10-year average (7,348 AFY) or 99.9 percent less than the historic 10-year average annual delivery for agricultural uses at the project site.

Table 3.16-3. Project Operational Water Uses (AFY)

Use	Acre-Feet per Year	Total AF Over 30-Year Period
Water for Landscape Irrigation	0	0
Water for Dust Control	0	0
Water for Operation and Maintenance (30 years)	10	300
TOTAL RAW WATER USAGE	**10**	**300**

Source: Appendix J of this EIR

Imperial County estimates a cumulative, non-agricultural project water supply demand increase of up to 63,243 AFY within the foreseeable 30-year planning period, within its jurisdiction. However, all new non-agricultural projects, including the proposed project, are required to mitigate their respective water supply demand via conservation programs or conservation projects in order to receive future water apportionments.

New, non-agricultural projects may be susceptible to delivery cutbacks when an EDP Apportionment is exhausted, thus all approved projects require best management practices and water use efficiency at all times. Given the prolonged drought conditions and recent communication to IID from the Department of the Interior, reductions to all basin contractors, including IID and its water customers, are increasingly likely. If such reductions were to come into effect within an approved project's operation, the County of Imperial will work with IID to ensure any anticipated reduction can be managed via conservations programs or conservation projects.
IID's quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID's use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including seepage recovery from IID canals and the All-American Canal and measures to reduce operational discharge. Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including the proposed project for the next 20 years and for the life of the proposed project under a water supply consistent with the district's full entitlement.

Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). In the event that IID determines that the proposed project is subject to the ~~utilize~~ IWSP for Non-Agricultural Projects ~~water~~, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID has adopted an IWSP for non-agricultural projects under ~~from~~ which water supplies can be contracted to serve new non-agricultural developments within IID's water service area. The IWSP identifies ~~sets aside~~ 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, to serve new non-agricultural projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID. Under any fully executed water supply agreement, IID has the capacity to procure or develop water supplies for the project through the implementation of policies, the construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions, including the requisite environmental permitting.

The project's operational water demand of approximately 10 AFY represents 0.054 percent of the unallocated supply that may be set aside for additional conservation and contracting under the IWSP for non-agricultural projects, and approximately 0.016 percent of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed project represents a 99.9 percent decrease from the 10-year historical average agricultural water use for 2015-2024 at the project site.

The historical stability of the IID water supply, the amount of foreseeable water available, along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers suggest that the proposed project's water needs will be reasonably met for the next 20 years as assessed for compliance under SB-610.

Thus, the proposed project's estimated water demand would not affect IID's ability to provide water to other users in IID's water service area. Therefore, the proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources, and impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.16.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Similar to construction, water for decommissioning (primarily for dust control) is anticipated to be obtained from IID canals or laterals in conformance with IID rules and regulations for MCI temporary water use. Decommissioning activities is anticipated to last approximately one year in duration and require less water than construction activities. Due to the relatively short-term duration of decommissioning, the project is not anticipated to affect IID's ability to provide water to other users in IID's water service area. The proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources, and impacts would be less than significant.

Residual

The proposed project would not result in significant impacts on the water supply of Imperial County; therefore, no mitigation is required. The proposed project will not result in residual impacts.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

4 Analysis of Long-Term Effects

4.1 Growth-Inducing Impacts

In accordance with Section 15126.2(e) of CEQA Guidelines, an EIR must:

> *"discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are Projects which would remove obstacles to population growth ... Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some Projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

Projects promoting direct growth will impose burdens on a community by directly inducing an increase in population or resulting in the construction of additional developments in the same area. For example, projects involving expansions, modifications, or additions to infrastructure, such as sewer, water, and roads, could have the potential to directly promote growth by removing existing physical barriers or allowing for additional development through capacity increases. New roadways leading into a previously undeveloped area directly promote growth by removing previously existing physical barriers to development and a new wastewater treatment plant would allow for further development within a community by increasing infrastructure capacity. Because these types of infrastructure projects directly serve related projects and result in an overall impact to the local community, associated impacts cannot be considered isolated. Indirect growth typically includes substantial new permanent employment opportunities and can result from these aforementioned modifications.

The proposed project is located within the unincorporated area of Imperial County and it does not involve the development of permanent residences that would directly result in population growth in the area. The unemployment rate in Imperial County, as of January 2025 was 17.9 percent (State of California Employment Development Department 2025). The applicant expects to utilize construction workers from the local and regional area, a workforce similar to that involved in the development of other utility-scale solar facilities. Based on the unemployment rate, and the availability of the local workforce, construction of the proposed project would not have a growth-inducing effect related to workers moving into the area and increasing the demand for housing and services. Once construction is completed, no permanent construction workers would be hired. The proposed project would employ 4 to 10 full-time personnel to maintain the project facility 7 days a week during normal daylight hours. As such, the proposed project would not induce substantial population growth in the area.

While the proposed project would contribute to energy supply, which indirectly supports population growth, the proposed project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, it would also replace existing sources of non-renewable energy. Unlike a gas-fired power plant, the proposed project is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts, consistent with the findings and declarations in SB 100 that a benefit of the Renewable Portfolio

Standard is displacing fossil fuel consumption within the state. The project is being proposed in response to state policy and legislation promoting development of renewable energy.

The proposed project would supply energy to accommodate and support existing demand and projected growth, but the energy provided by the project would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project site; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project (CEQA Guidelines Appendix F(II); PRC Section 21100(b)(3)). However, the relationship between the proposed project's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 CCR Section 15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in Napa Citizens for Honest Gov't v. Napa County Board of Supervisors, 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth" *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the proposed project's growth-inducing effects cannot be resolved by collection of further data because of the diversity of factors affecting growth.

While this document has considered that the proposed project, as an energy project, might foster regional growth, the particular growth that could be attributed to the proposed project is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the proposed project. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the proposed project's contribution of additional electrical capacity. The County of Imperial has not adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA.

Additionally, the project would not involve the development of any new local or regional roadways, new water systems, or sewer; and thus, the project would not further facilitate additional development into outlying areas. For these reasons, the proposed project would not be growth-inducing.

4.2 Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines Section 15126.2(d), an EIR must identify any significant irreversible environmental changes that would be caused by implementation of the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses.

Energy resources needed for the construction of the proposed project would contribute to the incremental depletion of renewable and non-renewable resources. Resources, such as timber, used in building construction are generally considered renewable and would ultimately be replenished. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the project. Thus, the project would irretrievably commit resources over the anticipated 30-year life of the project.

PC ORIGINAL PKG

At the end of the project's operation term, the applicant may determine that the project should be decommissioned and deconstructed. Should the project be decommissioned, the project applicant is required to restore land to its pre-project state. Consequently, some of the resources on the site could potentially be retrieved after the site has been decommissioned. Concrete footings, foundations, and pads would be removed and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. The applicant anticipates using the best available recycling measures at the time of decommissioning.

Implementation and operation of the proposed project would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources. Additionally, the project is consistent with the state's definition of an "eligible renewable energy resource" in Section 399.12 of the California Public Utilities Code and the definition of "in-state renewable electricity generation facility" in Section 25741 of the California PRC.

4.3 Significant and Unmitigable Impacts

In accordance with CEQA Guidelines Section 15126(c), EIRs must include a discussion of significant environmental effects that cannot be avoided if the proposed project is implemented. The impact analysis, as detailed in Section 3 of this EIR, concludes that no significant and unmitigable impacts were identified. Where significant impacts have been identified, mitigation measures are proposed, that when implemented, would reduce the impact level to less than significant.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

5 Cumulative Impacts

The CEQA Guidelines (Section 15355) define a cumulative impact as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The CEQA Guidelines [Section 15130(a)(1)] further states that “an EIR should not discuss impacts which do not result in part from the project.”

Section 15130(a) of the CEQA Guidelines provides that “[A]n EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable...” Cumulatively considerable, as defined in Section 15065(a)(3), “means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

An adequate discussion of significant cumulative impacts requires either: (1) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or (2) “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.”

The CEQA Guidelines recognize that cumulative impacts may require mitigation, such as new rules and regulations that go beyond project-by-project measures. An EIR may also determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project’s contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Lead Agency must identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable (CEQA Guidelines Section 15130(a)(3)).

This EIR evaluates the cumulative impacts of the project for each resource area, using the following steps:

1. Define the geographic and temporal scope of cumulative impact analysis for each cumulative effects issue, based on the project’s reasonably foreseeable direct and indirect effects.
2. Evaluate the cumulative effects of the project in combination with past and present (existing) and reasonably foreseeable future projects and, in the larger context of the Imperial Valley.
3. Evaluate the project’s incremental contribution to the cumulative effects on each resource considered in Chapter 3, Environmental Analysis. When the project’s incremental contribution to a significant cumulative impact is considerable, mitigation measures to reduce the project’s “fair share” contribution to the cumulative effect are discussed, where required.

5.1 Geographic Scope and Timeframe of the Cumulative Effects Analysis

The geographic area of cumulative effects varies by each resource area considered in Chapter 3. For example, air quality impacts tend to disperse over a large area, while traffic impacts are typically more localized. Similarly, impacts on the habitats of special-status wildlife species need to be considered within its range of movement and associated habitat needs.

The analysis of cumulative effects in this EIR considers a number of variables including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the project site and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects of a project, but not beyond the scope of the direct and indirect effects of that project.

The cumulative development scenario includes projects that extend through year (2030), which is the planning horizon of the County of Imperial General Plan. Because of uncertain development patterns that are far in the future, it is too speculative to accurately determine the type and quantity of cumulative projects beyond the planning horizon of the County's adopted County General Plan. Evaluating the proposed project's cumulative impacts when future facility decommissioning occurs is highly speculative because decommissioning is expected to occur in 20 to 25 years' time. Therefore, cumulative impacts during decommissioning are speculative for detailed consideration in this analysis.

5.2 Projects Contributing to Potential Cumulative Impacts

The CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the projects are to be considered: the use of a list of past, present, and probable future projects (the "list approach") or the use of adopted projections from a general plan, other regional planning document, or certified EIR for such a planning document (the "plan approach").

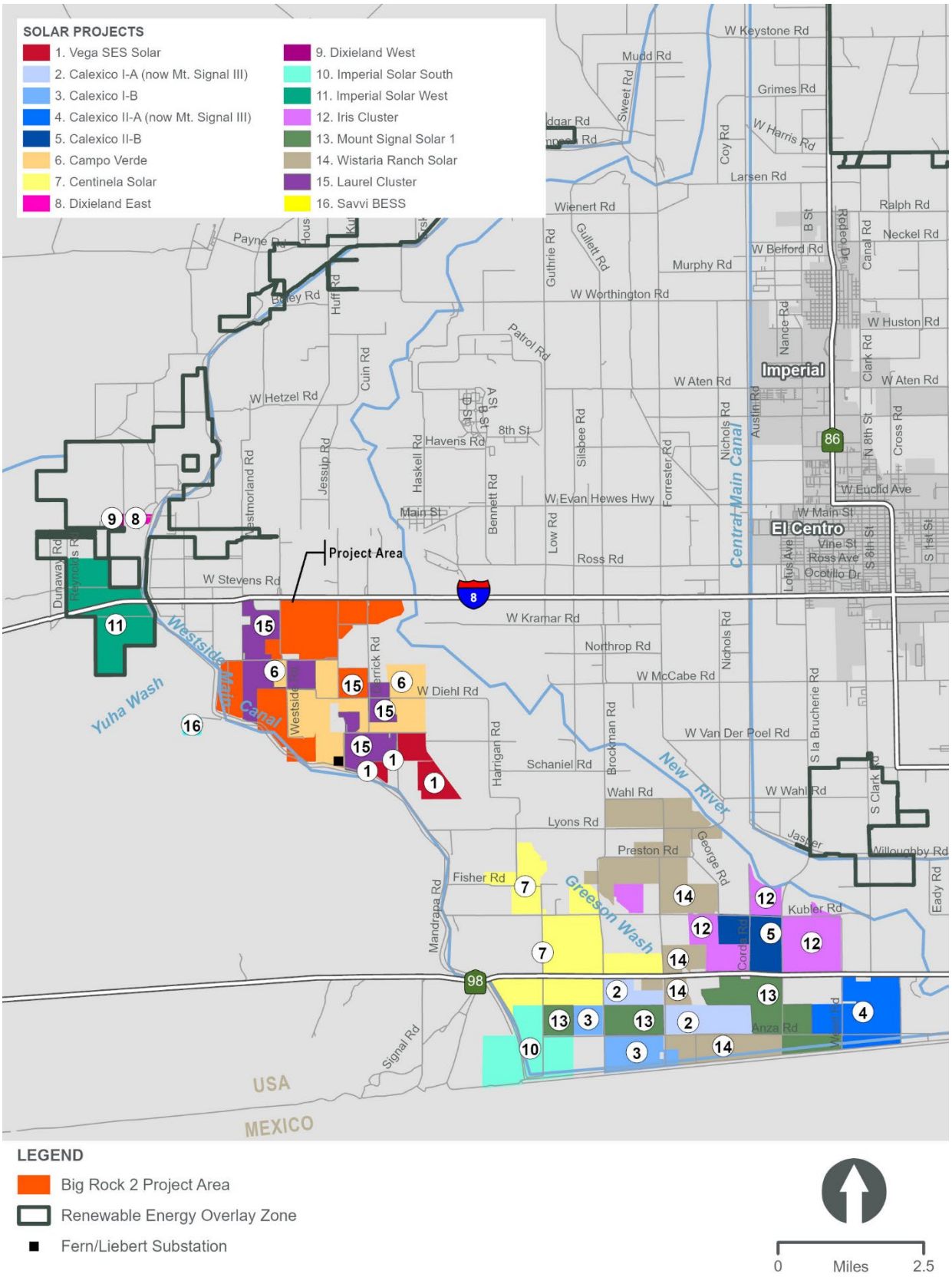
For this EIR, the list approach has been utilized to generate the most reliable future projections of possible cumulative impacts. When the impacts of the project are considered in combination with other past, present, and future projects to identify cumulative impacts, the other projects considered may also vary depending on the type of environmental impacts being assessed. As described above, the general geographic area associated with different environmental impacts of the project defines the boundaries of the area used for compiling the list of projects considered in the cumulative impact analysis. Figure 5-1 provides the general location for each of these projects in relation to the project site.

5.3 Cumulative Impact Analysis

This cumulative impact analysis utilizes an expanded list method (as defined under CEQA) and considers environmental effects associated with those projects identified in Table 5-1 in conjunction with the impacts identified for the project in Chapter 3 of this EIR. Table 5-1 includes projects known at the time of release of the NOP of the Draft EIR, as well as additional projects that have been proposed since the NOP date. Figure 5-1 provides the general location for each of these projects in relation to the project site.

PC ORIGINAL PKG

Figure 5-1. Cumulative Projects



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Table 5-1. Projects Considered in the Cumulative Impact Analysis

Map Label[1]	Project Name	Project Type	Distance from Big Rock 2 Project Site	Size (Acres)	Capacity (MW)	Status[2]
1	VEGA SES Solar Energy Project	PV Solar Facility and BESS	Approximately 0.4 miles east	574	100 PV Solar/100 BESS	Pending Construction
2	Calexico I-A (now Mount Signal III)	PV Solar Facility	Approximately 6.1 miles southeast	719	100	Operational
3	Calexico I-B	PV Solar Facility	Approximately 6 miles southeast	610	100	Operational
4	Calexico II-A (now Mount Signal III)	PV Solar Facility	Approximately 9.5 miles southeast	940	100	Operational
5	Calexico II-B	PV Solar Facility	Approximately 7 miles southeast	530	100	Operational
6	Campo Verde	PV Solar Facility	This site borders of BR2	1,443	140	Operational
7	Centinela Solar	PV Solar Facility	Approximately 3.4 miles southeast	2,067	275	Operational
8	Dixieland East	PV Solar Facility	Approximately 2.6 miles northwest	31	2	Operational
9	Dixieland West	PV Solar Facility	Approximately 2.8 miles northwest	32	3	Operational
10	Imperial Solar South	PV Solar Facility	Approximately 5.4 miles southeast	946.6	200	Operational
11	Imperial Solar West	PV Solar Facility	Approximately 1.1 miles west	1,130	250	Operational
12	Iris Cluster	PV Solar Facility	Approximately 5.5 miles southeast	1,422	360	Operational
13	Mount Signal Solar I	PV Solar Facility	Approximately 5.7 miles southeast	1,431	200	Operational
14	Wistaria Ranch Solar	PV Solar Facility	Approximately 5 miles southeast	2,661	250	Operational
15	Laurel 1	PV Solar Facility	This site borders BR2			Pending Construction
	Laurel 2	PV Solar Facility	This site borders BR2			Pending Construction

PC ORIGINAL PKG

Table 5-1. Projects Considered in the Cumulative Impact Analysis

Map Label[1]	Project Name	Project Type	Distance from Big Rock 2 Project Site	Size (Acres)	Capacity (MW)	Status[2]
	Laurel 3	PV Solar Facility	This site borders BR2	1,396 (combined total for Laurel 1, 2, and 3)	325 (combined total for Laurel 1, 2, and 3)	Pending Construction
16	Saavi BESS	BESS	Approximately 0.5 mile west	39.25	400	Pending Entitlement

1 – See Figure 5-1 for cumulative project location.

2 – Project status based on information provided by County staff and on Imperial County Planning & Development Service's RE Geographic Information System Mapping Application (https://icpds.maps.arcgis.com/apps/webappviewer/index.html?id=0d869c18d11645cc918391fdcac24b80). Accessed on December 12, 2024.

BESS – Battery Energy Storage System; BR2=Big Rock 2; IID – Imperial Irrigation District; MW – megawatts; PV – photovoltaic

PC ORIGINAL PKG

5.3.1 Aesthetics

The cumulative study area for projects considered in the visual resources cumulative impact analysis considers a 5-mile radius from the project site. Views beyond 5 miles are obstructed by a combination of the flat topography coupled with the Earth's curvature. The short-term visual impacts of the project would be in the form of general construction activities including grading, use of construction machinery, and installation of the transmission poles and stringing of transmission lines, but would only be available to a very limited amount of people and would have to be in relative close proximity to the project site. Longer-term visual impacts of the project would be in the form of the presence of solar array grids, an electrical distribution and transmission system, and substation.

As provided in Section 3.2, Aesthetics, the existing visual character of the project site and the quality of views in terms of visibility beyond the site would not be substantially altered. The primary visual change that would be experienced by viewers in the surrounding area is the introduction of numerous rows of orderly solar panels, and installation of fencing along the site perimeter. The visual changes associated with the project would not be located in proximity to any designated scenic vistas or scenic highways. Project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Solar 3 and 4 Projects and the existing operational Campo Verde Solar Facility that have altered the existing landscape in the project vicinity. Further, the project site would be restored to its existing condition following the decommissioning of the solar uses. As a result, although the visual character of the project site would change from undeveloped to one with developed characteristics, a less than significant impact associated with the proposed project has been identified.

Development of the proposed project in conjunction with the cumulative projects identified in Table 5-1 will gradually change the visual character of this portion of the Imperial Valley. However, projects located within private lands and/or under the jurisdiction of the County of Imperial are being designed in accordance with the County of Imperial's General Plan and Land Use Ordinance, which includes policies to protect visual resources in the County.

Finally, all projects listed in Table 5-1 would not produce a substantial amount of light and glare, as no significant source of light or glare is proposed. The project will otherwise comply with the County lighting ordinance, as would all other related projects. Based on these considerations, there would be no significant cumulatively considerable aesthetic impact, and cumulative aesthetic impacts would be less than significant.

5.3.2 Agricultural Resources

Cumulative impacts on agricultural resources take into account the proposed project's temporary impacts as well as those likely to occur as a result of other existing, proposed and reasonably foreseeable projects. To determine cumulative impacts on agricultural resources, an assessment is made of the temporal nature of the impacts on individual resources (e.g., temporary such as in solar projects versus permanent as in industrial or residential developments) as well as the inventory of agricultural resources within the cumulative setting.

As discussed in Section 3.3, Agricultural Resources, implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland
- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

Thus, the proposed project would incrementally add to the temporary conversion of agricultural land in Imperial County. According to the California Department of Conservation, in 2020, approximately 519,891 acres out of a total of 1,028,522 acres in Imperial County is classified as Important Farmland (California DOC n.d.). Table 5-2 summarizes the percentage of each type of farmland in the County that would be converted by the proposed project.

Table 5-2. Percentage Conversion of Farmland by Proposed Project

Agriculture Classification	Total Acreage in Imperial County (2020)	Approximate Acreage Converted on Project Site	Project Percentage of County Acreages
Prime Farmland	188,365	973.24	0.52
Farmland of Statewide Importance	289,002	753.80	0.26
Unique Farmland	1,767	0.06	0.00
Farmland of Local Importance	40,757	65.08	0.16
Total	**519,891**	**1,792.18**	**0.94**

Source: California DOC 2020

As shown in Table 5-2, the Prime Farmland and Farmland of Statewide Importance within the project site comprises approximately 0.78 percent (0.52 + 0.26) of the total Important Farmland in the County. Thus, the proposed project would temporarily convert a very small fraction of the total Important Farmlands in the County and have a minimal effect on agricultural land on a cumulative scale. Furthermore, the conversion would be temporary and last for the duration of the project's useful life which is expected to be up to 30 years.

Development of the solar energy facility, BESS, and supporting infrastructure is subject to the County's zoning ordinance. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*

PC ORIGINAL PKG

- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

Upon approval of a CUPs, the project's uses would be consistent with the Imperial County Land Use Ordinance and thus, is also consistent with the General Plan land use designations of the site. Additionally, as a condition of project approval, the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan.

As discussed in Section 3.3, Agricultural Resources, Mitigation Measure AG-1a (Payment of Agricultural and Other Benefit Fees), AG-1b (Site Reclamation Plan), and AG-2 (Pest Management Plan) would be implemented to reduce potential impacts on agricultural resources to a level less than significant. Each individual cumulative project would be or would have been required to provide mitigation for any impacts on agricultural resources in accordance with the County's policies directed at mitigating the impact associated with the conversion of important farmlands. Therefore, the project's contribution to this impact would be less than cumulatively considerable.

5.3.3 Air Quality

Imperial County is used as the geographic scope for analysis of cumulative air quality impacts. As shown in Table 5-1, many of the cumulative projects are large-scale renewable energy generation projects, where the main source of air emissions would be generated during the construction phases of these projects; however, there would also be limited operational emissions associated with operations and maintenance activities for these facilities. Additionally, a majority of the projects listed in Table 5-1 are already constructed and operational. Therefore the potential for a cumulative, short-term air quality impact as a result of construction activities is anticipated to be less than significant.

Currently, the SSAB is either in attainment or unclassified for all federal and state air pollutant standards with the exception of 8-Hour $O_3$and $PM_{2.5}$.

The AQAP for the SSAB, through the implementation of the AQMP and SIP for PM_{10}, sets forth a comprehensive program that will lead the SSAB into compliance with all federal and state air quality standards. With respect to PM_{10}, the ICAPCD implements Regulation VIII – Fugitive Dust Rules, to control these emissions and ultimately lead the basin into compliance with air standards, consistent with the AQAP. Within Regulation VIII are Rules 800 through 806, which address construction and earthmoving activities, bulk materials, carry-out and track-out, open areas, paved and unpaved roads, and conservation management practices. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:

- Phasing of work in order to minimize disturbed surface area;
- Application of water or chemical stabilizers to disturbed soils;
- Construction and maintenance of wind barriers; and
- Use of a track-out control device or wash down system at access points to paved roads.

Compliance with Regulation VIII is mandatory on all construction sites, regardless of size. However, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the air district is required 10 days prior to the commencement of any construction activity.

Construction

The proposed project would generate air emissions due to vehicle and dust emissions associated with construction activities. Similar effects would also be realized upon site decommissioning, which would be carried out in conjunction with the project's restoration plan, and subject to applicable ICAPCD standards. Likewise, the other cumulative projects that are pending construction (Laurel I, Laurel II, and Laurel III), or pending entitlement (Saavi BESS) identified in Table 5-1 would result in the generation of air emissions during construction activities.

With respect to the proposed project, during the construction and decommissioning phases, the project would generate PM_{10}, $PM_{2.5}$, ROG, CO, and NO_X emissions during each active day of construction. As discussed in Section 3.4, Air Quality, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissions. With implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

The proposed project, in conjunction with the construction of other cumulative projects as identified in Table 5-1, could result in a cumulatively considerable increase in the generation of PM_{10}, $PM_{2.5}$, and NO_x; however, like the proposed project, cumulative projects would be subject to mitigation pursuant to County ICAPCD's Regulations and Rules, and the cumulative impact would be reduced to a level less than significant through compliance with these measures. Because the project will be required to implement measures consistent with ICAPCD regulations designed to alleviate the cumulative impact associated with PM_{10}, the proposed project's contribution is rendered less than cumulatively considerable and is therefore, less than significant.

PC ORIGINAL PKG

Operation

As the proposed project would have no major stationary emission sources and would require minimal vehicular trips, operation of the proposed solar facility would result in substantially lower emissions than project construction. The project's operational emissions would not exceed the Tier I thresholds; therefore, the impact would be less than significant. Operational impacts of other renewable energy facilities identified in Table 5-1 would also be similar. Although these cumulative projects generally involve large areas, their operational requirements are very minimal, requiring minimal staff or use of machinery or equipment that generate emissions. Further, alternative energy projects, such as the project, would assist attainment of regional air quality standards and improvement of regional air quality by providing clean, renewable energy sources. Consequently, the projects would provide a positive contribution to the implementation of applicable air quality plan policies and compliance with EO S-3-05.

However, from a cumulative air quality standpoint, the potential cumulative impact associated with the generation of O_3, $PM_{2.5}$ and PM_{10} emissions during operation of the cumulative projects is a consideration because existing O_3 and PM_{10} levels in the SSAB are at unhealthy levels during certain periods. Imperial County is classified as non-attainment for $PM_{2.5}$ for the urban areas of Imperial County. However, the project's operational contribution to O_3, $PM_{2.5}$ and PM_{10} would be below a level of significance. As with the construction phases, the cumulative projects would be required to comply with ICAPCD's Regulation VIII for dust control (Regulation VIII applies to both the construction and operational phases of projects). As a result, the ICAPCD would be required to comply with the various dust control measures and to prepare and implement operational dust control plans as approved by the ICAPCD, which is a component of ICAPCD's overall framework of the AQAP that sets forth a comprehensive program for SSAB's compliance with all federal and state air quality standards. Therefore, the project would not contribute to long-term cumulatively considerable air quality impacts and the project would not result in cumulatively significant air quality impacts, and cumulative impacts would be less than significant.

5.3.4 Biological Resources

The geographic scope for considering cumulative impacts on biological resources includes the Imperial Valley and related biological habitats. Table 5-1 lists the projects considered for the biological resources cumulative impact analysis.

In general terms, in instances where a potential impact could occur, CDFW and USFWS have promulgated a regulatory scheme that limits impacts on these species. The effects of the project would be rendered less than significant through mitigation requiring compliance with all applicable regulations that protect plant, fish, and animal species, as well as waters of the U.S. and state. Other cumulative projects would also be required to avoid impacts on special-status species and/or mitigate to the satisfaction of the CDFW and USFWS for the potential loss of habitat.

As described in Section 3.5, Biological Resources, the project would have the potential to result in impacts on biological resources. These impacts are generally focused on potential construction-related effects to burrowing owls, raptor species (California Black Rail, Yuma Ridgeway's Rail, and northern harrier), migratory birds, and bats. Additionally, project construction has the potential to result in direct and indirect impacts on nesting birds.

Burrowing Owls are protected by the CDFW mitigation guidelines for burrowing owl (CDFW 2012) and Consortium guidance (1993), which require a suite of mitigation measures to ensure direct effects to burrowing owls during construction activities are avoided and indirect effects through burrow

PC ORIGINAL PKG

destruction and loss of foraging habitat are mitigated at prescribed ratios. Mitigation measures identified in Section 3.5, Biological Resources, would ensure that all regulations required to protect burrowing owls, raptor species, and migratory birds, are implemented, thereby minimizing potential impacts on these species to a less than significant level. Similarly, the cumulative projects within the geographic scope of the project would be required to comply with the legal framework as described above. Based on these considerations, impacts on biological resources would not be cumulatively considerable.

As with the proposed project, each of the cumulative projects would be required to provide mitigation for impacts on biological resources. The analysis below is conducted qualitatively and in the context that the cumulative projects would be subject to a variety of statutes and administrative frameworks that require mitigation for impacts on biological resources.

Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The MBTA is enforced by USFWS. This act prohibits the killing of any migratory birds without a valid permit. Any activity which contributes to unnatural migratory bird mortality could be prosecuted under this act. With few exceptions, most birds are considered migratory under this act. Raptors and active raptor nests are protected under California FGCs 3503.5, 3503, and 3513.

The CWA and California's Porter-Cologne Water Quality Control Act provide protection for water-related biological resources by controlling pollution, setting water quality standards, and preventing jurisdictional streams, lakes, and rivers from being filled without a federal permit. No jurisdictional wetlands are located with the project site that could otherwise be directly impacted by construction of the proposed project. Likewise, Mitigation Measures HYD-1 and HYD-2 would be required to avoid or minimize potential water quality impacts that could otherwise indirectly impact biological resources. Further, the proposed project would result in a net decrease in water demand, which would provide a benefit to IID's water budget and available supply for the Salton Sea. Implementation of the project would result in fallowing of currently irrigated agricultural fields. The IID's "Imperial Valley Natural Community Conservation Plan and Habitat Conservation Plan Planning Agreement No. 2810-2004-001-06 (February 2006) covers water conservation and irrigation and drainage of land to which IID delivers water to which the environmental impacts and various approaches to mitigate potential impacts to the Salton Sea include fallowing agricultural lands as identified in the HCP Final EIR/EIR. EIR Section 3.16 discusses the IID's Interim Water Supply Policy (IWSP) for Non-Agricultural Projects and Temporary Land Conversion Fallowing Policy (TLCFP) adopted by the IID and according to the TLCFP "This fallowing program satisfies multiple district objectives and service to reduce the conservation and water use demands on other IID water uses and thus provide district-wide benefits."

Given the above, the project would not contribute substantially to a cumulative biological resources impact. Similarly, the cumulative projects within the geographic scope of the proposed project will be required to comply with the legal frameworks set forth above, as well as others, and will be required to mitigate their impacts to a less than significant level. Therefore, the project would not contribute to a cumulatively considerable impact to biological resources, and cumulative impacts would be less than significant.

PC ORIGINAL PKG

5.3.5 Cultural Resources

As discussed in Section 3.6, Cultural Resources, 7 previously recorded cultural resources were identified within the project site during field surveys. Under Impact 3.6-1, the eligibility of the identified resources were discussed. None of the 7 previously recorded cultural resources were determined eligible for listing in the CRHR or NRHP.

The potential of finding a buried archaeological site during construction is considered low. However, like all construction projects in the state, the possibility exists. This potential impact is considered significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce potential impacts associated with the unanticipated discovery of unknown buried archaeological resources. Implementation of Mitigation Measure CUL-3 would reduce potential impacts on human remains to a level less than significant.

Future projects with potentially significant impacts on cultural resources would be required to comply with federal, state, and local regulations and ordinances protecting cultural resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures CUL-1 through CUL-3, the proposed project would have a less than cumulatively considerable contribution to impacts on cultural resources.

During operations and decommissioning of the project, no additional impacts on archaeological resources would be anticipated because the soil disturbance would have already occurred and been mitigated during construction.

5.3.6 Geology and Soils

The Imperial Valley portion of the Salton Trough physiographic province of Southern California is used as the geographic scope for the analysis of cumulative impacts on geology/soils and mineral resources. Cumulative development would result in an increase in population and development that could be exposed to hazardous geological conditions, depending on the location of proposed developments. Geologic and soil conditions are typically site specific and can be addressed through appropriate engineering practices. Cumulative impacts on geologic resources would be considered significant if the project would be impacted by geologic hazard(s) and if the impact could combine with off-site geologic hazards to be cumulatively considerable. None of the projects identified within the geographic scope of potential cumulative impacts would intersect or be additive to the project's site-specific geology and soils impacts; therefore, no cumulatively considerable effects are identified for geology/soils, and cumulative impacts would be less than significant.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant paleontological resources impact due to the potential loss of paleontological resources unique to the region. However, mitigation is included in this EIR to reduce potentially significant project impacts to paleontological resources during construction of the proposed project. Implementation of Mitigation Measures GEO-3 and GEO-4 would ensure that the potential impacts on paleontological resources do not rise to the level of significance. Future projects with potentially significant impacts on paleontological resources would be required to comply with federal, state, and local regulations and ordinances protecting paleontological resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures

PC ORIGINAL PKG

GEO-3 and GEO-4, the proposed project would have a less than cumulatively considerable contribution to impacts on paleontological resources.

5.3.7 Greenhouse Gas Emissions

Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Although the emissions of the projects alone would not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. In turn, global climate change has the potential to result in rising sea levels, which can inundate low-lying areas; affect rainfall and snowfall, leading to changes in water supply; and affect habitat, leading to adverse effects on biological resources.

SCAQMD considers projects that generate more than 10,000 $MTCO_2e$ per year to be significant. the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold.

As discussed in Section 3.8, Greenhouse Gas Emissions, the project would result in the generation of approximately 3,470 $MTCO_2e$, or approximately 112 $MTCO_2e$ annually amortized over a 30-year period. Therefore, the construction emissions are less than the SCAQMD's threshold of 10,000 $MTCO_2e$ per year. As the project's emissions do not exceed the SCAQMD's threshold, the proposed project would not result in a cumulatively considerable impact to GHG emissions and would not conflict with the State GHG reduction targets. Other cumulative projects identified in Table 5-1 largely consist of utility-scale solar facilities. The nature of these projects is such that, like the project, they would be consistent with the strategies of the Climate Change Scoping Plan. In order to meet the AB 32 GHG emissions reduction mandate, the Scoping Plan relies on achievement of the RPS target of 33 percent of California's energy coming from renewable sources by 2020 and 50 percent by 2030. The RPS target was updated in September 2018 under SB 100 to 60 percent by 2030. The project and other similar projects are essential to achieving the RPS.

Given that the project is characterized as a renewable energy project and places emphasis on solar power generation, project operations would be almost carbon-neutral with the majority of the operational GHG emissions associated with vehicle trips. Based on these considerations, no significant long-term operational GHG impacts would occur and, therefore, project-related GHG impacts would not be cumulatively considerable.

5.3.8 Hazards and Hazardous Materials

The geographic scope considered for cumulative impacts from health, safety, and hazardous materials is the area within 1 mile of the boundary of the project sites. One mile is the standard American Society of Testing and Materials (ASTM) standard search distance for hazardous materials.

Under cumulative conditions, implementation of the project in conjunction with the projects listed in Table 5-1 is not anticipated to present a public health and safety hazard to residents. Additionally, the project and related projects would all involve the storage, use, disposal, and transport of hazardous materials to varying degrees during construction, operation, and decommissioning. Impacts from these activities are less than significant for the project because the storage, use, disposal, and transport of hazardous materials are extensively regulated by various Federal, state, and local laws, regulations,

PC ORIGINAL PKG

and policies. It is foreseeable that the project and related projects would implement and comply with these existing hazardous materials laws, regulations, and policies. Therefore, the related projects would not cause a cumulative impact, and the project would not result in a cumulatively considerable incremental contribution to a cumulative impact related to use or routine transport of hazardous materials.

5.3.9 Hydrology and Water Quality

Table 5-1 lists the projects considered for the hydrology and water quality cumulative impact analysis. The geographic scope for considering cumulative hydrology and water quality impacts is the Imperial Valley Hydrologic Unit as defined by the Colorado Basin RWQCB Basin Plan.

The construction of the project is expected to result in short-term water quality impacts. Compliance with the SWRCB's NPDES general permit for activities associated with construction (2009-0009-DWQ) would reduce water quality impacts. As with the proposed project, each of the cumulative projects would be required to comply with the Construction General Permit. The SWRCB has determined that the Construction General Permit protects water quality, is consistent with the CWA, and addresses the cumulative impacts of numerous construction activities throughout the state. This determination in conjunction with the implementation of mitigation would ensure short-term water quality impacts are not cumulatively considerable.

The project is not expected to result in long-term operations-related impacts related to water quality. The project would mitigate potential water quality impacts by implementing site design, source control, and treatment control BMPs, as outlined in Mitigation Measures HYD-1 and HYD-2. Some cumulative projects would require compliance with the SWRCB's NPDES general permit for industrial activities, as well as rules found in the CWA, Section 402(p)(1) and 40 CFR 122.26, and implemented Order No. 90-42 of the RWQCB. With implementation of SWRCB, Colorado River RWQCB, and County policies, plans, and ordinances governing land use activities that may degrade or contribute to the violation of water quality standards, cumulatively considerable impacts on water quality would be minimized to a less than significant level.

Based on a review of the FEMA Flood Insurance Rate Map FIRM, the proposed project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. As such, the project would not result in a significant cumulatively considerable impact on floodplains by constructing new facilities within an identified flood hazard zone.

Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact to hydrology or water quality, and cumulative impacts would be less than significant.

5.3.10 Land Use Planning

The geographic scope for the analysis of cumulative land use and planning impacts is typically defined by government jurisdiction. The geographic scope for considering potential inconsistencies with the General Plan's policies from a cumulative perspective includes all lands within the County's jurisdiction and governed by its currently adopted General Plan. In contrast, the geographic scope for considering potential land use impacts or incompatibilities include the project site plus a one-mile buffer to ensure a consideration for reasonably anticipated potential direct and indirect effects.

PC ORIGINAL PKG

As provided in Section 3.11, Land Use/Planning, the project would not involve any facilities that could otherwise divide an established community. Based on this circumstance, no cumulatively considerable impacts would occur. As discussed in Section 3.11, Land Use/Planning, the project would not conflict with the goals and objectives of the County of Imperial General Plan if all entitlements (General Plan amendment, Conditional Use Permits, and Zone Change) are approved by the County Board of Supervisors. In addition, a majority of the cumulative projects identified in Table 5-1 would not result in a conflict with applicable land use plans, policies, or regulations. In the event that incompatibilities or land use conflicts are identified for other projects listed in Table 5-1, similar to the project, the County would require mitigation to avoid or minimize potential land use impacts. Where General Plan Amendments and/or Zone Changes are required to extend the RE Overlay Zone, that project would also be required to demonstrate consistency with the overall goals and policies of the General Plan, and would be required to demonstrate meeting the criteria for extending the RE Overlay onto the project site. Based on these circumstances, no significant cumulatively considerable impact would occur, and cumulative impacts would be less than significant.

5.3.11 Noise and Vibration

When determining whether the overall noise (and vibration) impacts from related projects would be cumulatively significant and whether the projects' incremental contribution to any significant cumulative impacts would be cumulatively considerable, it is important to note that noise and vibration are localized occurrences; as such, they decrease rapidly in magnitude as the distance from the source to the receptor increases. Therefore, only those related projects and identified in Table 5-1 that are in the direct vicinity of the project site and those that are considered influential in regard to noise and vibration would have the potential to be considered in a cumulative context with the project's incremental contribution.

Construction equipment noise from the related projects identified in Table 5-1would be similar in nature and magnitude to those discussed for the project in Section 3.12, Noise and Vibration. Specifically, noise levels from on-site construction activities would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The site preparation phase would be anticipated to generate the most substantial noise levels as the on-site equipment associated with grading, compacting, and excavation tend to be the loudest. As discussed in Section 3.12, Noise and Vibration, the project's noise levels would not exceed the County's 75 dBA L_{eq} construction noise threshold. Therefore, impacts from construction noise are considered less than significant. Similar to the proposed project, other cumulative projects would be required to comply with the County's construction noise standards. Construction activity is limited to the hours of 7 a.m. to 7 p.m. Monday through Friday, and 9 a.m. to 5 p.m. on Saturdays. Adhering to the County's construction hours would reduce the noise and vibration impacts to below a level of significance. Thus, the incremental contribution of the project to a cumulative noise impact would not be cumulatively considerable.

Stationary-source and vehicular noise from the aforementioned related projects would be similar in nature and magnitude to those discussed for the projects in Section 3.12, Noise and Vibration. For the proposed project, no noise impacts have been identified. Operation of the other cumulative projects listed in Table 5-1 could result in the long-term stationary source noise levels that exceed applicable standards at nearby sensitive receptors and/or result in substantial increases in ambient noise levels. However, given that the project facilities would be constructed within the A-2, A-2-R, and A-3 zones, and components of the project associated with noise during operation would be located at appropriate distances from the residential uses scattered in this portion of the County, long-term operational noise levels are not expected to exceed normally acceptable noise levels for these zones (e.g., 70 dBA Ldn).

PC ORIGINAL PKG

Thus, the incremental contribution of the project to significant cumulative noise impacts would not be cumulatively considerable.

5.3.12 Public Services

The project would result in increased demand for public services (fire protection service and law enforcement services) (Section 3.13, Public Services). Future development in the Imperial Valley, including projects identified in Table 5-1, would also increase the demand for public services. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public services within their jurisdictional boundaries. In conjunction with the project's approval, the project applicant would also be conditioned to ensure sufficient funding is available for any fire protection or prevention needs and law enforcement services. Based on the type of projects proposed (e.g., solar energy generation and battery storage), their relatively low demand for public services other than fire and police, it is reasonable to conclude that the project would not increase demands for education, or other public services. Service impacts associated with the project related to fire and police would be addressed through payment of impact fees as part of the project's Conditions of Approval to ensure that the service capabilities of these departments are maintained. Therefore, no cumulatively considerable impacts would occur.

5.3.13 Transportation

As stated in Section 3.14, Transportation, during the construction phase of the project, the maximum number of trips generated on a daily basis would be approximately 1,016 trips (1,032 passenger car equivalent). Construction-related trips are temporary and would not generate permanent trips. As a condition of approval under the project's CUP(s), a traffic control plan as part of a Construction Traffic Management Plan (CTMP) would be implemented by the project applicant or contractor to reduce potential impacts at affected intersections (see 3.14, Transportation).

The majority of the projects listed in Table 5-1 are already constructed. As shown on Table 5-1, there are cumulative projects that pending construction (Laurel I, Laurel II, and Laurel III), or pending entitlement (Saavi BESS). The construction phasing of these projects is not anticipated to overlap with the proposed project. Furthermore, the cumulative projects are not anticipated to use the same construction haul route as the proposed project. During operations, the proposed project would generate up to 20 trips per day. Based on the low amount of operational trips generated and low existing traffic volumes on area roadways, no substantial transportation impacts are anticipated. Based on these findings, the project would not result in cumulatively considerable roadway or intersection impacts, and this impact would be less than significant.

5.3.14 Tribal Cultural Resources

As discussed in Section 3.15, Tribal Cultural Resources, the County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians ("Viejas") have requested to be involved with monitoring efforts. The proposed project was determined to have cultural significance or ties to Viejas. As a result, implementation of Mitigation Measures CUL-3 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance. Other projects listed in Table 5-1 would potentially be located in sensitive areas where unidentified tribal cultural resources may exist. Therefore, future cumulative projects would also be required to comply with the requirements of AB

52 to determine the presence/absence of tribal cultural resources and engage in consultation to determine appropriate mitigation measures to minimize or avoid impacts on tribal cultural resources. Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact tribal cultural resources.

5.3.15 Utilities/Service Systems

Future development in Imperial County would increase the demand for utility service in the region. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public utilities within their jurisdictional boundaries. The proposed project would not require or result in the relocation or construction of new or expanded wastewater facilities, storm water facilities, or water facilities. Additionally, the project would be comprised of mostly recyclable materials and would not generate significant volumes of solid waste that could otherwise contribute to significant decreases in landfill capacity. Based on these considerations, the project would result in less than significant impacts on existing utility providers and, therefore, would not result in cumulatively considerable impacts.

PC ORIGINAL PKG

6 Effects Found Not Significant

In accordance with Section 15128 of the CEQA Guidelines, an EIR must contain a statement briefly indicating the reasons that various potential significant effects of a project were determined not to be significant. Based on the Initial Study and Notice of Preparation prepared for the proposed project (Appendix A of this EIR), Imperial County has determined that the proposed project would not have the potential to cause significant adverse effects associated with the topics identified below. Therefore, these topics are not addressed in this EIR; however, the rationale for eliminating these topics is briefly discussed below.

6.1 Agriculture and Forestry Resources

6.1.1 Forestry Resources

No portion of the project site or the immediate vicinity is zoned or designated as forest lands, timberlands, or timberland production. As such, the proposed project would not result in a conflict with existing zoning or cause the need for a zone change specifically related to forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). Therefore, implementation of the proposed project would not impact forestry resources.

6.2 Energy

The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, and petroleum-based fuel supplies and distribution systems. The proposed project would not utilize any natural gas during either construction or operation of the proposed project, and no further analysis of natural gas is provided in this analysis.

The following discussion discusses the potential energy consumption associated with the construction and operation of the proposed project and analyzes if any energy utilized by the proposed project is wasteful, inefficient, or unnecessary consumption of energy resources.

6.2.1 Energy Consumption

Collectively, the proposed project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. Operation of the proposed project would not result in the consumption of electricity or natural gas and thus, would not contribute to the County wide usage and would directly support the RPS goal of increasing the percentage of electricity procured from renewable sources.

Therefore, the energy analysis focuses on the two sources of energy that are most relevant to the projects: the equipment fuel necessary for construction and the automotive fuel necessary for ongoing maintenance activities. This analysis conservatively assumes that all of the automobile trips projected to arrive at the project site during operations would be new to Imperial County.

PC ORIGINAL PKG

Construction

Energy consumption for diesel and gasoline associated with the proposed project is summarized in Table 6-1 and Table 6-2, respectively.

Table 6-1. Proposed Construction Energy Consumption – Diesel

Timing	CO2 Metric Tons (kg CO2/gallon)	Energy Consumption (gallons)
Phase 1 – 2026	499	48,913
Phase 2 – 2026	423	41,408
Phase 3 – 2026	786	76,964
Phase 3 – 2027	271	26,503
Phase 4 – 2027	119	11,673
Phase 5 – 2050	910	89,100
Total Project Diesel	**--**	**294,561**

Source: HDR 2024

Table 6-2. Proposed Construction Energy Consumption – Gasoline

Timing	CO2 Metric Tons (kg CO2/gallon)	Energy Consumption (gallons)
Phase 1 – 2026	63	7,185
Phase 2 – 2026	99	11,263
Phase 3 – 2026	805	91,655
Phase 3 – 2027	680	77,449
Phase 4 – 2027	48	5,465
Phase 5 – 2050	1,212	138,059
Total Project Diesel	**--**	**331,076**

Source: HDR 2024

Fuel necessary for project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the project site. The fuel expenditure necessary to construct the solar facility and infrastructure would be temporary, lasting only as long as project construction. As shown in Table 6-1 and Table 6-2, construction of the proposed project would result in a total consumption of approximately 625,637 gallons of total fuel (294,561 gallons of diesel and approximately 331,076 gallons of gasoline).

According to the 2023 California Annual Retail Fuel Outlet Report Results (CEC-A15), gasoline and diesel sales in Imperial County in 2023 is estimated at 74 million gallons and 27 million gallons, respectively (CEC 2024b). Accordingly, the estimated 294,561 gallons of diesel fuel required during project construction would represent approximately 0.011 percent of total diesel sales in Imperial County. The estimated 331,076 gallons of gasoline required during project construction would represent approximately 0.004 percent of total gasoline sales in Imperial County.

Fuel energy consumed during project construction would be temporary and would not represent a substantial demand on energy resources. In addition, energy conservation would occur during project construction through compliance with the CARB anti-idling and emissions regulations, which require that equipment not used for more than five minutes be turned off. Compliance with these regulations would result in less fuel combustion and energy consumption and thus minimize the project's

PC ORIGINAL PKG

construction-related energy use. Project construction equipment would also be required to comply with EPA and CARB engine emission standards. These emission standards require highly efficient combustion systems to maximize fuel efficiency and reduce unnecessary fuel consumption. Furthermore, construction activities associated with the proposed project would be required to adhere to all State and ICAPCD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources.

Construction-Related Electricity

During construction of the proposed project, electricity would be consumed to construct the new structures and infrastructure. Electricity would be supplied to the project site by IID and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines. A 230-kV overhead gen-tie transmission line is anticipated to link the project substation to the Liebert Switchyard, which will then be connected via an overhead 230-kV gen-tie line to the existing SDG&E Imperial Valley Substation, which would provide adequate capacity to handle the power generated and utilized by the proposed project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with County and IID guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Operations

Once operational, electricity required during operations would be greatly offset by the electricity produced by the solar facility. Specifically, operation of renewable energy facility would offset GHG emissions by replacing energy generated by fossil fuel power plants. The project would generate up to 500 MW of renewable energy, of which 500 MW net of energy would be added to the power grid. In addition, the proposed project would provide up to 500 MW of battery storage. This renewable energy would be used in place of electricity generated by fossil fuel sources. Therefore, the proposed project would result in a less than significant impact. No impact would occur from electricity-related energy consumption from the proposed project.

It should be noted that, the proposed project would comply with all Federal, State, and County requirements related to the consumption of transportation energy and would provide a non-carbon

source of electricity to power electric vehicles in Imperial County. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant.

6.2.2 Compliance with State or Local Plans for Renewable Energy or Energy Efficiency

The purpose of the proposed project is to construct a renewable energy and storage facility in Imperial County. Once in operation, it will decrease the need for energy from fossil fuel–based power plants in the state. The result would be a net increase in electricity resources available to the regional grid, generated from a renewable source. The proposed project would help California meet its Renewable Portfolio Standard of 60 percent of retail electricity sales from renewable sources by the end of 2030 and 100 percent by 2045. Additionally, the project would also be consistent with the County's General Plan Conservation and Open Space Element, Objective 9.2 which encourages renewable energy developments. Therefore, the project would directly support state and local plans for renewable energy development. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, no impact would occur.

6.3 Mineral Resources

The project site is not used for mineral resource production and the applicant is not proposing any form of mineral extraction. According to Figure 8: Imperial County Existing Mineral Resources of the Conservation and Open Space Element of the General Plan (County of Imperial 2016), no known mineral resources occur within the project site nor does the project site contain mapped mineral resources. Therefore, the proposed project would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of California nor would the proposed project result in the loss of availability of a locally important mineral resource.

6.4 Population and Housing

Development of housing is not proposed as part of the project. Project construction would involve the use of temporary workforce, however, once operational, the project will only involve approximately 4 to 10 employees for O&M activities. Therefore, the proposed project would not result in a substantial growth in the area, as the number of employees required to operate and maintain the facility is minimal.

No housing exists within the project site and no people reside within the project site. Therefore, the proposed project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. The proposed project would result in no impact to population and housing.

6.5 Public Services

Schools. The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Construction of the proposed project would not result in an increase in student population within the Imperial County's School District since it is anticipated that construction workers would commute in during construction. The number of construction and operational workers coming to the region is low and is not expected to increase demand for schools or require the construction of new schools. The proposed project would have a less than significant impact on Imperial County schools.

PC ORIGINAL PKG

Parks and Other Public Facilities. The number of construction and operational workers coming to the region is low and is not expected to increase on existing or future parks. Therefore, substantial permanent increases in population that would adversely affect local parks, libraries, and other public facilities are not expected. The project is expected to have a less than significant impact on parks, libraries, and other public facilities.

6.6 Recreation

The project site is not used for formal recreational purposes. The project would be staffed with 4 to 10 full-time employees. As such, the project would not significantly increase the use or accelerate the deterioration of regional parks or other recreational facilities. The temporary increase of population during construction that might be caused by an influx of workers would be minimal and not cause a detectable increase in the use of parks. The workforce required to construct the project is anticipated to come from existing populations that live in or commute from the surrounding local community. Additionally, the project does not include or require the expansion of recreational facilities. Therefore, no impact is identified for recreation.

6.7 Utilities and Service Systems

Wastewater Facilities. The proposed project would generate a minimal volume of wastewater during construction. During construction activities, wastewater would be contained within portable toilet facilities and disposed of at an approved site. Operation of the proposed project would require a total of 4 to 10 on-site full-time employees and will include an O&M building. Wastewater generation would be minimal. The project's wastewater will be treated via on-site septic systems, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations, and standards. The proposed project would not exceed wastewater treatment requirements of the RWQCB and this is considered a less than significant impact.

Storm Water Facilities. The proposed project would involve the construction of drainage control facilities within the project site, and included in the project impact footprint, of which environmental impacts have been evaluated. Otherwise, the project would not require or result in the relocation or construction of storm drainage facilities off site (i.e., outside of the project footprint) because the proposed solar facility would not generate a significant increase in the amount of impervious surfaces that would increase runoff during storm events, and therefore, would not require the construction of off site storm water management facilities. Water from solar panel washing would continue to percolate through the ground, as a majority of the surfaces within the project site would remain pervious. The proposed project would not require or result in the relocation or construction of new or expanded storm water facilities beyond those proposed as part of the project and evaluated in the EIR. This is considered a less than significant impact.

Power, Natural Gas, and Telecommunication Facilities. The proposed project would involve construction of power facilities. However, these are components of the project as evaluated in the EIR. The proposed project would not otherwise generate the demand for or require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities that would in turn, result in a significant impact to the environment. Therefore, impacts would be less than significant.

Solid Waste Facilities. Solid waste generation would be minor for the construction and operation of the Project. Solid waste during construction would be disposed of using a locally licensed waste hauling service, most likely Allied Waste. Trash would likely be hauled to the Calexico Solid Waste

PC ORIGINAL PKG

Site (13-AA-0004) located approximately 13 miles southeast of the project site. The Calexico Solid Waste Site has approximately 1,561,235 cubic yards of remaining capacity is estimated to remain in operation through 2179 (CalRecycle 2024). Therefore, there is ample landfill capacity in the County to receive the minor amount of solid waste generated by construction and operation of the proposed Project.

Additionally, because the proposed project would generate solid waste during construction and operation, the project would be required to comply with state and local requirements for waste reduction and recycling; including the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991. Also, conditions of the CUPs would contain provisions for recycling and diversion of Imperial County construction waste policies.

Further, when the proposed project reaches the end of its operational life, the components would be decommissioned and deconstructed. When the project concludes operations, much of the wire, steel, and modules of which the system is comprised would be recycled to the extent feasible. The project components would be deconstructed and recycled or disposed of safely, and the site could be converted to other uses in accordance with applicable land use regulations in effect at the time of closure. Commercially reasonable efforts would be used to recycle or reuse materials from the decommissioning. All other materials would be disposed of at a licensed facility. A less than significant impact is identified for this issue.

6.8 Wildfire

According to the Draft Fire Hazard Severity Zone Map for Imperial County prepared by the California Department of Forestry and Fire Protection, the project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan; expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; exacerbate fire risk; or, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact is identified for wildfire.

PC ORIGINAL PKG

7 Alternatives

7.1 Introduction

The identification and analysis of alternatives is a fundamental concept under CEQA. This is evident in that the role of alternatives in an EIR is set forth clearly and forthrightly within the CEQA statutes. Specifically, CEQA §21002.1(a) states:

> *"The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."*

The CEQA Guidelines require an EIR to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines §15126.6(a)). The CEQA Guidelines direct that selection of alternatives focus on those alternatives capable of eliminating any significant environmental effects of the project or of reducing them to a less-than significant level, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. In cases where a project is not expected to result in significant impacts after implementation of recommended mitigation, review of project alternatives is still appropriate.

The range of alternatives required within an EIR is governed by the "rule of reason" which requires an EIR to include only those alternatives necessary to permit a reasoned choice. The discussion of alternatives need not be exhaustive. Furthermore, an EIR need not consider an alternative whose implementation is remote and speculative or whose effects cannot be reasonably ascertained.

Alternatives that were considered but were rejected as infeasible during the scoping process should be identified along with a reasonably detailed discussion of the reasons and facts supporting the conclusion that such alternatives were infeasible.

Based on the alternatives analysis, an environmentally superior alternative is designated among the alternatives. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives (CEQA Guidelines §15126.6(e)(2)).

7.2 Criteria for Alternatives Analysis

As stated above, pursuant to CEQA, one of the criteria for defining project alternatives is the potential to attain the project objectives. Established objectives of the project applicant for the proposed project include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.

- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- ~~Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.~~

7.3 Alternatives Considered but Rejected

7.3.1 Alternative Site

Section 15126.6(f)(2) of the CEQA Guidelines addresses alternative locations for a project. The key question and first step in the analysis is whether any of the significant effects of the proposed project would be avoided or substantially lessened by constructing the proposed project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR. Further, CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

The proponent does not have control of an alternate site; if control were viable, the proponent would have to re-initiate the application process as a new project. Similar to the proposed project site, an alternate site would require environmental review once the proponent has prepared sufficient project description information. At present, the proponent does not have control of an alternate site. This alternative would be the most complex, costly, and time-consuming alternative to implement. It is unknown if the environmental impacts associated with this alternative would be less than the proposed project because it would be speculative to evaluate an unsecured alternate site. This is primarily due

to the fact that the proponent does not have control of an alternate site. Therefore, an alternative site was eliminated from further consideration in this EIR.

7.4 Alternative 1: No Project/No Development Alternative

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e)(1), "the specific alternative of 'no project' shall also be evaluated along with its impact." Also, pursuant to Section 15126.6(e)(2); "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, … at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be further developed with a solar energy project. The No Project/No Development Alternative would not meet any of the project objectives.

7.4.1 Environmental Impact of Alternative 1: No Project/No Development Alternative

Aesthetics

Under the No Project/No Development Alternative, the project site would not be developed and would continue to be agricultural land. The No Project/No Development Alternative would not modify the existing project site or add construction to the project site; therefore, there would be no change to the existing condition of the site. Under this alternative, there would be no potential to create a new source of light or glare associated with the PV arrays. As discussed in greater detail in Section 3.2, Aesthetics, the proposed project would result in a less than significant impact associated with introduction of new sources of light and glare. Under this alternative, no impacts related to light, glare, and aesthetic impacts would occur.

Agricultural Resources

Under the No Project/No Development Alternative, the project site would not be developed and would continue to be utilized as agricultural land. Compared to the proposed project, implementation of this alternative would avoid the conversion of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland per the FMMP. Therefore, this alternative would not contribute to the conversion of agricultural lands or otherwise adversely affect agricultural operations and mitigation would not be required. Compared to the proposed project, this alternative would avoid the need for future restoration of the project site to pre-project conditions. This alternative would avoid any agricultural impacts associated with the proposed project.

Air Quality

Under the No Project/No Development Alternative, there would be no air emissions associated with project construction or operation, and no project- or cumulative-level air quality impact would occur. Therefore, no significant impacts to air quality or violation of air quality standards would occur under this alternative. Moreover, this alternative would be consistent with existing air quality attainment plans and would not result in the creation of objectionable odors.

As discussed in Section 3.4, Air Quality, the proposed project would exceed the ICAPCD's significance thresholds for emissions of PM_{10} during construction of the project. mitigate the potential impacts associated with construction-generated emissions with regard to PM_{10}, the project would adhere to the requirements of ICAPCD Regulation VIII for the control of fugitive dust (Mitigation Measure AQ-1). Furthermore, implementation of Mitigation Measure AQ-2 would ensure construction equipment will be equipped with an engine designation of EPA Tier 4 engine. Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

This alternative would not result in air quality emissions compared to the proposed project, the majority of which would occur during construction. The No Project/No Development Alternative would not reduce the long-term need for renewable electricity generation. As a consequence, while the No Project/No Development Alternative would not result in new impacts to air quality as a result of construction, it would likely not realize the overall benefits to regional air quality when compared to the operation of the proposed project. Compared to the proposed project, this alternative would avoid significant air quality impacts.

Biological Resources

Under the No Project/No Development Alternative, existing biological resource conditions within the project site would largely remain unchanged and no impacts would occur. Unlike the proposed project which requires mitigation for biological resources including burrowing owl and other migratory birds, this alternative would not result in construction of a solar facility that could otherwise result in significant impacts to these biological resources. Compared to the proposed project, this alternative would avoid impacts to biological resources.

Cultural Resources

The proposed project would involve ground-disturbing activities that have the potential to disturb previously undocumented cultural resources that could qualify as historical resources or unique archaeological resources pursuant to CEQA. Under the No Project/No Development Alternative, the project site would not be developed and no construction-related ground disturbance would occur. Therefore, compared to the proposed project, this alternative would avoid impacts to cultural resources.

Geology and Soils

Because there would be no development at the project site under the No Project/No Development Alternative, no grading or construction of new facilities would occur. Therefore, there would be no impact to project-related facilities as a result of local seismic hazards (strong ground shaking), soil erosion, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, corrosive soils, suitability of soils for supporting septic tanks, and paleontological resources. In contrast, the proposed project would require the incorporation of mitigation measures related to potential seismic hazards, soil erosion, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, corrosive soils, suitability of soils for supporting septic tanks, and paleontological resources to minimize impacts

PC ORIGINAL PKG

to a less than significant level. Compared to the proposed project, this alternative would avoid significant impacts related to local geology and soil conditions and paleontological resources.

Greenhouse Gas Emissions

Under the No Project/No Development Alternative, there would be no GHG emissions resulting from project construction or operation or corresponding impact to global climate change. The No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of SB 32. While this alternative would not further implement policies (e.g., SB X1-2) for GHG reductions, this alternative would also not directly conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This alternative would not create any new GHG emissions during construction but would not lead to a long-term beneficial impact to global climate change by providing renewable clean energy. For the proposed project, a less than significant impact was identified for construction-related GHG emissions, and in the long-term, the project would result in an overall beneficial impact to global climate change as the result of creation of clean renewable energy, that does not generate GHG emissions. Compared to the proposed project, while the No Project/No Development Alternative would not result in new GHG emissions during construction, it would be less beneficial to global climate change as compared to the proposed project. Further, the construction emissions (amortized over 30 years) associated with the project would be off-set by the beneficial renewable energy provided by the project, negating any potential that the No Project/No Development alternative would reduce construction-related GHG emissions.

Hazards and Hazardous Materials

The No Project/No Development Alternative would not include any new construction. Therefore, no potential exposure to hazardous materials would occur. Therefore, no impact is identified for this alternative for hazards and hazardous materials.

Hydrology/Water Quality

The No Project/No Development Alternative would not result in modifications to the existing drainage patterns or volume of storm water runoff as attributable to the proposed project, as the existing site conditions and on-site pervious surfaces would remain unchanged. In addition, no changes with regard to water quality would occur under this alternative. Therefore, compared to the proposed project, this alternative would avoid impacts to hydrology and water quality.

Land Use/Planning

As discussed in Section 3.11, Land Use/Planning, the proposed project would not physically divide an established community or conflict with applicable plans, policies, or regulations. Under the No Project/No Development Alternative, the project site would not be developed and continue to be utilized as agricultural land. Current land uses would remain the same. No General Plan Amendment, Zone Change, or CUPs would be required under this alternative. Under this alternative, no existing community would be divided, and no inconsistencies with planning policies would occur. No land use impacts would occur.

PC ORIGINAL PKG

Noise and Vibration

This alternative would not require construction or operation of the project; therefore, this alternative does not have the potential to temporarily increase ambient noise levels within the vicinity of the project site and affect sensitive receptors. As discussed in Section 3.12, Noise and Vibration, the proposed project would not result in significant noise impacts on sensitive receptors during construction and operation. Compared to the proposed project, this alternative would not generate noise and would not result in any noise or vibration impacts.

Public Services

The No Project/No Development Alternative would not increase the need for public services which would otherwise be required for the proposed project (additional police or fire protection services). Therefore, no impact to public services is identified for this alternative.

Transportation

There would be no new development under the No Project/No Development Alternative. Compared to the proposed project, this alternative would not generate vehicular trips during construction or operation. For these reasons, no impact would occur and this alternative would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities.

Tribal Cultural Resources

The proposed project would involve ground-disturbing activities that have the potential to disturb previously undocumented tribal cultural resources. Under the No Project/No Development Alternative, the project site would not be developed, and no construction-related ground disturbance would occur. Therefore, compared to the proposed project, this alternative would avoid potential impacts to tribal cultural resources.

Utilities and Service Systems

Compared to the proposed project, the No Project/No Development Alternative would not require the expansion or extension of existing utilities, since there would be no new project facilities that would require utility service. No solid waste would be generated under this alternative. Therefore, this alternative would result in no impacts to existing utilities or solid waste facilities.

Conclusion

Implementation of the No Project/No Development Alternative would generally result in reduced impacts for a majority of the environmental issues areas considered in Chapter 3, Environmental Analysis when compared to the proposed project. A majority of these reductions are realized in terms of significant impacts that are identified as a result of project construction. However, this alternative would not realize the benefits of reduced GHG emissions associated with energy use, which are desirable benefits that are directly attributable to the proposed project.

PC ORIGINAL PKG

Comparison of the No Project/No Development Alternative to Project Objectives

The No Project/No Development Alternative would not meet any of the objectives of the project. Additionally, the No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of SB 32 (California Global Warming Solutions Act of 2006).

PC ORIGINAL PKG

7.5 Alternative 2: Reduced Project Site

The purpose of this alternative is to reduce impacts on Prime Farmland within the project site. As discussed in Section 3.3, Agricultural Resources, implementation of the project would result in the temporary conversion of 973.24 acres of Prime Farmland to non-agricultural uses. A majority of the Prime Farmland occurs within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would reduce the overall size of the solar facility by avoiding the Prime Farmland occurring within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would avoid developing parcels that contain large areas of Prime Farmland. (NOTE: this alternative would not avoid several pockets of Prime Farmland as shown in Figure 7-1, as these represent small, isolated pockets of land, which would likely not remain economically viable or practically feasible to farm as they would be surrounded by solar uses). Therefore, the project site would be reduced by approximately 788 acres from a total of 1,849 acres to 1,061 acres.

Aesthetics

Under Alternative 2, the overall size of the solar energy facility would be reduced. No significant visual aesthetic impact has been identified as the proposed project's facilities would not impact scenic resources, result in the substantial degradation of the existing visual character of the project site, or add a substantial amount of light and glare. As such, this alternative would not avoid or reduce any significant impacts identified for the project and the aesthetic impact would be similar to the proposed project.

Agricultural Resources

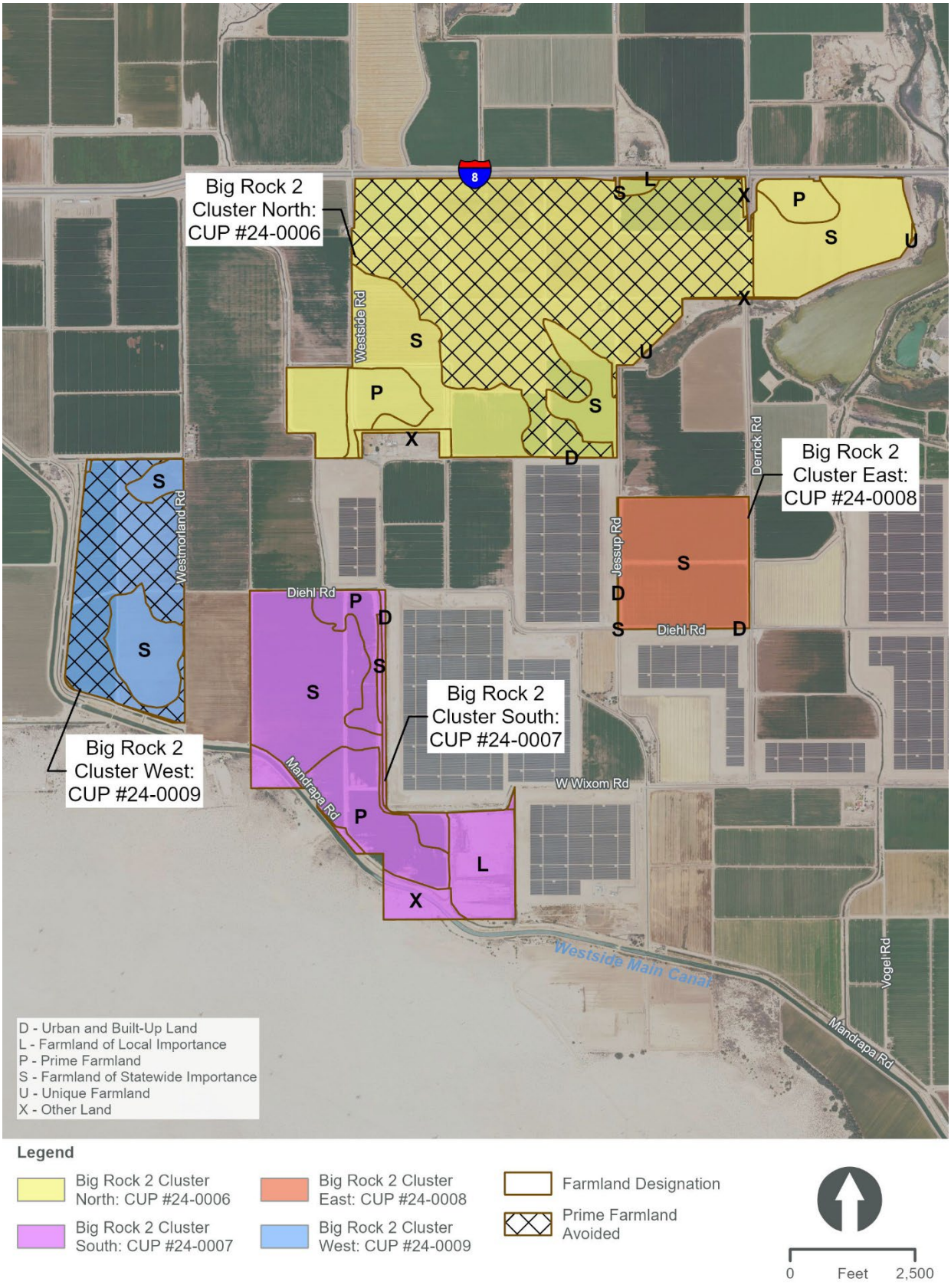
Under Alternative 2, the conversion of approximately 788 acres of Prime Farmland to non-agricultural uses would be avoided within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. However, the proposed project would still result in the conversion of pockets of Prime Farmland within the overall project site, as well as Farmland of Statewide Importance and Unique Farmland, and would still require mitigation for the temporary conversion of Important Farmland to non-agricultural uses to reduce significant impacts to a level less than significant. Impacts associated with contributing to the conversion of other agricultural lands or otherwise affecting agricultural operations would still occur, but would be less than would occur under the proposed project. Compared to the proposed project, this alternative would result in less of an impact on agricultural resources as compared to the proposed project.

Air Quality

Under Alternative 2, air emissions during construction would be less than the proposed project because of the reduced site development. A less than significant impact with mitigation incorporated has been identified for the proposed projects during construction. Similar to the proposed project, this alternative would be required to comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Similar to the proposed project, this alternative would be consistent with existing AQMPs and would not result in the creation of objectionable odors. This alternative would provide less MW generation compared to the proposed project, thereby reducing its ability to provide a long-term source of renewable energy. Compared to the proposed project, while this alternative would result in less air quality impacts, it would likely provide fewer desirable benefits to overall regional air quality as attributable to the proposed project. Compared to the proposed project, this alternative would result in less air quality impacts.

PC ORIGINAL PKG

Figure 7-1. Alternative 2 – Reduced Project Site



PC ORIGINAL PKG

Biological Resources

Under Alternative 2, the overall size of the solar energy facility would be reduced. Although the overall size of the solar energy facility would be reduced, there is still potential for impacts on special-status species. Compared to the proposed project, this alternative would result in a reduction in impacts on biological resources, but would still require mitigation.

Cultural Resources

Although the overall size of the solar energy facility would be reduced, this alternative would still require ground-disturbing activities, which has the potential to disturb undocumented cultural resources that could qualify as historical resources or unique archaeological resources pursuant to CEQA, and human remains. Compared to the proposed project, this alternative would result in a reduction in impacts on cultural resources because of the reduced site development, but would still require mitigation related to monitoring for inadvertent discovery.

Geology and Soils

Under Alternative 2, while the overall project footprint would be reduced, grading and construction of new facilities would still occur. Similar to the proposed project, this alternative would also be subject to potential impacts related to local seismic hazards (strong ground shaking), soil erosion, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, corrosive soils, suitability of soils for supporting septic tanks, and paleontological resources, and incorporation of mitigation measures would be required to minimize these impacts to a less than significant level. This alternative would result in similar geology and soil and paleontological resources impacts as the proposed project.

Greenhouse Gas Emissions

Under Alternative 2, the overall project footprint would be reduced, thereby contributing to reductions in GHG emissions during project construction. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced. This alternative would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Similar to the proposed project, this alternative would not exceed SCAQMD's screening threshold of 10,000 metric tons of CO_2e per year. This alternative would contribute to similar and desirable reductions in GHG emissions and associated contribution to global climate change through the production of renewable energy, although to a lesser degree. This alternative would have a similar impact as the proposed project.

Hazards and Hazardous Materials

Similar to the proposed project, construction of this alternative would involve the limited use of hazardous materials, such as fuels and greases to fuel and service construction equipment. Similar to the proposed project, no impact associated with potential safety hazards to the public residing or working within proximity to a public airport would occur. Implementation of this alternative would result in a similar hazards and hazardous materials impact as the proposed project.

PC ORIGINAL PKG

Hydrology/Water Quality

Alternative 2 would result in modifications to the existing drainage patterns and the volume of storm water runoff, as this alternative would introduce impervious area on-site, although to a lesser degree than the proposed project. Because the overall project footprint would be reduced, this alternative would realize a minor reduction in the corresponding impacts on hydrology and on-site drainage; however, the same mitigation measures would be applicable to this alternative. Compared to the proposed project, this alternative would result in less of an impact on hydrology/water quality.

Land Use Planning

Implementation of this alternative would not avoid or reduce a land use and planning impact, as no significant impact associated with the project has been identified. As with the proposed project, this alternative would be consistent with the County Land Use Ordinance, Division 17, RE Overlay Zone, which authorizes the development and operation of RE projects with approved CUPs. Implementation of this alternative would be similar to the proposed project with respect to land use and planning.

Noise

As with the proposed project, Alternative 2 would not result in significant noise impacts associated with construction activities. As with the proposed project, operational impacts associated with this alternative would not expose persons or generate noise levels in excess of applicable noise standards, exposure persons to, or generate excessive groundborne vibration, or expose persons to excessive aircraft noise. This alternative would have similar noise impacts as the proposed project.

Public Services

Alternative 2 would require increased public services, specifically law enforcement and fire protection services. While the solar facility would be slightly smaller, the impacts of this alternative to public services and associated service ratios would be similar. Like the proposed project, this alternative would be conditioned to provide law enforcement and fire service development impact fees. Therefore, this alternative would result in a similar impact related to public services as the proposed project.

Transportation

This alternative would result in a similar level of construction and operation-related vehicle and truck trips as compared to the proposed project. However, the increase in vehicular traffic was identified as a less than significant impact for the proposed project. In this context, Alternative 2 would not reduce or avoid an impact related to transportation and would result in less than significant impacts similar to the proposed project. As with the proposed project, Alternative 2 would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities. This alternative would result in a similar impact related to transportation as the proposed project.

Tribal Cultural Resources

Although the overall size of the solar energy facility would be reduced, this alternative would still require ground-disturbing activities, which has the potential to disturb undocumented tribal cultural resources. Compared to the proposed project, this alternative would result in a reduction in impacts on tribal cultural resources because of the reduced site development, but would still require mitigation.

Utilities and Service Systems

Implementation of this alternative would result in an overall less demand for utilities, including water. However, this alternative would not avoid or reduce a significant impact associated with the project as a less than significant impact to utilities has been identified associated with the project. Implementation of this alternative would not achieve to the same degree the beneficial impacts of providing renewable energy. As compared to the proposed project, the overall demand for utilities would be less under this alternative.

Conclusion

As shown on Table 7-1, this alternative would reduce impacts to agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

Comparison of Alternative 2: Reduced Project Site

Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced.

7.6 Environmentally Superior Alternative

Table 7-1 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As noted on Table 7-1, the No Project/No Development Alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” As shown on Table 7-1, Alternative 2 would be the environmental superior alternative because it would reduce impacts for the following environmental issue areas as compared to the proposed project: agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

PC ORIGINAL PKG

Table 7-1. Comparison of Alternative Impacts to Proposed Project

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Aesthetics	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Agricultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Air Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Biological Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Geology and Soils	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Similar Impact
GHG Emissions	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hazards and Hazardous Materials	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hydrology/ Water Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Land Use/Planning	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Noise and Vibration	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Public Services	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Transportation	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Tribal Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Utilities/Service Systems	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

8 References

California Air Pollution Control Officers Association. 2021. Health Effects. Available on-line at: http://www.capcoa.org/health-effects/. Accessed on December 5, 2024.

California Air Resources Board (CARB). 2017. Climate Change Scoping Plan. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed on December 9, 2024.

——— 2024a. Ambient Air Quality Standards Designation Tool. Available on-line at: https://ww2.arb.ca.gov/capp/cst/tch/ambient-air-quality-standards-designation-tool. Accessed on December 10, 2024.

——— 2024b. Table of Ambient Air Quality Standards. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed on December 10, 2024.

——— 2024c. EMFAC2017 Web Database Emissions Inventory. Available on-line at: http://www.arb.ca.gov/emfac/2017. Accessed on December 20, 2024.

California Department of Conservation (DOC). 2016. Imperial County Williamson Act FY 2016/2017. Available on-line at: https://www.icpds.com/assets/California-Department-of-Conservation-2016-1642792259.pdf. Accessed on December 18, 2024.

——— 2020. Alternate Imperial County 2018-2020 Land Use Conversation Table A-10. Available on-line at: Alternate Imperial County 2018-2020 Land Use Conversion. Accessed on December 30, 2024.

——— 2022. California Important Farmland Finder. Available on-line at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed on December 18, 2024.

——— 2024. California Williamson Act Enrollment Finder. Available on-line at: https://gis.conservation.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312. Accessed December 26, 2024.

California Department of Education. 2017. "California School Directory: Westside Elementary." Available on-line at: https://www.cde.ca.gov/SchoolDirectory/details?cdscode=13631646008577. Accessed on December 16, 2024.

California Department of Fish and Game (CDFG). 2012. *Staff Report on Burrowing Owl Mitigation.* Available on-line at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true. Accessed on October 17, 2024.

California Department of Forestry and Fire Protection. 2023. Fire Hazard Severity Zones in SRA – Imperial County. Available on-line at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed on December 4, 2024.

California Department of Transportation (Caltrans). 1998. Technical Noise Supplement.

——— 2013. Transportation and Construction Vibration Guidance Manual. Available on-line at: https://www.placer.ca.gov/DocumentCenter/View/8273/Caltrans-2013-Transportation-and-Construction-Vibration-Guidance-Manual-PDF. Accessed on December 13, 2024.

California Department of Water Resources (DWR). 2021. Groundwater Sustainability Agency Map Viewer: Imperial Valley Groundwater Basin. Available on-line at:

PC ORIGINAL PKG

https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true. Accessed on October 22, 2024.

California Energy Commission (CEC). 2024a. California Energy Consumption Database. http://www.ecdms.energy.ca.gov/Default.aspx. Accessed December 19, 2024.

——— 2024b. 2023 California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division – September 19, 2024. Available on-line at: https://www.energy.ca.gov/media/3874. Accessed on December 20, 2024.

CalRecycle. 2024. SWIS Facility/Site Activity Details – Calexico Solid Waste Site (13-AA-0004). Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4179?siteID=591. Accessed on December 20, 2024.

California Natural Resources Agency. 2018. A Summary of Key Findings from California's Fourth Climate Change Assessment. Available on-line at: https://www.energy.ca.gov/sites/default/files/2019-11/20180827_Summary_Brochure_ADA.pdf. Accessed on December 9, 2024.

California Regional Water Quality Control Board (RWQCB). 2019. Water Quality Control Plan for the Colorado River Basin Region. Available on-line at: https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/docs/2020/rb7bp_e2019.pdf. Accessed on December 10, 2024.

——— 2021. 2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) — Statewide. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CAR725000002000012709505 7. Accessed on October 22, 2024.

——— 2022. Impaired Water Bodies. Available on-line at https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CAR725000002000012709505 7. Accessed December 19, 2024.

California State Water Resources Control Board (SWRCB). 2021. California Basin Plan Beneficial Use Viewer. Available on-line at: https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=116f7daa9c4d4103afda1257be82eb16. Accessed on October 29, 2024.

City of El Centro. General Plan Update Transportation Impact Study. 2021. Available on-line at: https://cityofelcentro.org/communitydevelopment/wp-content/uploads/sites/14/2022/05/Appendix-H.1-Transportation-Impact-Study.pdf. Accessed on December 2, 2024.

County of Imperial. 1996. Airport Land Use Compatibility Plan, Imperial County Airports. Available on-line at: https://www.icpds.com/hearings/airport-land-use-commission.

——— 2022. Seismic and Public Safety Element. Available on-line at: https://www.icpds.com/assets/GPA21-0004-Seismic-and-Public-Safety-Element-11-22-2022.pdf

——— 1997 Water Element. Available on-line at: https://www.icpds.com/assets/planning/water-element.pdf.

——— 2008. Circulation and Scenic Highways Element. Available on-line at: https://www.icpds.com/assets/planning/circulation-scenic-highway-element-2008.pdf.

——— 2015a. Agricultural Element. Available on-line at: https://www.icpds.com/assets/planning/agricultural-element-2015.pdf.

PC ORIGINAL PKG

——— 2015b. Renewable Energy and Transmission Element. Available on-line at: https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf.

——— 2015c. Noise Element. Available on-line at: https://www.icpds.com/assets/planning/noise-element-2015.pdf.

——— 2016. Conservation and Open Space Element. Available on-line at: https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf.

——— 2023. Land Use Ordinance. Title 9. Division 5: Zoning Areas Established. Amended November 21, 2023. Available on-line at: https://www.icpds.com/assets/5-Zoning-Areas-Established-.pdf.

——— 2022. Title 9, Division 7: Noise Abatement and Control. Available on-line at: https://www.icpds.com/assets/planning/ordinances/title-9-div-7-2015.pdf.

Federal Emergency Management Agency (FEMA). 2008. FEMA Flood Map Service Center: Imperial County Unincorporated Areas [map]. Available on-line at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed on October 22, 2024

Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model User's Guide. Available on-line at: https://planning.lacity.gov/eir/8150Sunset/References/4.G.%20Noise/N.07_FHWA%20User%20Guide_2006.pdf. Accessed on December 16, 2024.

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. Available on-line at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf . Accessed on December 16, 2024.

Groundwater Exchange. 2021. Available on-line at: https://groundwaterexchange.org/basin/imperial-valley-7-030/. Accessed on October 22, 2024.

Imperial County Agricultural Commissioner. 2023. 2023 Imperial County Agricultural Crop & Livestock Report. Available on-line at: https://agcom.imperialcounty.org/wp-content/uploads/2024/10/2023-CR-design-10.08.pdf. Accessed December 26, 2024.

Imperial County Air Pollution Control District (ICAPCD). 2009. Final 2009 Imperial County State Implementation Plan for Particulate Matter Less than 10 Microns in Aerodynamic Diameter. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/08/Final-IC-2009-PM10-SIP-document.pdf. Accessed on October 24, 2024.

——— 2014. Final 2013 State Implementation Plan for the 2006 24-Hour PM2.5 Moderate Nonattainment Area. Available on-line at: https://ww2.arb.ca.gov/resources/documents/2013-state-implementation-plan-2006-24-hour-pm25-moderate-nonattainment-area. Accessed December 5, 2024.

——— 2017a. 2017 Imperial County Plan for 2008 8-hour Ozone Standard. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/OzoneSIP.pdf. Accessed on December 6, 2024.

——— 2017b. CEQA Air Quality Handbook. 2017. Guidelines for the Implementation of the California Environmental Quality Act of 1970. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/CEQAHandbk.pdf. Accessed on October 24, 2024.

PC ORIGINAL PKG

——— 2018a. 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less than 10 Microns in Diameter. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/2018PM10PlanBoardPacket.pdf. Accessed on October 17, 2024.

——— 2018b. 2018 Annual Particulate Matter Less than 2.5 Microns in Diameter State Implementation Plan. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/2018-IC-PM25SIP.pdf. Accessed on October 17, 2024.

Imperial County Fire Department (ICFD). 2019. Fire Department and Office of Emergency Services. Available on-line at: https://firedept.imperialcounty.org/. Accessed on December 5, 2024.

Imperial Irrigation District 2012. Imperial Integrated Regional Water Management Plan. Available on-line at: https://www.iid.com/water/water-supply/water-plans/imperial-integrated-regional-water-management-plan

National Highway Traffic Safety Administration (NHTSA). 2021. *USDOT Proposes Improved Fuel Economy Standards for MY 2024-2026 Passenger Cars and Light Trucks.* Available on-line at: https://www.nhtsa.gov/press-releases/fuel-economy-standards-2024-2026-proposal. Accessed on December 17, 2024.

——— 2022. *USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026.* Available on-line at: https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026. Accessed on December 18, 2024.

Southern California Association of Governments (SCAG). 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal). Available on-line at: https://scag.ca.gov/connect-socal. Accessed on December 11, 2024.

State of California Employment Development Department. 2025. Immediate Release, El Centro Metropolitan Statistical Area (MSA) (Imperial County). Available on-line at: https://labormarketinfo.edd.ca.gov/geography/msa/imperial.html. Accessed on March 27, 2024.

United States Department of Transportation (DOT). 2020. Lithium Battery Guide for Shippers. Available on-line at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2023-07/Lithium%20Battery%20Guide.pdf. Accessed on December 16, 2024.

PC ORIGINAL PKG

9 EIR Preparers and Persons and Organizations Contacted

9.1 EIR Preparers

This EIR was prepared for the County of Imperial by HDR at 591 Camino de la Reina, Suite 300, San Diego, CA 92108. The following professionals participated in its preparation:

County of Imperial

Jim Minnick, Planning & Development Services Director

Michael Abraham, AICP, Assistant Planning & Development Services Director

Diana Robinson, Planning Division Manager

Rocio Yee, Planner II

HDR

Tim Gnibus, Principal

Sharyn Hidalgo, Project Manager

Regan Del Rosario, Environmental Planner

Steven Yu, Environmental Planner

Gary Goldman, Geotechnical Section Manager

Victoria Hsu, Senior Air Quality Specialist

Anitra Rice, Senior Air Quality Specialist

Hong Spores, Senior Hydrogeologist

Sharon Jacob, Geographic Information Systems Analyst

Trent Lundberg, Geographic Information Systems Analyst

Katherine Turner, Document Production Administrator

HDR was assisted by the following consultants:

Dudek (Biological Technical Report, Cultural Resources Inventory Report, Transportation Impact Analysis, Visual Resources Report, Water Supply Assessment)

605 Third Street

Encinitas, CA 92024

HDR (Air Quality and Greenhouse Gas Emissions Technical Report, Land Evaluation and Site Assessment, Phase I ESA, and Preliminary Geological and Geotechnical Assessment Report)

591 Camino de la Reina, Suite 300

San Diego, CA 92108

9.2 Persons and Organizations Contacted

The following persons and organizations were contacted in preparation of this document:

- Imperial Irrigation District

PC ORIGINAL PKG

Draft Environmental Impact Report

Big Rock 2 Cluster Solar and Storage Project

SCH No. 2024090063

Imperial County, California

April 2025

Prepared for

County of Imperial

801 Main Street

El Centro, CA 92243

Prepared by

HDR

591 Camino de la Reina

Suite 300

San Diego, CA 92108

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Table of Contents

Executive Summary ES-1
Project Overview ES-1
Purpose of an EIR ES-2
Eliminated from Further Review in Notice of Preparation ES-2
Summary of Significant Impacts and Mitigation Measures that Reduce or Avoid the Significant Impacts ES-2
Areas of Controversy and Issues to be Resolved ES-3
Project Alternatives ES-35
Environmentally Superior Alternative ES-36

1 Introduction 1-1
1.1 Overview of the Proposed Project 1-1
1.1.1 Agency Roles and Responsibilities 1-1
1.2 Relationship to Statutes, Regulations, and Other Plans 1-6
1.2.1 County of Imperial General Plan and Land Use Ordinance 1-6
1.2.2 Renewables Portfolio Standard Program 1-6
1.2.3 Senate Bill 32 1-6
1.2.4 Title 17 California Code of Regulations, Subchapter 10, Article 2, Sections 95100 et seq. 1-7
1.2.5 Federal Clean Air Act 1-7
1.2.6 Imperial County Air Pollution Control District 1-7
1.2.7 Federal Clean Water Act (33 United States Code Section 1251-1387) 1-7
1.2.8 Federal Clean Water Act and California Porter-Cologne Water Quality Control Act 1-8
1.2.9 Federal Endangered Species Act 1-8
1.2.10 National Historic Preservation Act 1-8
1.2.11 California Endangered Species Act 1-8
1.2.12 California Lake and Streambed Program (Fish and Game Code Section 1602) 1-9
1.3 Purpose of an EIR 1-9
1.4 EIR Process 1-9
1.4.1 Availability of Reports 1-9
1.4.2 Public Participation Opportunities/Comments and Coordination 1-9
1.4.3 Environmental Topics Addressed 1-10
1.4.4 Areas of Controversy and Issues to be Resolved 1-11
1.4.5 Document Organization 1-11

2 Project Description 2-1
2.1 Project Location 2-1
2.1.1 Big Rock 2 Cluster North: CUP #24-0006 2-3
2.1.2 Big Rock 2 Cluster South: CUP #24-0007 2-4
2.1.3 Big Rock 2 Cluster East/Laurel Cluster South: CUP #24-0008 2-4
2.1.4 Big Rock 2 Cluster West: CUP #24-0009 2-4
2.2 Project Objectives 2-13
2.3 Project Characteristics 2-14
2.3.1 Photovoltaic Panels/Solar Arrays 2-14
2.3.2 Collection, Inverter and Transformer Systems 2.3-21
2.3.3 Battery Energy Storage System 2.3-23
2.3.4 Substation(s) 2.3-23
2.3.5 Transmission Line and Interconnection 2-31
2.3.6 Operations and Maintenance (O&M) Building 2-33

PC ORIGINAL PKG

2.3.7 Roadway and IID Crossings 2-35
2.3.8 Water Usage 2-35
2.3.9 Water Storage 2-35
2.3.10 Site Security and Fencing 2-35
2.3.11 Lighting 2-36
2.3.12 Site Access 2-36
2.3.13 Fire Protection/Fire Safety Systems 2-36
2.4 Project Construction 2-37
2.4.1 Laydown Areas 2-38
2.4.2 Workforce 2-38
2.5 Project Operation 2-38
2.5.1 Workforce 2-38
2.6 Utility Grid Upgrades 2-39
2.7 Decommissioning and Reclamation 2-39
2.8 Required Project Approvals 2-40
2.8.1 Imperial County 2-40
2.8.2 Imperial Irrigation District 2-44
2.8.3 Discretionary Actions and Approvals by Other Agencies 2-44
3 Environmental Analysis, Impacts, and Mitigation 3.1-1
3.1 Introduction to Environmental Analysis 3.1-1
3.1.1 Organization of Issue Areas 3.1-1
3.1.2 Format of the Impact Analysis 3.1-1
3.2 Aesthetics 3.2-1
3.2.1 Existing Conditions 3.2-1
3.2.2 Regulatory Setting 3.2-11
3.2.3 Impacts and Mitigation Measures 3.2-13
3.2.4 Decommissioning/Restoration and Residual Impacts 3.2-28
3.3 Agricultural Resources 3.3-1
3.3.1 Existing Conditions 3.3-1
3.3.2 Regulatory Setting 3.3-3
3.3.3 Impacts and Mitigation Measures 3.3-8
3.3.4 Decommissioning/Restoration and Residual Impacts 3.3-16
3.4 Air Quality 3.4-1
3.4.1 Existing Conditions 3.4-1
3.4.2 Regulatory Setting 3.4-5
3.4.3 Impacts and Mitigation Measures 3.4-13
3.4.4 Decommissioning/Restoration and Residual Impacts 3.4-27
3.5 Biological Resources 3.5-1
3.5.1 Existing Conditions 3.5-1
3.5.2 Regulatory Setting 3.5-10
3.5.3 Impacts and Mitigation Measures 3.5-13
3.5.4 Decommissioning/Restoration and Residual Impacts 3.5-24
3.6 Cultural Resources 3.6-1
3.6.1 Existing Conditions 3.6-1
3.6.2 Regulatory Setting 3.6-7
3.6.3 Impacts and Mitigation Measures 3.6-11
3.6.4 Decommissioning/Restoration and Residual Impacts 3.6-15
3.7 Geology and Soils 3.7-1
3.7.1 Existing Conditions 3.7-1
3.7.2 Regulatory Setting 3.7-6
3.7.3 Impacts and Mitigation Measures 3.7-8

PC ORIGINAL PKG

3.7.4 Decommissioning/Restoration and Residual Impacts 3.7-17
3.8 Greenhouse Gas Emissions 3.8-1
3.8.1 Existing Conditions 3.8-1
3.8.2 Regulatory Setting 3.8-4
3.8.3 Impacts and Mitigation Measures 3.8-11
3.8.4 Decommissioning/Restoration and Residual Impacts 3.8-15
3.9 Hazards and Hazardous Materials 3.9-1
3.9.1 Existing Conditions 3.9-1
3.9.2 Regulatory Setting 3.9-4
3.9.3 Impacts and Mitigation Measures 3.9-8
3.9.4 Decommissioning/Restoration and Residual Impacts 3.9-14
3.10 Hydrology/Water Quality 3.10-1
3.10.1 Existing Conditions 3.10-1
3.10.2 Regulatory Setting 3.10-7
3.10.3 Impacts and Mitigation Measures 3.10-14
3.10.4 Decommissioning/Restoration and Residual Impacts 3.10-23
3.11 Land Use/Planning 3.11-1
3.11.1 Existing Conditions 3.11-1
3.11.2 Regulatory Setting 3.11-9
3.11.3 Impacts and Mitigation Measures 3.11-18
3.11.4 Decommissioning/Restoration and Residual Impacts 3.11-23
3.12 Noise and Vibration 3.12-1
3.12.1 Existing Conditions 3.12-1
3.12.2 Regulatory Setting 3.12-5
3.12.3 Impacts and Mitigation Measures 3.12-11
3.12.4 Decommissioning/Restoration and Residual Impacts 3.12-16
3.13 Public Services 3.13-1
3.13.1 Existing Conditions 3.13-1
3.13.2 Regulatory Setting 3.13-2
3.13.3 Impacts and Mitigation Measures 3.13-4
3.13.4 Decommissioning/Restoration and Residual Impacts 3.13-6
3.14 Transportation 3.14-1
3.14.1 Existing Conditions 3.14-2
3.14.2 Regulatory Setting 3.14-5
3.14.3 Impacts and Mitigation Measures 3.14-6
3.14.4 Decommissioning/Restoration and Residual Impacts 3.14-12
3.15 Tribal Cultural Resources 3.15-1
3.15.1 Existing Conditions 3.15-1
3.15.2 Regulatory Setting 3.15-1
3.15.3 Impacts and Mitigation Measures 3.15-3
3.15.4 Decommissioning/Restoration and Residual Impacts 3.15-5
3.16 Utilities and Service Systems 3.16-1
3.16.1 Existing Conditions 3.16-1
3.16.2 Regulatory Setting 3.16-2
3.16.3 Impacts and Mitigation Measures 3.16-5
3.16.4 Decommissioning/Restoration and Residual Impacts 3.16-7
4 Analysis of Long-Term Effects 4-1
4.1 Growth-Inducing Impacts 4-1
4.2 Significant Irreversible Environmental Changes 4-2
4.3 Significant and Unmitigable Impacts 4-3

PC ORIGINAL PKG

5 Cumulative Impacts 5-1
5.1 Geographic Scope and Timeframe of the Cumulative Effects Analysis 5-2
5.2 Projects Contributing to Potential Cumulative Impacts 5-2
5.3 Cumulative Impact Analysis 5-2
5.3.1 Aesthetics 5-7
5.3.2 Agricultural Resources 5-7
5.3.3 Air Quality 5-9
5.3.4 Biological Resources 5-11
5.3.5 Cultural Resources 5-13
5.3.6 Geology and Soils 5-13
5.3.7 Greenhouse Gas Emissions 5-14
5.3.8 Hazards and Hazardous Materials 5-14
5.3.9 Hydrology and Water Quality 5-15
5.3.10 Land Use Planning 5-15
5.3.11 Noise and Vibration 5-16
5.3.12 Public Services 5-17
5.3.13 Transportation 5-17
5.3.14 Tribal Cultural Resources 5-17
5.3.15 Utilities/Service Systems 5-18
6 Effects Found Not Significant 6-1
6.1 Agriculture and Forestry Resources 6-1
6.1.1 Forestry Resources 6-1
6.2 Energy 6-1
6.2.1 Energy Consumption 6-1
6.2.2 Compliance with State or Local Plans for Renewable Energy or Energy Efficiency 6-4
6.3 Mineral Resources 6-4
6.4 Population and Housing 6-4
6.5 Public Services 6-4
6.6 Recreation 6-5
6.7 Utilities and Service Systems 6-5
6.8 Wildfire 6-6
7 Alternatives 7-1
7.1 Introduction 7-1
7.2 Criteria for Alternatives Analysis 7-1
7.3 Alternatives Considered but Rejected 7-2
7.3.1 Alternative Site 7-2
7.4 Alternative 1: No Project/No Development Alternative 7-3
7.4.1 Environmental Impact of Alternative 1: No Project/No Development Alternative 7-3
7.5 Alternative 2: Reduced Project Site 7-8
7.6 Environmentally Superior Alternative 7-12
8 References 8-1
9 EIR Preparers and Persons and Organizations Contacted 9-1
9.1 EIR Preparers 9-1
9.2 Persons and Organizations Contacted 9-2

PC ORIGINAL PKG

Tables

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures ES-5
Table ES-2. Comparison of Alternative Impacts to Proposed Project ES-37
Table 1-1. Big Rock 2 Cluster North Existing and Proposed Zoning 1-2
Table 1-2. Big Rock 2 Cluster Existing and Proposed Zoning 1-3
Table 1-3. Big Rock 2 Cluster East Existing and Proposed Zoning 1-3
Table 1-4. Big Rock 2 Cluster West Existing and Proposed Zoning 1-3
Table 2-1. Big Rock 2 Cluster North Assessor Parcel Numbers, Zoning, and Acreage 2-3
Table 2-2. Big Rock 2 Cluster South Assessor Parcel Numbers, Zoning, and Acreage 2-4
Table 2-3. Big Rock 2 Cluster East/Laurel Cluster South Assessor Parcel Numbers, Zoning, and Acreage 2-4
Table 2-4. Big Rock 2 Cluster West Assessor Parcel Numbers, Zoning, and Acreage 2-5
Table 2-5. Proposed Megawatt Output 2-14
Table 2-6. Big Rock 2 Cluster North Existing and Proposed Zoning 2-40
Table 2-7. Big Rock Cluster South Existing and Proposed Zoning 2-41
Table 2-8. Big Rock 2 Cluster East/Laurel Cluster South Existing and Proposed Zoning 2-41
Table 2-9. Big Rock 2 Cluster West Existing and Proposed Zoning 2-42
Table 3.2-1. Consistency with Applicable General Plan Conservation and Open Space Element Policies 3.2-13
Table 3.3-1. Farmland Mapping and Monitoring Program Designations within the Project Site 3.3-3
Table 3.3-2. Imperial County Change in Agricultural Land Use Summary (2016 to 2018) 3.3-5
Table 3.3-3. Project Consistency with Applicable General Plan Agricultural Policies 3.3-7
Table 3.3-4. California LESA Model Scoring Thresholds 3.3-10
Table 3.3-5. Final Land Evaluation Site Assessment Score Sheet Summary 3.3-10
Table 3.4-1. Criteria Air Pollutants - Summary of Common Sources and Effects 3.4-2
Table 3.4-2. Attainment Status of Criteria Pollutants in the Imperial County Portion of the Salton Sea Air Basin 3.4-3
Table 3.4-3. Ambient Air Quality Monitoring Data 3.4-4
Table 3.4-4. National and California Ambient Air Quality Standards 3.4-7
Table 3.4-5. Project Consistency with Applicable Plan Policies 3.4-12
Table 3.4-6. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities 3.4-14
Table 3.4-7. Imperial County Air Pollution Control District Significance Thresholds for Operation 3.4-14
Table 3.4-8. Unmitigated Daily Construction Maximum Criteria Air Pollutant Emissions 3.4-20
Table 3.4-9. Mitigated Daily Construction Maximum Criteria Air Pollutant Emissions 3.4-21
Table 3.5-1. Vegetation Communities or Land Cover Types within the Project Site 3.5-1
Table 3.5-2. Aquatic Resource Summary for the Project Site 3.5-10
Table 3.5-3. Project Consistency with General Plan Goals and Policies 3.5-13
Table 3.6-1. Previously Recorded Cultural Resources Within 1-mile of the Project Site 3.6-3
Table 3.6-2. Newly Recorded Built Environment Resources Within the API 3.6-6
Table 3.6-3. Project Consistency with Applicable General Plan Goals and Objectives 3.6-10
Table 3.7-1. Project Consistency with Applicable General Plan Policies 3.7-7
Table 3.8-1. State of California Greenhouse Gas Emissions 3.8-3
Table 3.8-2. Unmitigated Annual Construction GHG Emissions ($MTCO_2e$ per year) 3.8-13
Table 3.10-1. Beneficial Uses of Receiving Waters 3.10-9
Table 3.10-2. Project Consistency with Applicable General Plan Policies 3.10-11

PC ORIGINAL PKG

Table 3.10-3. Source Control Best Management Practices....3.10-16
Table 3.11-1. Project Assessor Parcel Numbers, Acreages, and Zoning 3.11-2
Table 3.11-2. Project Consistency with Applicable General Plan Policies 3.11-11
Table 3.11-3. Project Consistency with “Adjacent to the Existing RE Overlay Zone” Criteria....3.11-21
Table 3.12-1. California Department of Transportation Vibration Damage Potential Threshold Criteria....3.12-5
Table 3.12-2. Land Use Compatibility for Community Noise Environments....3.123-6
Table 3.12-3. Consistency with Applicable General Plan Noise Policies 3.12-9
Table 3.12-4. Imperial County Property Line Noise Limits 3.12-11
Table 3.12-5. Typical Noise Levels for Construction Equipment....3.12-13
Table 3.12-6. Caltrans Guideline Vibration Annoyance Potential....3.12-15
Table 3.13-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element 3.13-2
Table 3.14-1. Existing Weekday Peak Hour Intersection LOS 3.14-3
Table 3.14-2. Existing ADT Roadway Segment Level of Service....3.14-4
Table 3.14-3. Project Construction Trip Generation Summary....3.14-8
Table 3.16-1. County of Imperial General Plan Consistency Analysis – Water Service 3.16-5
Table 3.16-2. Projected Water Demand 3.16-6
Table 5-1. Projects Considered in the Cumulative Impact Analysis 5-5
Table 5-2. Percentage Conversion of Farmland by Proposed Project 5-8
Table 6-1. Proposed Construction Energy Consumption – Diesel 6-2
Table 6-2. Proposed Construction Energy Consumption – Gasoline 6-2
Table 7-1. Comparison of Alternative Impacts to Proposed Project....7-13

PC ORIGINAL PKG

Figures

Figure 2-1. Regional Location 2-2
Figure 2-2. Project Site 2-7
Figure 2-3. Zoning Designations 2-11
Figure 2-4. Proposed Site Plan 2-16
Figure 2-5. Representative Examples of Photovoltaic Panel/Mounting Configuration 2-17
Figure 2-6. Standard Solar Block and Typical Inverter Plan and Profile 2-19
Figure 2-7. Representative Examples of Typical Inverter Stations 2.3-22
Figure 2-8. Conceptual BESS Layout 2.3-25
Figure 2-9. Representative Examples of Typical Energy Storage Systems 2-27
Figure 2-10. Substation Details - Typical 2-29
Figure 2-11. Representative Example of Typical Substation Design 2-31
Figure 2-12. Monopole Details - Typical 2-32
Figure 2-13. Conceptual Operations and Maintenance Building Area Plan 2-34
Figure 3.2-1. Key Observation Points 3.2-4
Figure 3.2-2. Existing Key Observation Point 1 ..... 3.2-5
Figure 3.2-3. Existing Key Observation Point 2 ..... 3.2-6
Figure 3.2-4. Existing Key Observation Point 3 ..... 3.2-7
Figure 3.2-5. Existing Key Observation Point 4 ..... 3.2-8
Figure 3.2-6. Existing Key Observation Point 5 ..... 3.2-9
Figure 3.2-7. Existing Key Observation Point 6 ..... 3.2-10
Figure 3.2-8. Key Observation Point 1 – Proposed Condition 3.2-19
Figure 3.2-9. Key Observation Point 2 – Proposed Condition 3.2-19
Figure 3.2-10. Key Observation Point 3 – Proposed Condition 3.2-20
Figure 3.2-11. Key Observation Point 4 – Proposed Condition 3.2-20
Figure 3.2-12.Key Observation Point 5 – Proposed Condition 3.2-21
Figure 3.2-13. Key Observation Point 6 – Proposed Condition 3.2-21
Figure 3.2-14.Glare Study Area and Potential Receptors 3.2-25
Figure 3.3-1. Important Farmlands 3.3-2
Figure 3.5-1. Vegetation Communities and Land Cover Types within the Project Site (Map 1 of 2) 3.5-3
Figure 3.5-2. Vegetation Communities and Land Cover Types within the Project Site (Map 2 of 2) 3.5-4
Figure 3.10-1. Watershed 3.10-3
Figure 3.11-1. General Plan Land Use Designations 3.11-5
Figure 3.11-2. Zoning Designations 3.11-7
Figure 5-1. Cumulative Projects 5-3
Figure 7-1. Alternative 2 – Reduced Project Site 7-9

PC ORIGINAL PKG

Appendices

Appendix A Initial Study and Notice of Preparation and Comment Letters
Appendix B Visual Resources Report
Appendix C Land Evalutation and Site Assessment Model
Appendix D Air Quality and Greenhouse Gas Emissions Technical Report
Appendix E1 Biological ResourcesTechnical Report
Appendix E2 Aquatic Resources Delineation Report
Appendix F1 Cultural Resources Inventory
Appendix F2 Built Environment Inventory and Evaluation Report
Appendix G Preliminary Geological and Geotechnical Assessment Report
Appendix H Phase I Environmental Site Assessment
Appendix I Transportation Impact Analysis
Appendix J Water Supply Assessment

PC ORIGINAL PKG

Executive Summary

This Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) Public Resources Code [PRC] Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research (OPR). The purpose of this environmental document is to assess the potential environmental effects associated with the Big Rock 2 Cluster Solar and Storage Project (i.e., "project" or "proposed project") and to propose mitigation measures, where required, to reduce significant impacts.

Project Overview

The project applicant, 90FI 8me LLC, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and five variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as "solar energy facility"); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

PC ORIGINAL PKG

Purpose of an EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of CEQA is to: (1) inform the public and governmental decision makers of the potential significant environmental impacts of a project; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Eliminated from Further Review in Notice of Preparation

The Initial Study (IS)/NOP completed by the County (Appendix A of this EIR) determined that environmental effects to Forestry Resources, Energy, Mineral Resources, Population/Housing, Public Services (Schools and Parks/Other Public Facilities), Recreation, Utilities (Wastewater, Stormwater, Power, and Solid Waste), and Wildfire would not be potentially significant. Therefore, these impacts are not addressed in this EIR; however, the rationale for eliminating these issues is discussed in Chapter 6.0, Effects Found Not Significant.

Summary of Significant Impacts and Mitigation Measures that Reduce or Avoid the Significant Impacts

Based on the analysis presented in the IS/NOP and the information provided in the comments to the IS/NOP, the following environmental topics are analyzed in this EIR:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

PC ORIGINAL PKG

Table ES-1 summarizes the environmental impacts that were determined to be potentially significant, mitigation measures, and level of significance after mitigation associated with the project.

Areas of Controversy and Issues to be Resolved

Areas of Concern

Section 15123(b)(2) of the CEQA Guidelines requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public as well as issues to be resolved. A primary issue associated with this solar farm project, and other solar facility projects that are proposed in the County, is the corresponding land use compatibility and fiscal/economic impacts to the County. Through the environmental review process for this project, other areas of concern and issues to be resolved include potential impacts related to the conversion of farmland to non-agricultural uses, damage to crops, wildlife, water supply, fire hazards associated with the battery energy storage system, health effects from air pollution, noise and hazardous materials, and change of visual character.

Detailed analyses of these topics are included within each corresponding section contained within this document.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
Agricultural Resources				
Impact 3.3-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use	Potentially Significant	**AG-1a**	**Payment of Agricultural and Other Benefit Fees.** Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented: **Mitigation for Non-Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy. **Mitigation for Prime Farmland** **Option 1:** *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or **Option 2:** *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or, **Option 3:** *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project **Option 4:** *Avoid Prime Farmland.* The Permittee must revise their CUP Application/Site Plan to avoid Prime Farmland. **AG-1b** **Site Reclamation Plan.** In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 3.3-3: Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use	Potentially Significant	Implement Mitigation Measure AG-1b. **AG-2** **Pest Management Plan.** Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following: 1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line); 2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows: • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business; • All treatments must be performed by a qualified applicator or a licensed pest control operator; • "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		include physical/mechanical removal, bio control, cultural control, or chemical treatments; • Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation; • Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture; • Obey all pesticide use laws, regulations, and permit conditions; • Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties; • Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current; • Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		(current and previous if changed), and methods used. For pesticides include the chemical(s) used, Environmental Protection Agency (EPA) Registration numbers, and application rates. A pesticide use report may be used for this; • Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request. 3. A long-term strategy for weed and pest control and management during the operation of the proposed projects. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis. 4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands. 5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.	
Air Quality			
Impact 3.4-2: Result in a cumulatively considerable net	Significant	**AQ-1** **Fugitive Dust Control.** Pursuant to Imperial County Air Pollution Control District (ICAPCD), all construction sites,	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)		regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process. ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control • All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover. • All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material. • All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area. • Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line. • The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering. <u>ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control</u> • Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust. • Replace ground cover in disturbed areas as quickly as possible. • Automatic sprinkler system installed on all soil piles.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site. • Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees. • Implement a shuttle service to and from retail services and food establishments during lunch hours. <u>Standard Mitigation Measures for Construction Combustion Equipment</u> • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use. • Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). <u>Enhanced Mitigation Measures for Construction Equipment</u> To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures: • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Implement activity management (e.g., rescheduling activities to reduce short-term impacts). **AQ-2** **Construction Equipment.** All off-road construction diesel engines not registered under California Air Resources Board's (CARB's) Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression-Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig engines shall meet a minimum of Tier 4 Interim California Emission Standards. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure. **AQ-3** **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant. The project applicant shall apply	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/ emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department). **AQ-4** **Dust Suppression Management Plan.** Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval. **AQ-5** **Speed Limit.** During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less. **AQ-6** **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval. ICAPCD Rule 301 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.	
Biological Resources			
Impact 3.5-1: Potential impacts on special-status species	Potentially Significant	**BIO-1** **Burrowing Owl Mitigation.** Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. *Focused Burrowing Owl Surveys* To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities. *Pre-Construction Survey and Avoidance Measures* Depending on the project activity type and associated disturbance, an avoidance buffer distance of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0 250 meters (825 feet) during the breeding season (February through August) shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		If construction is to begin during the breeding season, mitigation measures shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs. Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation. *Burrowing Owl Protection and Mitigation Plan* If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant. *Incidental Take Authorization* The project applicant shall seek incidental take authorization from CDFW if incidental "take" of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		superseded by the incidental take authorization permit requirements, if/as applicable. **BIO-2 Burrowing Owl Habitat Compensation.** The California Department of Fish and Wildlife's 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site. Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two. If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable. **BIO-3 Worker Awareness Program and Ongoing Training.** Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects: • Biology and status of burrowing owl. • California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations. • Protection measures designed to reduce potential impacts on the species.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• The function of flagging designated authorized work areas. • Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance. **BIO-4** **Speed Limit.** During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads. **BIO-5** **Migratory Birds and Other Sensitive Non-Migratory Bird Species.** To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial. Construction conservation measures to be incorporated into the ABPP shall include the following: • Minimizing disturbance to vegetation to the maximum extent practicable.	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest. • Minimizing wildfire potential. • Minimizing activities that attract prey and predators. • Controlling non-native plants. Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following: • Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities. • Minimizing noise. • Minimizing use of outdoor lighting. **BIO-6** **Pre-Construction Bird Surveys and Nest Avoidance.** Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species).	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active. **BIO-7 Focused Bat Surveys and Bat Management Plan.** A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.	
Impact 3.5-3: Impact on Jurisdictional Waters	Potentially Significant	Implement Mitigation Measure BIO-3. **BIO-8** **Federal and State Agency Permits.** Prior to impacts occurring to U.S Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.	Less than Significant
Cultural Resources			
Impact 3.6-2: Impact on archaeological resources	Potentially Significant	**CUL-1** **Cultural Resources Worker Environmental Awareness Program Training.** Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure,	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		video, or in-person tailgate meeting, as determined appropriate by the archaeologist. The training shall be provided to all construction supervisors, forepersons, and operators of ground disturbing equipment. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance. **CUL-2** **Archaeological Monitoring.** Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist and a traditionally and culturally affiliated Native American Monitor, to monitor all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling). In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services. In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
			archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.	
Impact 3.6-3: Impact on Human Remains	Potentially Significant	**CUL-3**	**Discovery of Human Remains.** In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983).If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	
Geology and Soils			
Impact 3.7-2: Strong seismic ground shaking	Potentially Significant	**GEO-1** **Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures.** Facility design for all project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: • Site preparation • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Structural foundations • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.	
Impact 3.7-3: Possible risks to people and structures caused by seismic-related ground failure, including liquefaction	Potentially Significant	Implement Mitigation Measure GEO-1.	Less than Significant
Impact 3.7-5: Substantial soil erosion or the loss of topsoil	Potentially Significant	Implement Mitigation Measure GEO-1 and Mitigation Measure HYD-1.	Less than Significant
Impact 3.7-6: Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project	Potentially Significant	Implement Mitigation Measure GEO-1.	Less than Significant
Impact 3.7-7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	Potentially Significant	Implement Mitigation Measure GEO-1.	Less than Significant
Impact 3.7-8: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not	Potentially Significant	**GEO-2 Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements.** The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
available for the disposal of wastewater			necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.	
Impact 3.7-9: Impact on paleontological resources	Potentially Significant	**GEO-3**	**Paleontological Resources Monitoring.** Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
			Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.	
		GEO-4	**Paleontological Resources Worker Awareness Program.** Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.	
Hydrology/Water Quality				
Impact 3.10-1: Violation of water quality standards	Potentially Significant	**HYD-1**	**Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration.** The project applicant or its contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) specific to the project and be responsible for securing coverage under State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		actions and best management practices (BMPs) relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories: • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching) • Sediment control practices (e.g., temporary sediment basins, fiber rolls) • Temporary and post-construction on- and off-site runoff controls • Special considerations and BMPs for water crossings and drainages • Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity • Waste management, handling, and disposal control practices • Corrective action and spill contingency measures • Agency and responsible party contact information	

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure. **HYD-2** **Incorporate Post-Construction Runoff BMPs into Project Drainage Plan**. The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, Imperial Irrigation District (IID) "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary.	
Impact 3.10-3: Alter the existing drainage pattern of	Potentially Significant	Implement Mitigation Measures HYD-1.	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
the site or area resulting in siltation or on- or off-site erosion			
Impact 3.10-4: Alter the existing drainage pattern of the site or area resulting in flooding on- or off-site	Potentially Significant	Implement Mitigation Measures HYD-2.	Less than Significant
Impact 3.10-5: Alter the existing drainage pattern of the site or area such that runoff increases would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Potentially Significant	Implement Mitigation Measures HYD-1.	Less than Significant
Impact 3.10-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	Potentially Significant	Implement Mitigation Measures HYD-1 and HYD-2.	Less than Significant
Tribal Cultural Resources			
Impact 3.15-1: Impact on tribal cultural resources	Potentially Significant	Implement Mitigation Measure CUL-2. **TCR-1** **Discovery of Unidentified Tribal Cultural Resources.** If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment	Less than Significant

PC ORIGINAL PKG

Table ES-1. Summary of Project Impacts and Proposed Mitigation Measures

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.	

PC ORIGINAL PKG

Statement of Overriding Considerations

CEQA Guidelines Section 15093 requires the Lead Agency to balance, as applicable, the economic, legal, social, and technological, or other benefits of the project against its unavoidable environmental risks when determining whether to approve the project. No significant and unmitigated impacts have been identified for the proposed project; therefore, the County would not be required to adopt a Statement of Overriding Considerations pursuant to Section 15093 for this project.

Project Alternatives

Alternatives Considered but Rejected

Alternative Site

Section 15126.6(f)(2) of the CEQA Guidelines addresses alternative locations for a project. The key question and first step in the analysis is whether any of the significant effects of the proposed project would be avoided or substantially lessened by constructing the proposed project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR. Further, CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

The proponent does not have control of an alternate site; if control were viable, the proponent would have to re-initiate the application process as a new project. Similar to the proposed project site, an alternate site would require environmental review once the proponent has prepared sufficient project description information. At present, the proponent does not have control of an alternate site. This alternative would be the most complex, costly, and time-consuming alternative to implement. It is unknown if the environmental impacts associated with this alternative would be less than the proposed project because it would be speculative to evaluate an unsecured alternate site. This is primarily due to the fact that the proponent does not have control of an alternate site. Therefore, an alternative site was eliminated from further consideration in this EIR.

Alternatives Evaluated

The environmental analysis for the proposed project evaluated the potential environmental impacts resulting from implementation of the proposed project, as well as alternatives to the project. The alternatives include: Alternative 1: No Project/No Development and Alternative 2: Reduced Project Size. A detailed discussion of the alternatives considered is included in Chapter 7. Table ES-2 summarizes the impacts resulting from the proposed project and the identified alternatives.

Alternative 1: No Project/No Development Alternative

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e), “the specific alternative of ‘no project’ shall also be evaluated along with its impacts. The ‘no project’ analysis shall discuss the existing conditions at the time the Notice of Preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.”

PC ORIGINAL PKG

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be developed.

The No Project/No Development Alternative would not meet any of the objectives of the project. Additionally, the No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of Senate Bill 32.

Alternative 2: Reduced Project Site

The purpose of this alternative is to reduce impacts on Prime Farmland within the project site. As discussed in Section 3.3, Agricultural Resources, implementation of the project would result in the temporary conversion of 973.24 acres of Prime Farmland to non-agricultural uses. A majority of the Prime Farmland occurs within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would reduce the overall size of the solar facility by avoiding the Prime Farmland occurring within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would avoid developing parcels that contain large areas of Prime Farmland. (NOTE: this alternative would not avoid several pockets of Prime Farmland, as these represent small, isolated pockets of land, which would likely not remain economically viable or practically feasible to farm as they would be surrounded by solar uses). Therefore, the project site would be reduced by approximately 788 acres from a total of 1,849 acres to 1,061 acres.

As shown in Table ES-2, this alternative would reduce impacts to agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced.

Environmentally Superior Alternative

Table ES-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. The No Project/No Development Alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” As shown on Table ES-2, Alternative 2 would be the environmental superior alternative because it would reduce impacts for the following environmental issue areas as compared to the proposed project: agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

PC ORIGINAL PKG

Table ES-2. Comparison of Alternative Impacts to Proposed Project

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Aesthetics	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Agricultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Air Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Biological Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Geology and Soils	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Similar Impact
GHG Emissions	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hazards and Hazardous Materials	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hydrology/ Water Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Land Use/Planning	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Noise and Vibration	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Public Services	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Transportation	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Tribal Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Utilities/Service Systems	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

PC ORIGINAL PKG

1 Introduction

This environmental impact report (EIR) has been prepared to meet the requirements of the California Environmental Quality Act (CEQA) for purposes of evaluating the potential environmental impacts, mitigation measures, and alternatives associated with the proposed Big Rock 2 Cluster Solar and Storage Project. This EIR describes the existing environment that would be affected by, and the environmental impacts which could potentially result from the construction and operation of the proposed project as described in detail in Chapter 2.0 of this EIR.

1.1 Overview of the Proposed Project

The project applicant, 90FI 8me, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and five variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The project would generate up to a combined 500 megawatt (MW) of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as “solar energy facility”); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District’s (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the “proposed project” or “project.”

1.1.1 Agency Roles and Responsibilities

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

County of Imperial

Implementation of the project would involve the following approvals by the County of Imperial:

1. **General Plan Amendment (#24-0002).** An amendment to the County’s General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE

PC ORIGINAL PKG

Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

2. **Zone Change (#24-0003).**

- **Big Rock 2 Cluster North**. As shown in Table 1-1, the Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the RE Overlay Zone. As shown in Table 1-1, the applicant is requesting a Zone Change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

Table 1-1. Big Rock 2 Cluster North Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-270-020	A-2-R	A-2-R-RE
2	051-270-028	A-2	A-2-RE
3	051-270-036	A-2	A-2-RE
4	051-270-041	A-2-R	A-2-R-RE
5	051-280-054	A-2	A-2-RE
6	051-300-011	A-2	A-2-RE
7	051-300-016	A-2	A-2-RE
8	051-300-026	A-2	A-2-RE
9	051-300-035	A-3	A-3-RE
10	051-300-037	A-3	A-3-RE
11	051-300-032 (northern portion)	A-2	A-2-RE
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	N/A
13	051-300-036 (to be re-entitled)	A-3-RE	N/A

- **Big Rock 2 Cluster South**. As shown in Table 1-2, the Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). As shown in Table 1-2, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-3-RE).

PC ORIGINAL PKG

Table 1-2. Big Rock 2 Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-330-003	A-3	A-3-RE
2	051-350-004	A-3	A-3-RE
3	051-350-006	A-3	A-3-RE
4	051-350-007	A-3	A-3-RE
5	051-350-008	A-3	A-3-RE

- **Big Rock 2 Cluster East.** As shown in Table 1-3, the Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.

Table 1-3. Big Rock 2 Cluster East Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-310-027	A-2-R-RE	N/A
2	051-310-028	A-2-R-RE	N/A

Big Rock Cluster West. As shown in Table 1-4, the Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). As shown in Table 1-4, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

Table 1-4. Big Rock 2 Cluster West Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-290-018	A-2-R	A-2-R-RE
2	051-290-019	A-3	A-3-RE
3	051-320-005	A-3	A-3-RE
4	051-320-006	A-3	A-3-RE
5	051-320-007	A-3	A-3-RE

3. **Approval of the following CUPs:**
    - **Big Rock 2 Cluster North: #24-0006**
    - **Big Rock 2 Cluster South: #24-0007**
    - **Big Rock 2 Cluster East: #24-0008**
    - **Big Rock 2 Cluster West: #24-0009**

Implementation of the project would require the approval of the four CUPs listed above by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. With approval of the zone change, the project site would

PC ORIGINAL PKG

be zoned General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone (A-2-RE, A-2-R-RE and A-3-RE).

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

4. **Variance (#24-0002 through 24-0006).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by

PC ORIGINAL PKG

the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project.

Subsequent ministerial approvals may include, but are not limited to:

- Grading and clearing permits
- Building permits
- Reclamation plan
- Encroachment permits
- Transportation permit(s)

Other Agencies Reviews and/or Consultations

The following agencies may be involved in reviewing and/or consultations with the project proponent as it relates to construction of the project:

Federal

UNITED STATES FISH AND WILDLIFE SERVICE

- The United States Fish and Wildlife Service (USFWS) enforces compliance with regulations related to special-status species or their habitat as required under the Federal Endangered Species Act (ESA).

UNITED STATES ARMY CORPS OF ENGINEERS

- Section 404 Permit (Clean Water Act [CWA]). The CWA establishes a program to regulate the discharge of dredge and fill material into waters of the U.S. including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. Either an individual 404b permit or authorization to use an existing USACE Nationwide Permit will need to be obtained if any portion of the construction requires fill into a river, stream, or stream bed that has been determined to be a jurisdictional waterway.

State

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (TRUSTEE AGENCY)

- The California Department of Fish and Wildlife (CDFW) is a Trustee Agency and enforces compliance with regulations related to California special-status species or their habitats as required under the California Endangered Species Act (CESA). Agencies and/or project proponents must consult with CDFW regarding, when applicable, compliance with Section 1602 of the California Department of Fish and Game (CDFG) Code.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

- **National Pollution Discharge Elimination System Construction General Permit Order No. 2009-009-DWQ.** Requires the applicant to file a public Notice of Intent to discharge stormwater and to prepare and implement a stormwater pollution prevention plan (SWPPP).

PC ORIGINAL PKG

- **Jurisdictional Waters.** Agencies and/or project proponents must consultant with the California Regional Water Quality Control Board (RWQCB) regarding, when applicable, regarding compliance with the CWA Section 401 Water Quality Certification or permitting under California Porter-Cologne Act.

Local

IMPERIAL COUNTY FIRE DEPARTMENT

- Review as part of the EIR process including the final design of the proposed fire system.

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT

- Review as part of the EIR process regarding consistency with the Imperial County Air Pollution Control District (ICAPCD) CEQA Air Quality Handbook, the final "Modified" 2009 8-hour Ozone Air Quality Management Plan, the State Implementation Plan for particulate matter less than 10 microns in diameter (PM_{10}) in the Imperial Valley, the State Implementation Plan (SIP) for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and verification of Rule 801 compliance.

IMPERIAL IRRIGATION DISTRICT

- Review as part of the EIR process and issue an Interim Water Supply Policy (IWSP) water supply agreement (if IID determines the project is to utilize IWSP for Non-Agricultural Projects water) and other permits such as encroachment permits

1.2 Relationship to Statutes, Regulations, and Other Plans

1.2.1 County of Imperial General Plan and Land Use Ordinance

The General Plan provides guidance on future growth in the County of Imperial. Any development in the County of Imperial must be consistent with the General Plan and Land Use Ordinance (Title 9, Division 10).

1.2.2 Renewables Portfolio Standard Program

Established in 2002 under Senate Bill (SB) 1078, California's Renewables Portfolio Standard (RPS) was accelerated in 2006 under SB 107 by requiring that 20 percent of electricity retail sales be served by RE resources by 2010. RE sources include wind, geothermal, and solar. Subsequent recommendations in California energy policy reports advocated a goal of 33 percent by 2020. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order (EO) S-14-08 requiring that "... all retail sellers of electricity shall serve 33 percent of their load with RE by 2020." The following year, EO S-21-09 directed the California Air Resources Board (CARB), under its Assembly Bill (AB) 32 authority, to enact regulations to achieve the goal of 33 percent renewables by 2020.

In the ongoing effort to codify the ambitious 33 percent by 2020 goal, SB X12 was signed by Governor Brown, in April 2011. This new RPS preempts the CARB's 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities had to

PC ORIGINAL PKG

adopt the new RPS goals of 20 percent of retails sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020.

Governor Brown signed into legislation SB 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible RE resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

1.2.3 Senate Bill 32

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by Executive Order (EO) B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

1.2.4 Title 17 California Code of Regulations, Subchapter 10, Article 2, Sections 95100 et seq.

These CARB regulations implement mandatory GHG emissions reporting as part of the California Global Warming Solutions Act of 2006.

1.2.5 Federal Clean Air Act

The legal authority for federal programs regarding air pollution control is based on the 1990 Clean Air Act (CAA) Amendments. These are the latest in a series of amendments made to the CAA. This legislation modified and extended federal legal authority provided by the earlier Clean Air Acts of 1963 1970, and 1977.

The Air Pollution Control Act of 1955 was the first Federal legislation involving air pollution. This Act provided funds for federal research in air pollution. The CAA of 1963 was the first Federal legislation regarding air pollution control. It established a federal program within the U.S. Public Health Service and authorized research into techniques for monitoring and controlling air pollution. In 1967, the Air Quality Act was enacted in order to expand Federal government activities. In accordance with this law, enforcement proceedings were initiated in areas subject to interstate air pollution transport. As part of these proceedings, the Federal government for the first time conducted extensive ambient monitoring studies and stationary source inspections.

The Air Quality Act of 1967 also authorized expanded studies of air pollutant emission inventories, ambient monitoring techniques, and control techniques.

1.2.6 Imperial County Air Pollution Control District

The ICAPCD enforces rules and regulations regarding air emissions associated with various activities, including construction and farming, and operational activities associated with various land uses, in order to protect the public health.

1.2.7 Federal Clean Water Act (33 United States Code Section 1251-1387)

The Federal Water Pollution Control Act (33 United States Code [USC] §§1251-1387), otherwise known as the CWA, is a comprehensive statute aimed at restoring and maintaining the chemical, physical and biological integrity of the nation's waters. Enacted originally in 1948, the Act was amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost every year. Primary authority for the implementation and enforcement of the CWA rests with the U.S. Environmental Protection Agency (EPA). In addition to the measures authorized before 1972, the Act authorizes water quality programs, requires federal effluent limitations and state water quality standards, requires permits for the discharge of pollutants into navigable waters, provides enforcement mechanisms, and authorizes funding for wastewater treatment works construction grants and state revolving loan programs, as well as funding to states and tribes for their water quality programs. Provisions have also been added to address water quality problems in specific regions and specific waterways.

Important for wildlife protection purposes are the provisions requiring permits to dispose of dredged and fill materials into navigable waters. Permits are issued by the United States Army Corps of Engineers (USACE) under guidelines developed by EPA pursuant to Section 404 of the CWA.

1.2.8 Federal Clean Water Act and California Porter-Cologne Water Quality Control Act

The project is located within the Colorado River Basin RWQCB, Region 7. The CWA and the California Porter-Cologne Water Quality Control Act require that Water Quality Control Plans (more commonly referred to as Basin Plans) be prepared for the nine state-designated hydrologic basins in California. The Basin Plan serves to guide and coordinate the management of water quality within the region.

1.2.9 Federal Endangered Species Act

The ESA (16 USC 1531-1544) provides protection for plants and animals whose populations are dwindling to levels that are no longer sustainable in the wild. The Act sets out a process for listing species, which allows for petition from any party to list a plant or animal. Depending on the species, USFWS or the National Marine Fisheries Service (NMFS) will determine whether listing the species is warranted. If it is warranted, the species will be listed as either threatened or endangered. The difference between the two categories is one of degree, with endangered species receiving more protections under the statute.

1.2.10 National Historic Preservation Act

Federal regulations (36 Code of Federal Regulations [CFR] Part 800.2) define historic properties as "any prehistoric or historic district, site, building, structure, or object included, or eligible for inclusion in, in the National Register of Historic Places (NRHP)." The term "cultural resource" is used to denote a historic or prehistoric district, site, building, structure, or object, regardless of whether it is eligible for the NRHP.

1.2.11 California Endangered Species Act

CESA is enacted through Government Code Section 2050. Section 2080 of the California Fish and Game Code (FGC) prohibits "take" of any species that the commission determines to be an

PC ORIGINAL PKG

endangered species or a threatened species. Take is defined in Section 86 of the FGC as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

CESA allows for take incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-caused losses of listed species populations and their essential habitats.

1.2.12 California Lake and Streambed Program (Fish and Game Code Section 1602)

CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the FGC (Section 1602) requires an entity to notify CDFW of any proposed activity that may substantially modify a river, stream, or lake.

1.3 Purpose of an EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of CEQA is to: (1) inform the public and governmental decision makers of the potential, significant environmental impacts of a project; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.4 EIR Process

1.4.1 Availability of Reports

This Draft EIR has been distributed to various federal, state, regional, local agencies and interested parties for a 50-day public review period in accordance with Section 15087 of the CEQA Guidelines. This Draft EIR and documents incorporated by reference are available for public review at the County of Imperial Planning and Development Services Department, 801 Main Street, El Centro, California 92243. Documents may be reviewed during regular business hours.

Rocio Yee, Planner II

County of Imperial, Planning and Development Services Department

801 Main Street

El Centro, California 92243

Comments received during the public review period of the Draft EIR will be reviewed and responded to in the Final EIR. The Final EIR will then be reviewed by the Imperial County Planning Commission and Board of Supervisors as a part of the procedure to adopt the EIR. Additional information on this process may be obtained by contacting the County of Imperial Planning and Development Services Department at (442) 265-1736.

PC ORIGINAL PKG

1.4.2 Public Participation Opportunities/Comments and Coordination

Notice of Preparation

The County of Imperial issued a notice of preparation (NOP) for the preparation of an EIR for the Big Rock 2 Solar and Storage Project on September 3, 2024. The NOP was distributed to city, county, state, and federal agencies, other public agencies, and various interested private organizations and individuals in order to define the scope of the EIR. The NOP was also published in the Imperial Valley Press on September 3, 2024. The purpose of the NOP was to identify public agency and public concerns regarding the potential impacts of the project, and the scope and content of environmental issues to be addressed in the EIR. Correspondence in response to the NOP was received from the following entities and persons:

- California Department of Conservation
- California Department of Fish and Wildlife
- Imperial Irrigation District
- Imperial County Air Pollution Control District

The comments submitted on the NOP during the public review and comment period are included as Appendix A to this EIR.

Scoping Meeting and Environmental Evaluation Committee

During the NOP public review period, the Big Rock 2 Solar and Storge Project was discussed as an informational item at the County's Environmental Evaluation Committee meeting on September 26, 2024.

Additionally, a scoping meeting (held in-person and virtually) for the general public as well public agencies was held on September 26, 2024 at 6:00 p.m., to further obtain input as to the scope of environmental issues to be examined in the EIR. The NOP, which included the scoping meeting date and location, was published in the Imperial Valley Press on September 3, 2024. A virtual meeting was held by the Imperial County Planning & Development Services Department. At the scoping meeting, members of the public were invited to ask questions regarding the proposed project and the environmental review process, and to comment both verbally and in writing on the scope and content of the EIR. No comment letters were received during the scoping meeting.

1.4.3 Environmental Topics Addressed

Based on the analysis presented in the NOP and the information provided in the comments to the NOP, the following environmental topics are analyzed in this EIR:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils

PC ORIGINAL PKG

- Greenhouse Gas (GHG) Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services (Fire Protection and Police Protection)
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

Eliminated from Further Review in Notice of Preparation

The initial study (IS)/NOP completed by the County (Appendix A of this EIR) determined that environmental effects to Forestry Resources, Energy, Mineral Resources, Population/Housing, Public Services (Schools and Parks/Other Public Facilities), Recreation, Utilities (Wastewater, Stormwater, and Solid Waste), and Wildfire would not be potentially significant. Therefore, these impacts are not addressed in this EIR; however, the rationale for eliminating these issues is discussed in Chapter 6.0, Effects Found Not Significant.

1.4.4 Areas of Controversy and Issues to be Resolved

Section 15123(b)(2) of the CEQA Guidelines requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public as well as issues to be resolved. A primary issue associated with this solar farm project, and other solar facility projects that are proposed in the County, is the corresponding land use compatibility and fiscal/economic impacts to the County. Through the environmental review process for this project, other areas of concern and issues to be resolved include potential impacts related to the conversion of farmland to non-agricultural uses, damage to crops, wildlife, water supply, fire hazards associated with the battery energy storage system, health effects from air pollution, noise and hazardous materials, and change of visual character.

1.4.5 Document Organization

The structure of the Draft EIR is identified below. The Draft EIR is organized into 10 chapters, including the Executive Summary.

- The **Executive Summary** provides a summary of the proposed project, including a summary of project impacts, mitigation measures, and project alternatives.
- **Chapter 1 Introduction** provides a brief introduction of the proposed project; relationship to statutes, regulations and other plans; the purpose of an EIR; public participation opportunities; availability of reports; and comments received on the NOP.
- **Chapter 2 Project Description** provides a description of the Big Rock 2 Solar and Storage Project. This chapter also defines the goals and objectives of the proposed project, provides details regarding the individual components that together comprise the project, and identifies the discretionary approvals required for implementation of the project.

- **Chapter 3 Environmental Analysis** provides a description of the existing environmental setting and conditions, an analysis of the environmental impacts of the project for the following environmental issues: aesthetics; air quality; biological resources; cultural resources; geology and soils; GHG emissions; hydrology/water quality; land use and planning; noise and vibration; public services, transportation; tribal cultural resources; and utilities/service systems. This chapter also identifies mitigation measures to address potential impacts to the environmental issues identified above.
- **Chapter 4 Analysis of Long-Term Effects** provides an analysis of growth inducing impacts, significant irreversible environmental changes, and unavoidable adverse impacts.
- **Chapter 5 Cumulative Impacts** discusses the impact of the proposed project in conjunction with other planned and future development in the surrounding areas.
- **Chapter 6 Effects Found Not to be Significant** lists all the issues determined to not be significant as a result of the preparation of this EIR.
- **Chapter 7 Alternatives** analyzes the alternatives to the proposed project.
- **Chapter 8 References** lists the data references utilized in preparation of the EIR.
- **Chapter 9 EIR Preparers and Organizations Contacted** lists all the individuals and companies involved in the preparation of the EIR, as well as the individuals and agencies consulted and cited in the EIR.

PC ORIGINAL PKG

2 Project Description

Chapter 2 provides a description of the Big Rock 2 Cluster Solar and Storage Project. This chapter also defines the goals and objectives of the proposed project, provides details regarding the individual components that together comprise the project, and identifies the discretionary approvals required for project implementation.

The project applicant, 90FI 8me, is seeking approval of four Conditional Use Permits (CUPs), a General Plan amendment, Zone Change, and five variance requests associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility. The project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The proposed project involves utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active conditional use permits (CUP) known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project.

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as “solar energy facility”); 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District’s (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the “proposed project” or “project.”

2.1 Project Location

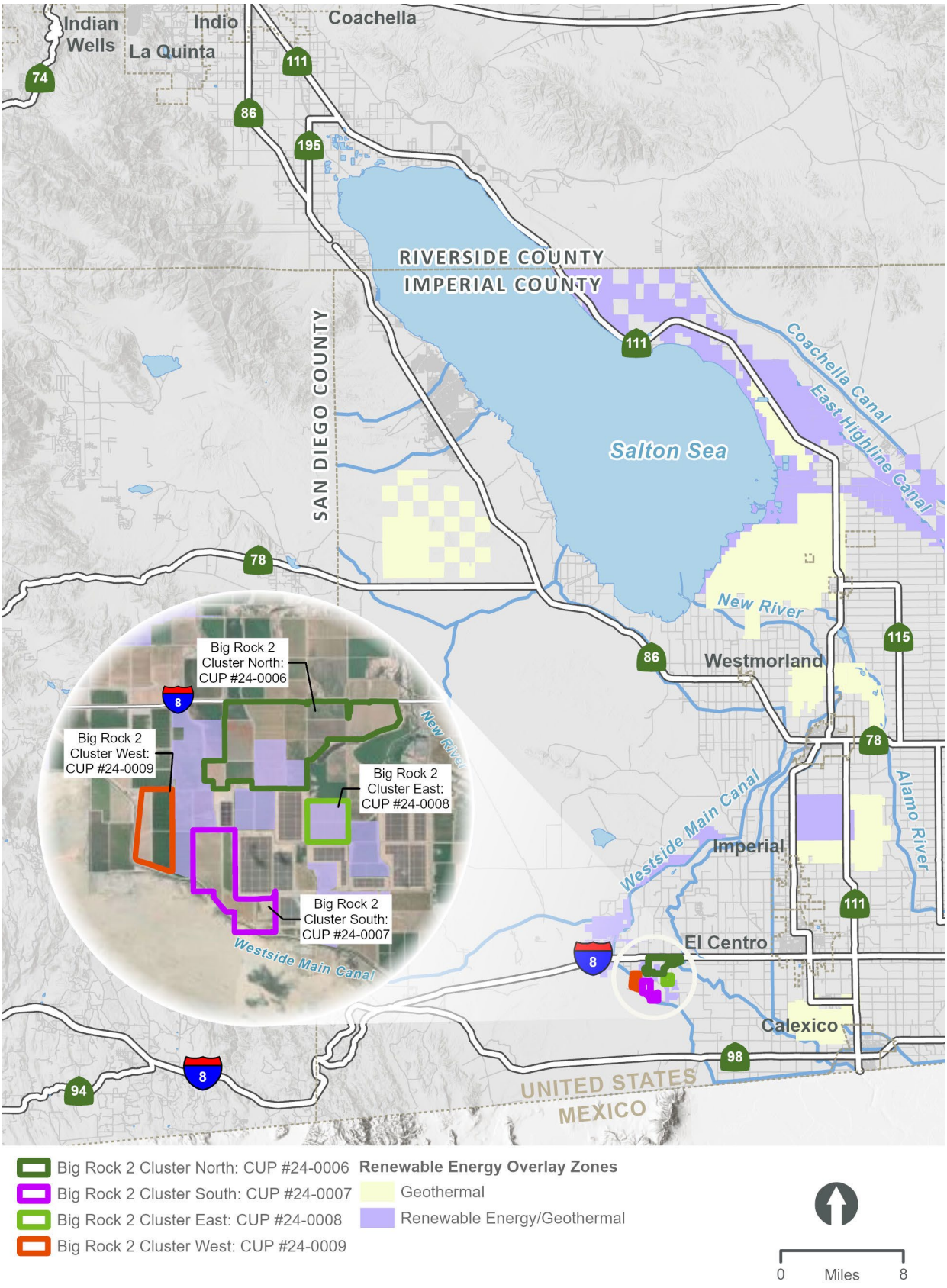
The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California (Figure 2-1). The proposed project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately-owned land, comprising 24 assessor parcels.

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

PC ORIGINAL PKG

Figure 2-1. Regional Location



PC ORIGINAL PKG

As previously mentioned above, the project applicant is seeking approval of four separate CUPs associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility, which together define the project site. The four CUP applications or individual site locations consist of the following and are shown in Figure 2-2.

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

Each of these four individual site locations are described in detail below.

2.1.1 Big Rock 2 Cluster North: CUP #24-0006

The Big Rock 2 Cluster North site is located on 13 parcels comprising approximately 1,030 acres. Table 2-2 identifies the individual APNs associated with the Big Rock 2 Cluster North site with their respective acreage and zoning. As shown in Table 2-1, of the 1,030 acres, approximately 120.3 acres are associated with the previously-approved CUP for Laurel Cluster 2 North. Approximately 80 acres of APN 051-300-032 and 40.3 acres of APN 051-300-036 associated with the previously-approved CUP for Laurel Cluster 2 North would be re-entitled as part of the proposed project.

The Big Rock 2 Cluster North site is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of the site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

Table 2-1. Big Rock 2 Cluster North Assessor Parcel Numbers, Zoning, and Acreage

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	85.5
Sub-total			***910.0***
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
13	051-300-036 (to be re-entitled)	A-3-RE	40.3

PC ORIGINAL PKG

Sub-total	***120.3***
TOTAL ACRES	**1,030**

2.1.2 Big Rock 2 Cluster South: CUP #24-0007

The Big Rock 2 Cluster South site is located on five parcels comprising approximately 410 acres. Table 2-2 identifies the individual APNs associated with the Big Rock 2 Cluster South site with their respective acreage and zoning.

The Big Rock 2 Cluster South site is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

Table 2-2. Big Rock 2 Cluster South Assessor Parcel Numbers, Zoning, and Acreage

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
TOTAL ACRES			**410.0**

2.1.3 Big Rock 2 Cluster East/Laurel Cluster South: CUP #24-0008

The Big Rock 2 Cluster East/Laurel Cluster South site is located on two parcels comprising approximately 160 acres. Table 2-3 identifies the individual APNs associated with the Big Rock 2 Cluster East/Laurel Cluster South site with their respective acreage and zoning. The 160-acre site is associated with the previously-approved CUP for Laurel Cluster 2 South and will be re-entitled as part of the proposed project.

The Big Rock 2 Cluster East site/Laurel Cluster South site is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

Table 2-3. Big Rock 2 Cluster East/Laurel Cluster South Assessor Parcel Numbers, Zoning, and Acreage

	APN	Zoning	Acres
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
TOTAL ACRES			**160.0**

2.1.4 Big Rock 2 Cluster West: CUP #24-0009

The Big Rock 2 Cluster West site is located on five parcels comprising approximately 249 acres. Table 2-4 identifies the individual APNs associated with the Big Rock 2 Cluster West site with their respective acreage and zoning.

PC ORIGINAL PKG

The Big Rock 2 Cluster West site is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

Table 2-4. Big Rock 2 Cluster West Assessor Parcel Numbers, Zoning, and Acreage

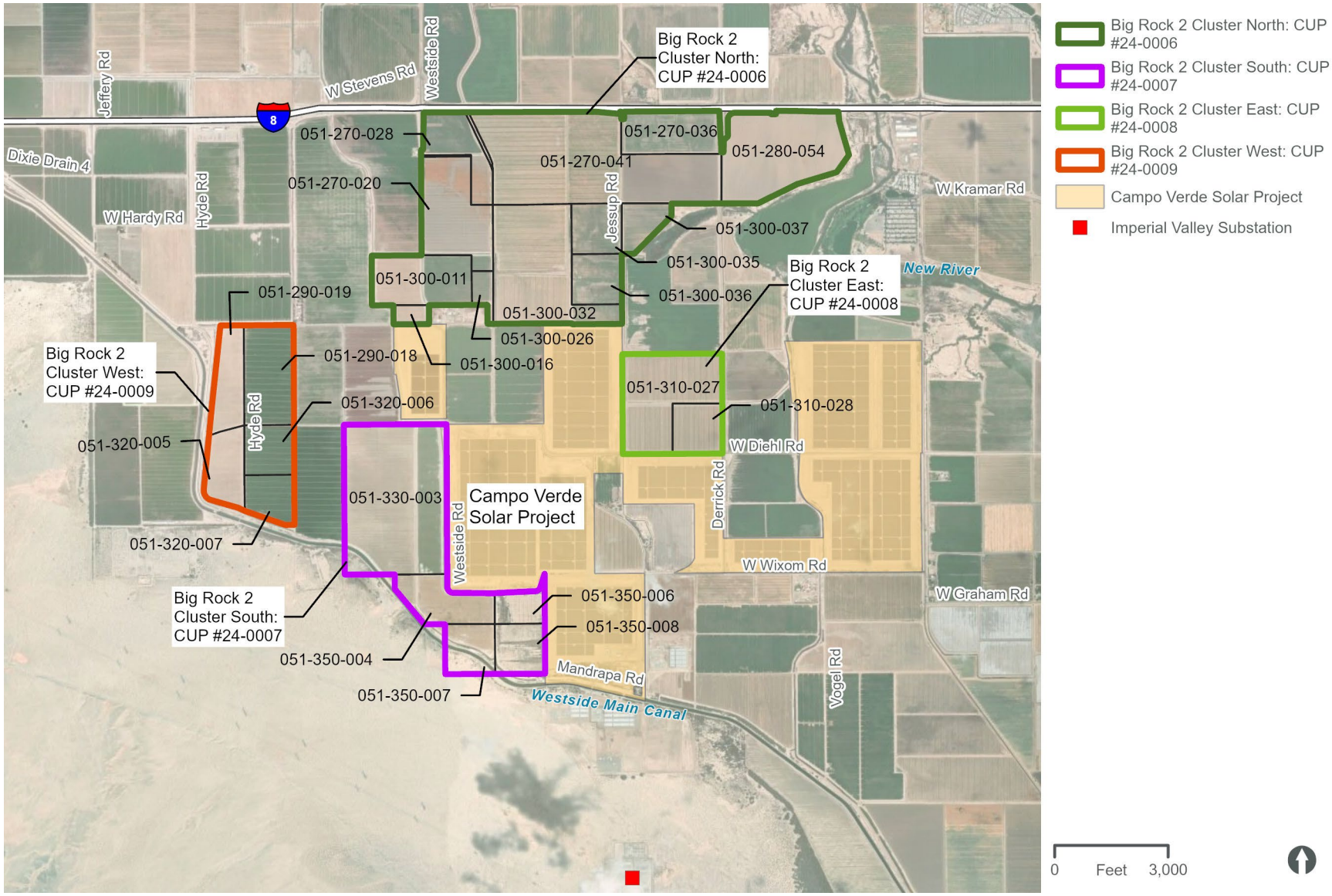
	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
TOTAL ACRES			**249.0**

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-2. Project Site



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Renewable Energy Overlay Zone

In October 2015, the County revised the Imperial County Renewable Energy and Transmission Element, which includes a RE Zone (RE Overlay Map). This General Plan element was created as part of the California Energy Commission Renewable Energy Grant Program to amend and update the County's General Plan to facilitate future development of renewable energy projects.

The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.

The County's General Plan and Land Use Ordinance allows that for renewable energy projects proposed on land classified in a non-RE Overlay zone, that the land on which the project is located may be included/classified in the RE Overlay Zone if the renewable energy project: 1) would be located adjacent to an existing RE Overlay Zone; 2) is not located in a sensitive area; 3) is located in proximity to renewable energy infrastructure; and, 4) and would not result in any significant environmental impacts.

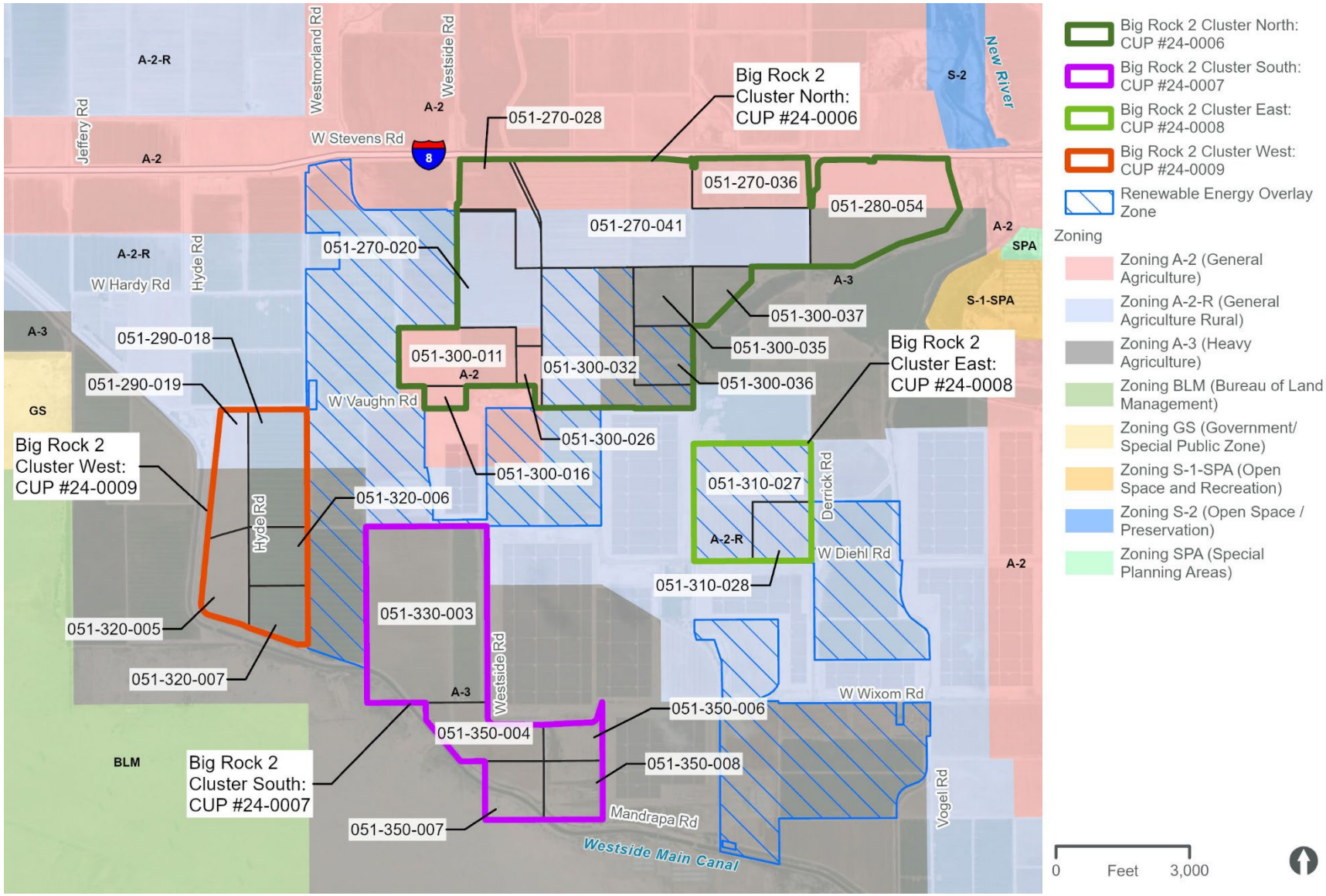
As shown in Figure 2-3, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-3. Zoning Designations



This page is intentionally blank.

PC ORIGINAL PKG

2.2 Project Objectives

The primary project objective is to develop, design and construct a large-scale solar PV and BESS facility in Imperial County that, when operational, maximizes the production of clean, reliable, and renewable electric power in an economically feasible and commercially financeable manner. The power produced by the project is expected to be marketed to utility companies, Community Choice Aggregators (CCAs), or other large-scale energy off-takers. Additional project objectives include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.
- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Renewable Energy and Transmission Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

2.3 Project Characteristics

The proposed project involves the construction of a utility-scale PV solar and BESS facility on approximately 1,849 acres of privately-owned land. As shown in Table 2-5, the project would generate up to a combined 500 MW of AC on a daily basis and up to 500 MW of battery storage. Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines which could run overhead and/or underground to a dedicated project substation. A 230-kV overhead generation intertie (gen-tie) transmission line is anticipated to link the project substation to the existing Liebert Switchyard, which will then be connected via an overhead 230-kV gen-tie line to the existing Mandrapa Switchyard and the San Diego Gas and Electric (SDG&E) Imperial Valley Substation.

Each individual CUP site may include a ground mounted photovoltaic solar power generating system, supporting structures, inverter modules, pad mounted transformers, BESS, access roads and fencing, an operations and maintenance (O&M) building, and an on-site substation. Figure 2-4 depicts the proposed site plan.

It is anticipated that all BESS facilities associated with the project will be developed concurrently with PV componentry and situated in proximity to project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and project needs, by allowing one CUP area to utilize BESS credits of another CUP area. Likewise, the project may share facilities such as O&M facilities, transmission-related facilities, project sub-station(s), and/or other appurtenances.

Table 2-5. Proposed Big Rock 2 Cluster Solar and Storage Project Megawatt Output

CUP Site	Proposed PV MW	Proposed BESS MW
Big Rock 2 Cluster North: CUP 24-0006	100	40
Big Rock 2 Cluster South: CUP 24-007	120	240
Big Rock Cluster East: CUP 24-0008	60	20
Big Rock 2 Cluster West: CUP 24-0009	80	20
Note: Total PV system is 500 MW. Table depicts Big Rock 2 PV MW only. Does not include those portions of the project that have been previously approved associated with the Laurel Cluster Project and will be re-entitled/renewed (140 MW).		

2.3.1 Photovoltaic Panels/Solar Arrays

Solar cells, also called PV cells, convert sunlight directly into electricity. PV cells combine to create solar modules, or panels, and many solar panels combined together to create one system is called a solar (or PV) array.

The project would use PV panels or modules on mounting frameworks to convert sunlight directly into electricity. The PV panels or modules would include, but not be limited to, bi-facial or concentrated photovoltaic (CPV) technology. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). Figure 2-5 provides a representative example of these types of systems. If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun

PC ORIGINAL PKG

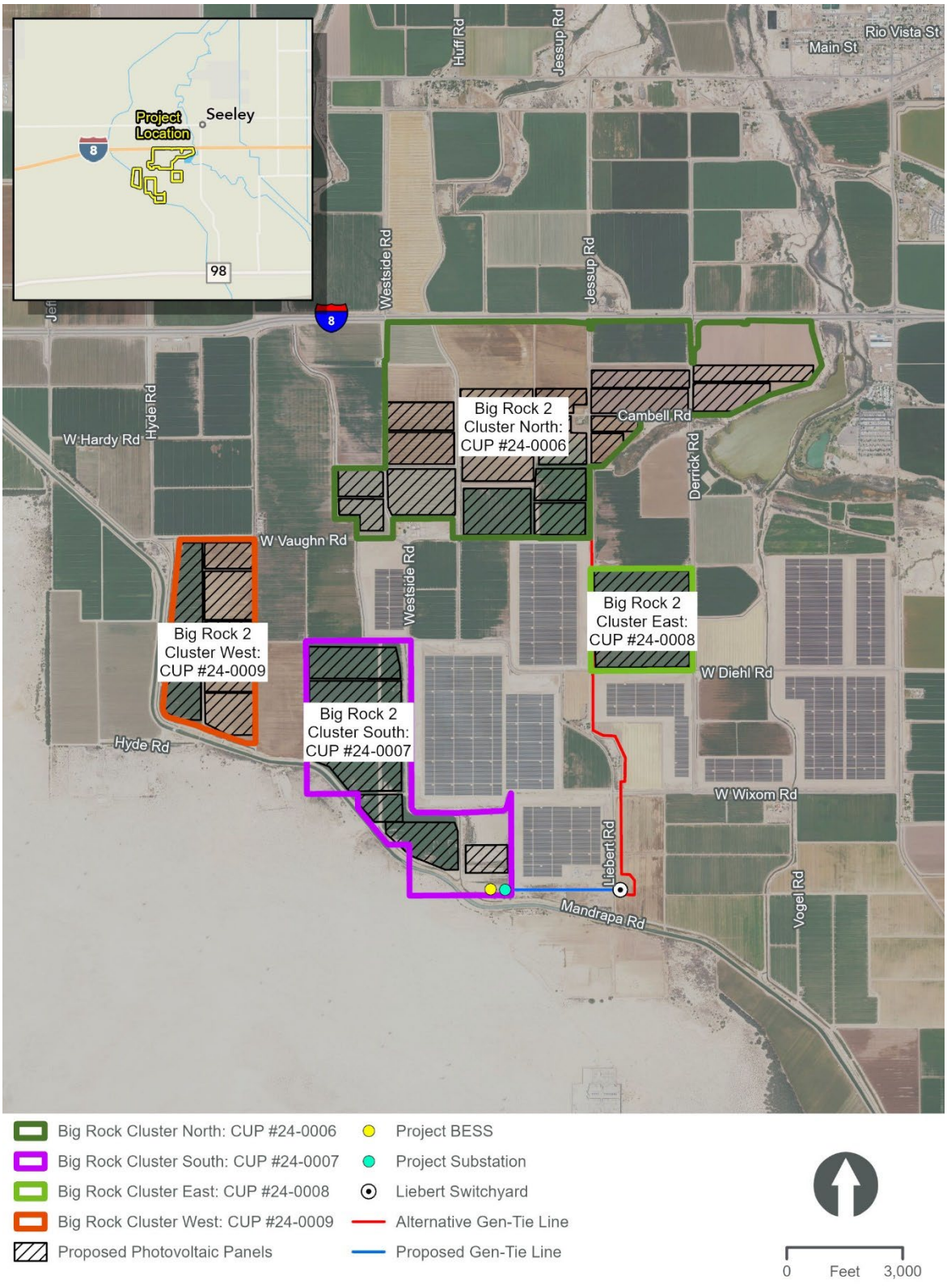
over the course of the day. Although the panels could stand up to 15 feet in height, depending on the mounting system used, panels are expected to remain between six and eight feet in height.

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks (Figure 2-6). Blocks would produce direct electrical current (DC), which is converted to alternating current (AC) at the inverter stations.

Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the project area characteristics and the desired energy production profile.

PC ORIGINAL PKG

Figure 2-4. Proposed Site Plan



PC ORIGINAL PKG

Figure 2-5. Representative Examples of Photovoltaic Panel/Mounting Configuration



Typical Fixed-Tilt Solar Panel Rows



Typical Single-Axis Tracking Solar Panels



Typical Dual-Axis Tracking Solar Panels



Typical Fixed-Tilt Mounting Structure



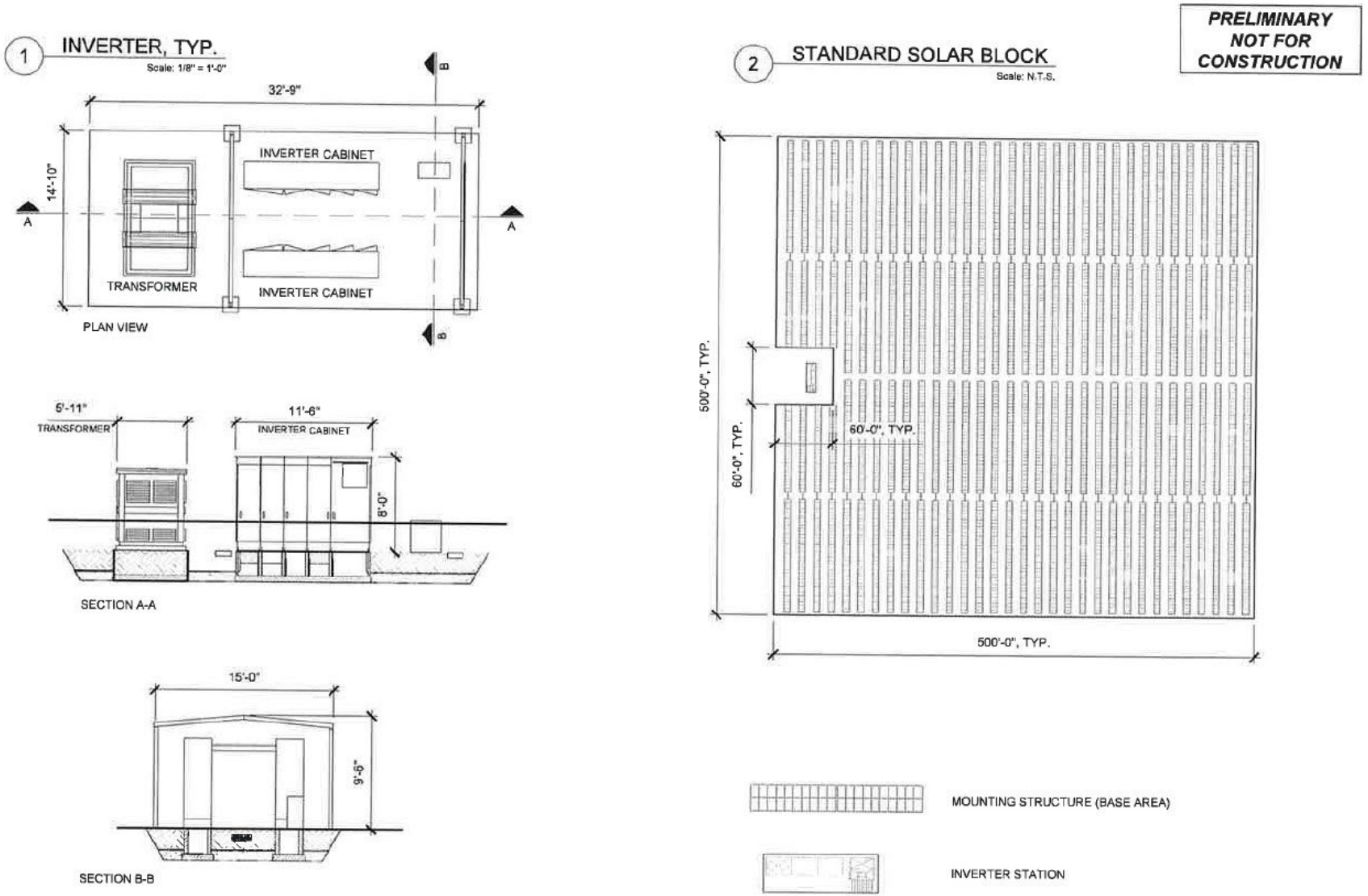
Typical Dual-Axis Mounting Structure

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-6. Standard Solar Block and Typical Inverter Plan and Profile



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

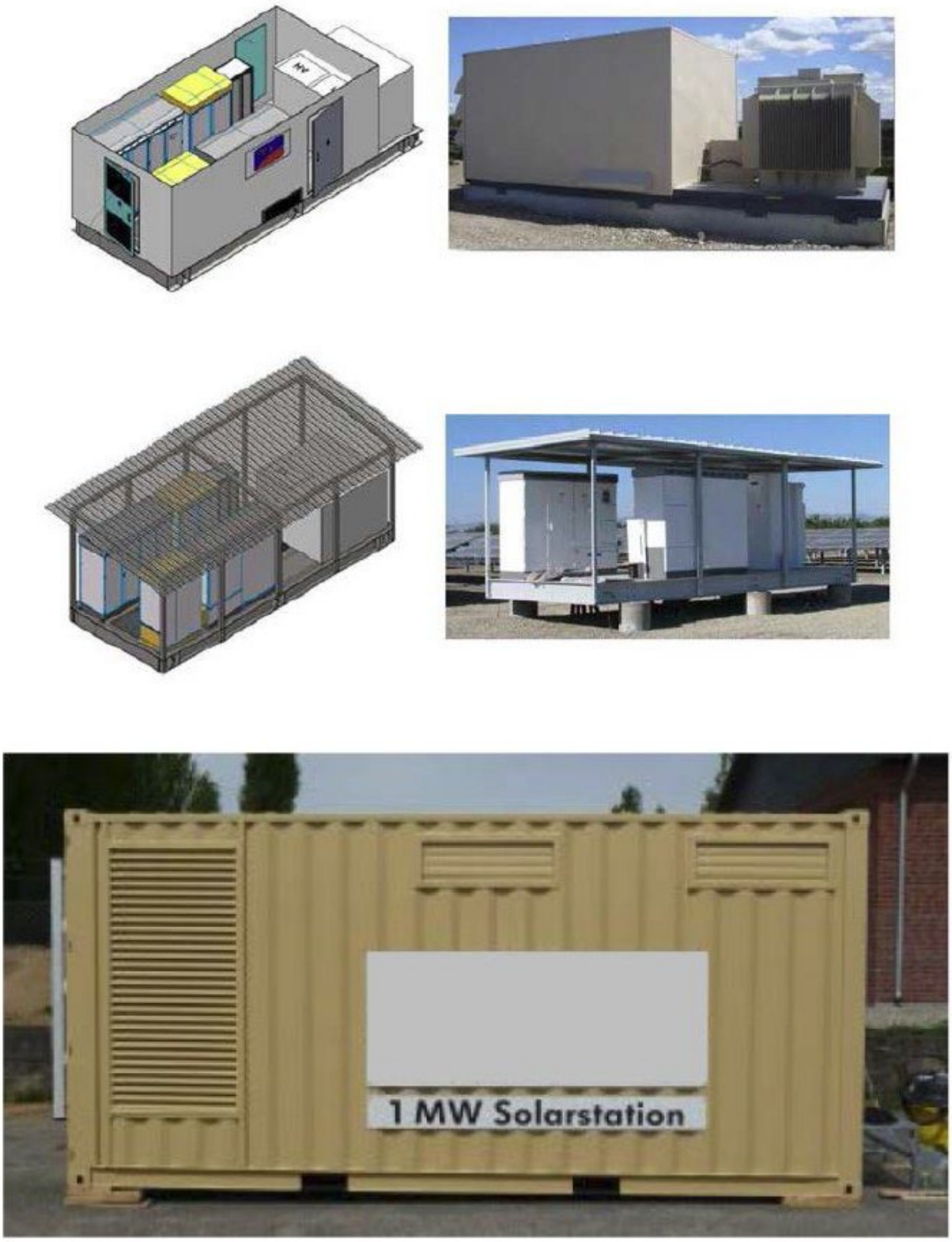
2.3.2 Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad. Figure 2-7 provides representative examples of a typical inverter station.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the project substation bus bar before being stepped up to 230kV for transmission. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the project by Imperial County.

PC ORIGINAL PKG

Figure 2-7. Representative Examples of Typical Inverter Stations



PC ORIGINAL PKG

2.3.3 Battery Energy Storage System

The project will include one or more BESS, located at or near the project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. A conceptual BESS layout is shown in Figure 2-8. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures. The maximum height of a dedicated structure is not expected to exceed 25 feet. Figure 2-9 provides representative examples of a typical energy storage system. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the project. As the BESS facility is intended to remain in service for the life of the project, it may be necessary to augment the batteries at regular intervals during project operations to restore the BESS facility to full capacity due to the life cycle of the battery units. Additional staff may be temporarily brought onsite, as needed, during augmentation installation.

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.

2.3.4 Substation(s)

The proposed project would have its own dedicated substation equipment located within the project footprint. Dedicated equipment may incorporate several components, including high voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s) (Figure 2-10). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures (such as communication towers) for diverse path routing of communications. Substations typically occupy an area of up to approximately five acres and are secured separately by a chain-link fence.

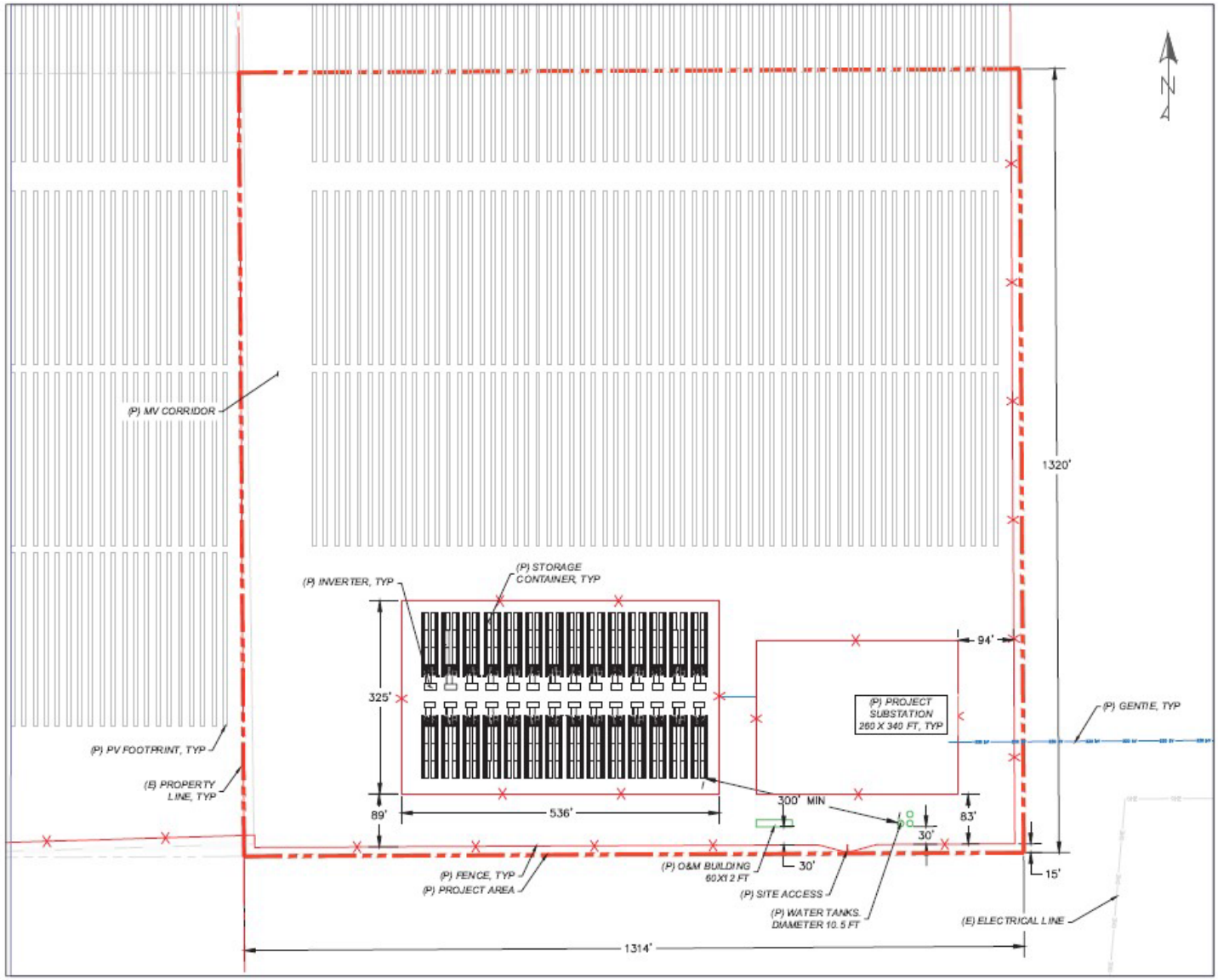
Dedicated project substations typically include a small control building (approximately 500 square feet) standing approximately 10 feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building. A representative example of a substation is presented in Figure 2-11.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-8. Conceptual BESS Layout



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-9. Representative Examples of Typical Energy Storage Systems



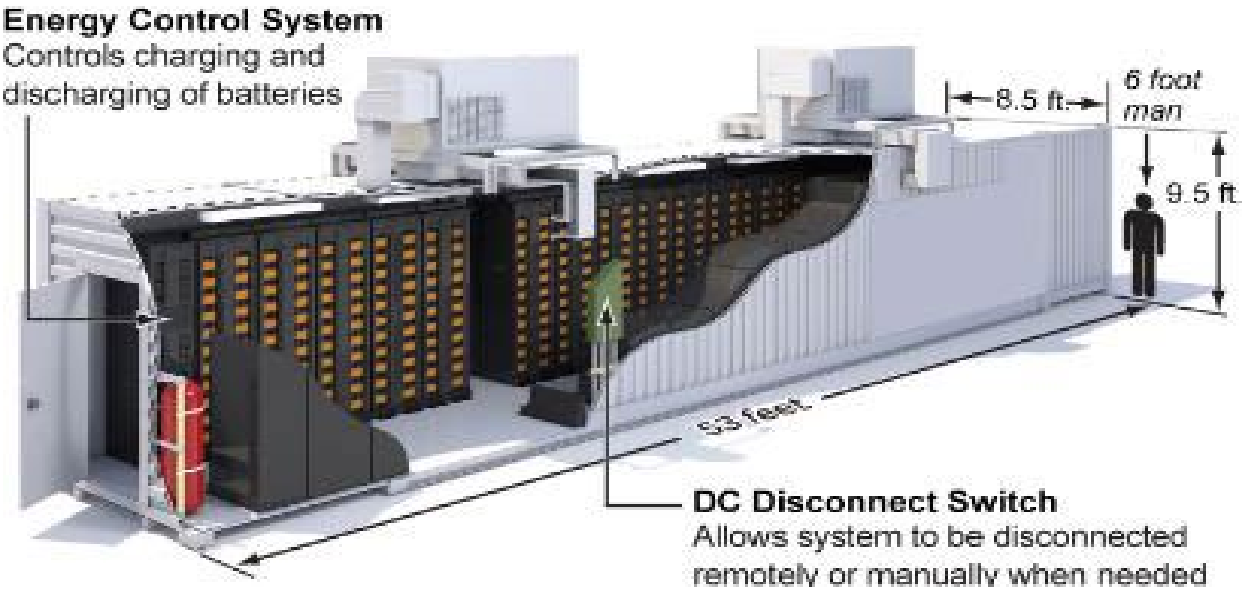
Modular BESS Installed on Concrete Pad



Modular BESS Installed on Multiple Concrete Pads

PC ORIGINAL PKG

Figure 2-9. Representative Examples of Typical Energy Storage Systems (con'td)



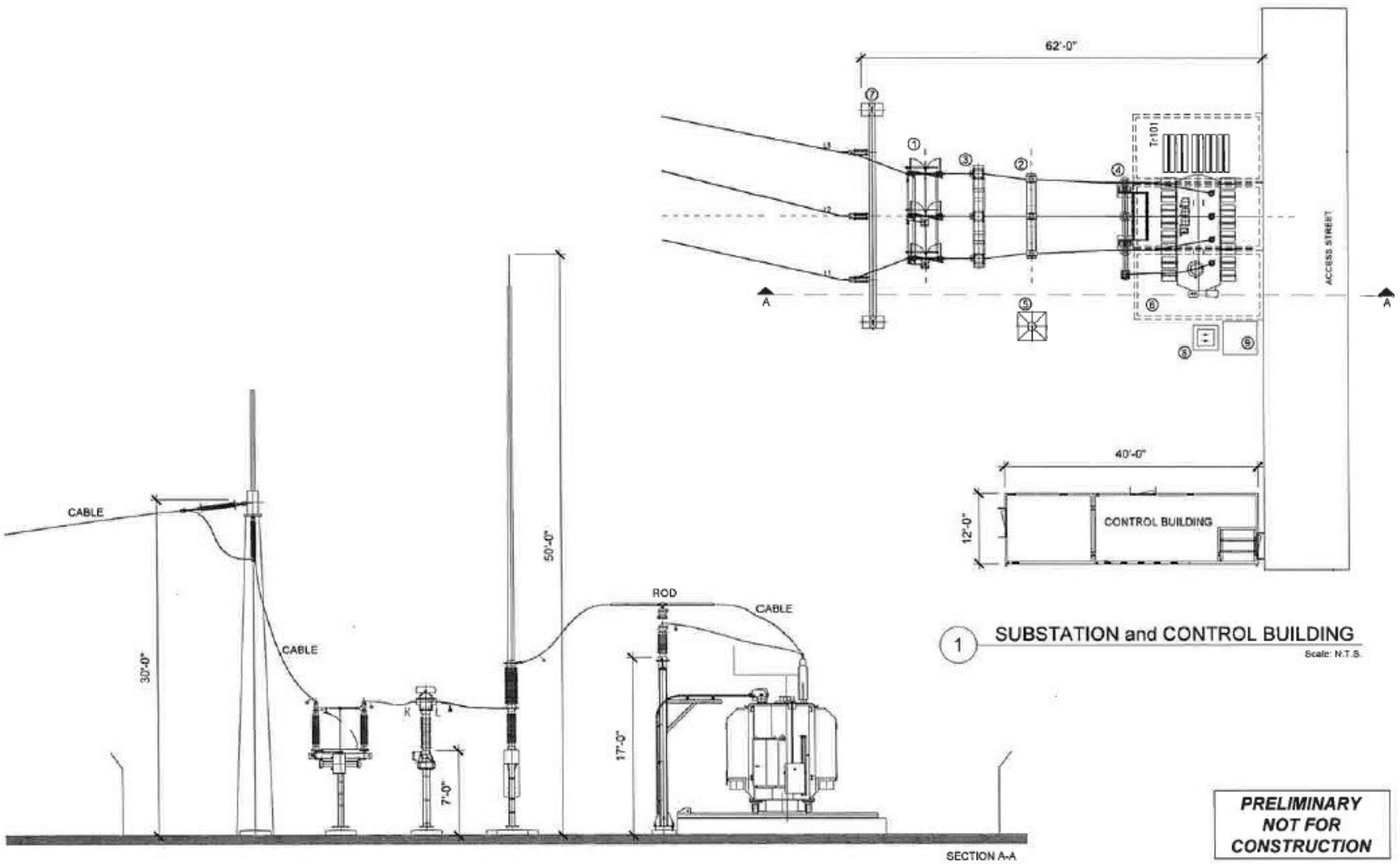
Typical BESS Module Configuration



Typical BESS

PC ORIGINAL PKG

Figure 2-10. Substation Details - Typical



PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2-11. Representative Example of Typical Substation Design



2.3.5 Transmission Line and Interconnection

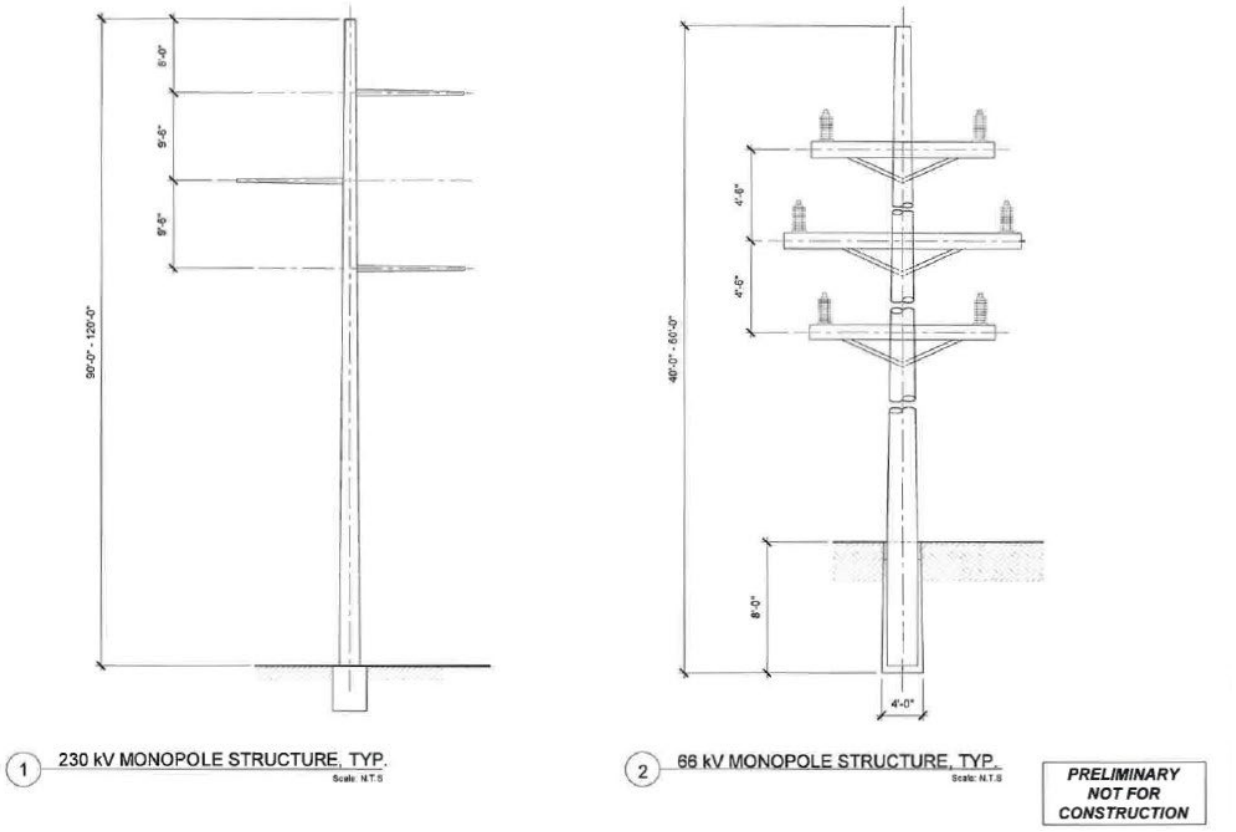
The project's 230kV step-up substation would connect to the existing 230kV Liebert Switchyard/Sub-station via one of the proposed gen-tie line alternatives (Figure 2-4). The proposed gen-tie line alignment would extend approximately 0.62 miles from the southeast corner of the Big Rock 2 Cluster South site then heads east to the Liebert Switchyard. The alternative gen-tie line alignment would extend approximately 2.04 miles from the south-central portion of the Big Rock 2 Cluster North site then heads south to the Liebert Switchyard. The project will transmit electricity to the electric grid via the existing Liebert Switchyard/Sub-station; therefore, a new electric grid switchyard/sub-station will not be required, and thus obviating the need for any real estate conveyance to IID specific to the project. The existing Liebert Switchyard is connected to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line that also passes through the existing Mandrapa Switchyard. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height (Figure 2-12) and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands. The project applicant will be required to submit application(s) to BLM in the event the gen-tie alignment will need to cross BLM lands. The BLM will determine the permits required based on the scope of the application(s).

The maximum height limit for non-residential structures and commercial communication towers in the A-2 and A-3 zones is 120 feet. The proposed project may involve construction of transmission towers up to 200 feet in height, which would exceed the height limit in the A-2 and A-3 zones and a height variance would be required.

PC ORIGINAL PKG

Figure 2-12. Monopole Details - Typical



PC ORIGINAL PKG

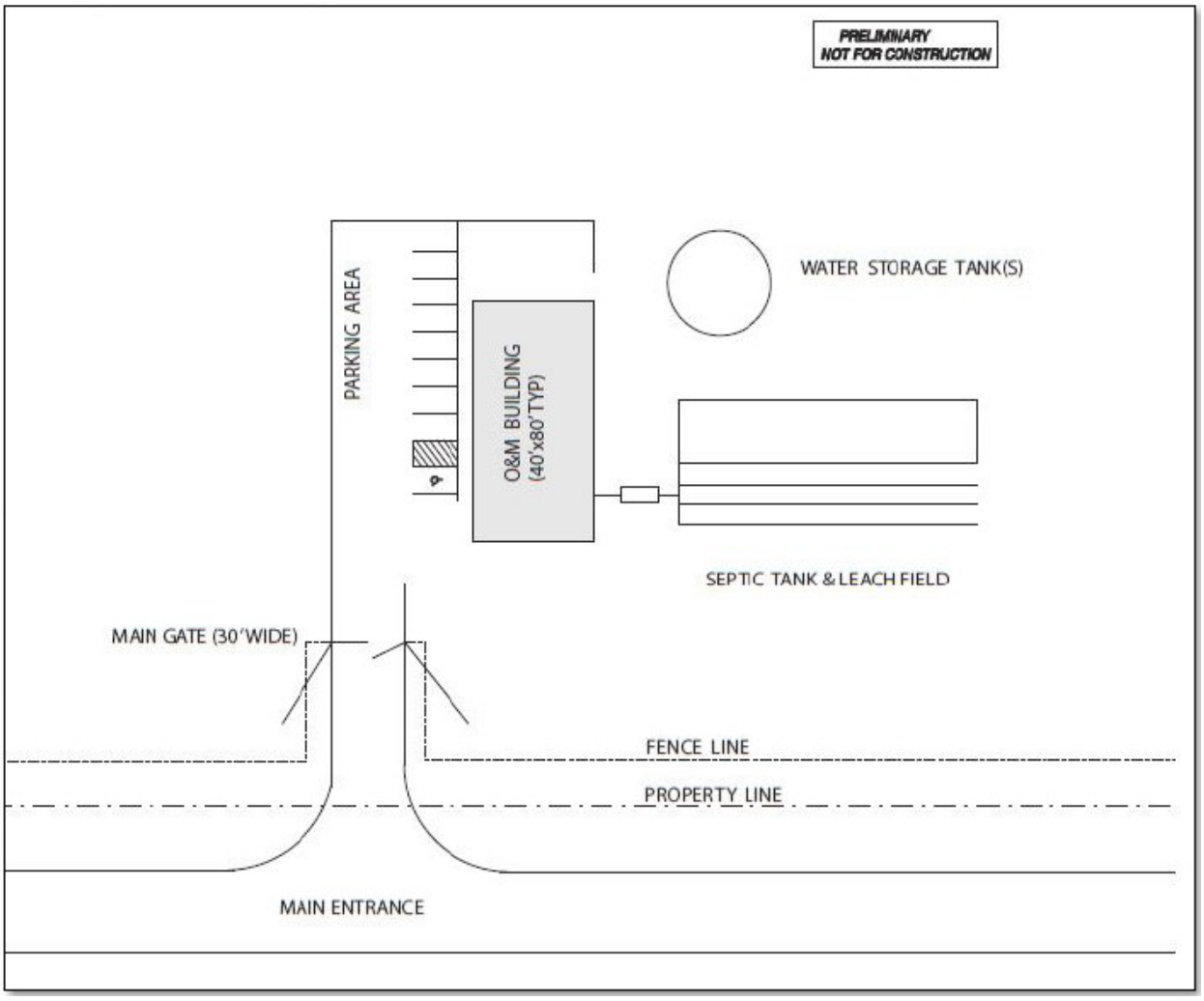
2.3.6 Operations and Maintenance (O&M) Building

Each individual CUP site may include an O&M building of approximately 40’ x 80’ in size, with associated onsite parking. Figure 2-13 depicts a typical O&M building floor plan and elevations. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Figure 2-13. Conceptual Operations and Maintenance Building Area Plan



PC ORIGINAL PKG

2.3.7 Roadway and IID Crossings

The project may require the following crossing types of IID canals and/or drains and unimproved Imperial County roads:

- overhead electric
- underground electric
- vehicular crossings

The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the project crossing or access point would still allow the drain to flow. As required by IID, the project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains. Exact locations and dimensions of any required IID facility and/or County roadway crossings would be determined prior to issuance of building permits by Imperial County.

2.3.8 Water Usage

The proposed project is anticipated to require approximately 700 acre-feet of water to support construction over a 1.5 to 2-year period. Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for municipal, commercial, industrial (MCI) temporary water use. Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the project Applicant will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which provides IID with the information needed to manage the IID-apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts.

The proposed project is anticipated to require up to 10 acre-feet per year (AFY) to support O&M over a 30-year operational period. The operational water demand would be for the O&M building, fire flow storage, and periodic panel washing. It is assumed that no water for dust control during operation will be necessary. Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). In the event that IID determines that the proposed project is to utilize Interim Water Supply Policy (IWSP) for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID has adopted an IWSP for non-agricultural projects from which water supplies can be contracted to serve new non-agricultural developments within IID's water service area.

A small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

2.3.9 Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

PC ORIGINAL PKG

2.3.10 Site Security and Fencing

The project area would be enclosed within a chain link fence measuring six feet in height with 1-foot-tall barbed wire on top of the chain link fence. Slatted chain-link fencing would be installed along the northern perimeter of the project site (portion of the project site adjacent to I-8) and non-slatted chain-link fencing would be installed around the remainder of the project perimeter. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the project.

Controlled access gates would be maintained at the main entrances to the project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

2.3.11 Lighting

Outdoor lighting for the project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

2.3.12 Site Access

Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels. Internal access roads would be constructed with an all-weather surface and meet County Fire Department's standards. Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

2.3.13 Fire Protection/Fire Safety Systems

Fire protection systems for battery systems would be designed in accordance with California Fire Code and would take into consideration the recommendations of the National Fire Protection Association (NFPA) 855.

Fire suppression agents such as Novec 1230 or FM 2000, or water may be used as a suppressant. In addition, fire prevention methods would be implemented to reduce potential fire risk, including voltage, current, and temperature alarms. Energy storage equipment would comply with Underwriters Laboratory (UL)-95401 and test methods associated with UL-9540A. The project would include lithium-ion batteries. For lithium-ion batteries storage, a system would be used that would contain the fire

PC ORIGINAL PKG

event and encourage suppression through cooling, isolation, and containment. Suppressing a lithium-ion (secondary) battery is best accomplished by cooling the burning material.

To mitigate potential hazards, redundant separate methods of failure detection would be implemented. These would include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off gas detection would be implemented, as applicable. These are in addition to other potential protective measures such as ventilation, overcurrent protection, battery controls maintaining batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Remote alarms would be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan would be implemented. Additionally, the project applicant would contribute its proportionate share for purchase of any fire-suppression equipment, if determined warranted by the County fire department for the proposed project.

2.4 Project Construction

The construction period for the project is approximately 18 to 24 months. Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the project's construction period.

Construction traffic could access the project site from the north or south via Derrick Road, Jessup Road, Westside Road, and Hyde Road, and from the east via Diehl Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) Evan Hewes Hwy, Westside Road, and Diehl Road for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00

pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the project area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

Site preparation would be planned and designed to minimize the amount of earth movement required for the project, to the extent feasible. The hydrology design would be given priority to protect the project's facility components, as well as adjacent IID canals/drains and County roads, from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

2.4.1 Laydown Areas

At full build-out, most of the project footprint would be disturbed by construction of the project. Therefore, temporary construction laydown and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the project disturbance footprint. Due to the large scale of the project, the laydown areas may be relocated periodically within the solar field acreage as the project is built out.

2.4.2 Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the project.

2.5 Project Operation

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation

PC ORIGINAL PKG

- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

2.5.1 Workforce

It is expected that the project would require an operational staff of 4 to 10 full-time employees. It is possible that the proposed project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

2.6 Utility Grid Upgrades

Certain utility grid upgrades will be performed by the utility to support the interconnection of the project. Upgrades will be limited to areas already within the footprint of the utility. The utility upgrades assigned to the project include, a Remote Terminal Unit (RTU) at Imperial Valley Substation, installation of one or more new 230-kV circuit breakers, two or more 230 kV disconnect switches, one A-frame deadend structure, line deadend hardware, three tiedowns, three surge arrestors, one Potential Transformer (PT) and associated foundations, structures, and relaying at Imperial Valley Substation. Precurser network upgrades that are expected to be in service include 24 230kV circuit breaker upgrades at Imperial Valley Substation identified as the "Short Circuit Mitigation for Imperial Valley 230kV Circuit Breakers" transmission planning project (TPP) Project.

2.7 Decommissioning and Reclamation

PV solar and BESS equipment typically has a lifespan of over 30 years. The proposed project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, continue to generate and sell power from the project or decommission and remove the system and its components. Upon decommissioning, the PV solar and BESS facilities could be converted to other uses in accordance with applicable land use regulations in effect at that time.

It is anticipated that during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, substation(s), transformers, electrical wiring, equipment on the BESS and inverter pads, and related equipment and concrete pads.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the PV solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the batteries, inverters, transformers, and related equipment, would also be removed. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried

PC ORIGINAL PKG

by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction function unless they may be used for subsequent land use. The area would be thoroughly cleaned, and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

The applicant would prepare a project Reclamation Plan that would be implemented at the end of the project's useful life, and would be consistent with Imperial County's decommissioning/reclamation requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.
- Description of the activities necessary to restore the project area to its previous condition. Such activities include removing and recycling PV solar and battery equipment, storage equipment, medium voltage collector line, substation, and gen-tie lines. The soils would then be de-compacted and restored to agricultural purposes.
- Presentation of the costs associated with the proposed decommissioning/reclamation measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased buildout, the phases would be decommissioned/reclaimed independently of one another.

2.8 Required Project Approvals

2.8.1 Imperial County

The following are the primary discretionary approvals required for implementation of the project:

1. **General Plan Amendment (#24-0002).** An amendment to the County's General Plan Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. As shown in Figure 2-3, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.
2. **Zone Change (#24-0003).**
    - **Big Rock 2 Cluster North**. As shown in Table 2-6 and Figure 2-3, the Big Rock 2 Cluster North site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), A-2-RE (General Agricultural – Renewable Energy Overlay), and A-3-RE (Heavy Agriculture – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 North (APNs 051-300-032 and 051-300-036) are already classified into the

PC ORIGINAL PKG

RE Overlay Zone. As shown in Table 2-6, the applicant is requesting a Zone Change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE).

Table 2-6. Big Rock 2 Cluster North Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-270-020	A-2-R	A-2-R-RE
2	051-270-028	A-2	A-2-RE
3	051-270-036	A-2	A-2-RE
4	051-270-041	A-2-R	A-2-R-RE
5	051-280-054	A-2	A-2-RE
6	051-300-011	A-2	A-2-RE
7	051-300-016	A-2	A-2-RE
8	051-300-026	A-2	A-2-RE
9	051-300-035	A-3	A-3-RE
10	051-300-037	A-3	A-3-RE
11	051-300-032 (northern portion)	A-2	A-2-RE
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	N/A
13	051-300-036 (to be re-entitled)	A-3-RE	N/A

- **Big Rock 2 Cluster South**. As shown in Table 2-7 and Figure 2-3, the Big Rock 2 Cluster South site is currently zoned A-3 (Heavy Agriculture). As shown in Table 2-7, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-3-RE).

Table 2-7. Big Rock Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-330-003	A-3	A-3-RE
2	051-350-004	A-3	A-3-RE
3	051-350-006	A-3	A-3-RE
4	051-350-007	A-3	A-3-RE
5	051-350-008	A-3	A-3-RE

- **Big Rock 2 Cluster East.** As shown in Table 2-8 and Figure 2-3, the Big Rock 2 Cluster East site is currently zoned A-2-RE (General Agricultural – Renewable Energy Overlay). The project parcels associated with the previously-approved CUP for Laurel Cluster 2 South (APNs 051-310-027 and 051-310-0328) are already classified into the RE Overlay Zone. Therefore, no Zone Change would be required for the Big Rock 2 Cluster East site.

PC ORIGINAL PKG

Table 2-8. Big Rock 2 Cluster East/Laurel Cluster South Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-310-027	A-2-R-RE	N/A
2	051-310-028	A-2-R-RE	N/A

Big Rock 2 Cluster West. As shown in Table 2-9 and Figure 2-3, the Big Rock 2 Cluster West site is currently zoned A-2-R (General Agricultural Rural) and A-3 (Heavy Agriculture). As shown in Table 2-9, the applicant is requesting a Zone Change to include/classify the project parcels into the RE Overlay Zone (A-2-R-RE and A-3-RE).

Table 2-9. Big Rock 2 Cluster West Existing and Proposed Zoning

	APN	Existing Zoning	Proposed Zoning
1	051-290-018	A-2-R	A-2-R-RE
2	051-290-019	A-3	A-3-RE
3	051-320-005	A-3	A-3-RE
4	051-320-006	A-3	A-3-RE
5	051-320-007	A-3	A-3-RE

3. **Approval of the following CUPs:**
    - **Big Rock 2 Cluster North: #24-0006**
    - **Big Rock 2 Cluster South: #24-0007**
    - **Big Rock 2 Cluster East: #24-0008**
    - **Big Rock 2 Cluster West: #24-0009**

    Implementation of the project would require the approval of the four CUPs listed above by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. With approval of the zone change, the project site would be zoned General Agricultural, General Agricultural Rural, and Heavy Agriculture with a RE Overlay Zone (A-2-RE, A-2-R-RE and A-3-RE).

    Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

    - *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
    - *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*

PC ORIGINAL PKG

- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

4. **Variance (#24-0002 through 24-0006).** The proposed project may involve construction of transmission and communication towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance for any transmission and communication structures that exceed this height limit.
5. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and Board of Supervisors prior to making a decision on approval or denial of the project.

The project may involve additional ministerial and discretionary approvals as listed below. Ministerial and discretionary approvals may include, but are not limited to the following:

- Grading Permit(s) - Imperial County Planning & Development Services (ICPDS)
- Building Permit(s) - ICPDS
- Dust Control Plan – Imperial County Air Pollution Control District (ICAPCD)
- Rule 310 Exemption (as applicable) - ICAPCD
- Construction Traffic Control Plan – Imperial County Department of Public Works (ICDPW)
- County Road Encroachment Permits, Transportation Permits - ICDPW

PC ORIGINAL PKG

- Vacation of Public Easements (as applicable) - ICDPW
- Site Plan and Architectural Review – ICPDS
- Occupancy Permits - ICPDS
- Fire Safety Plan – Imperial County Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements – Imperial County Fire Department and Office of Emergency Management
- On-site Water Treatment Permit – Imperial County Division of Environmental Health, ICDPW
- Private Sewage Disposal Permit - Imperial County Division of Environmental Health
- Project Decommissioning Plan - ICPDS, ICDPW
- Pest Management Plan **-** Agricultural Commissioner's Office

2.8.2 Imperial Irrigation District

Various approvals may be required from IID in conjunction with implementation of the proposed project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the project, an encroachment would occur as the proposed project would cross IID facilities with access points and electrical crossings. The proposed project may also drain into IID drain facilities. Due to the preliminary nature of the project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

2.8.3 Discretionary Actions and Approvals by Other Agencies

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of the project. Trustee Agencies are state agencies that have discretionary approval or jurisdiction by law over natural resources affected by a project. These agencies may include, but are not limited to the following:

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- California Endangered Species Act (CESA), Incidental Take Permit (ITP) for Western Burrowing Owl (recently listed by California Department of Fish and Wildlife as a "Candidate" species).

PC ORIGINAL PKG

- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3 Environmental Analysis, Impacts, and Mitigation

3.1 Introduction to Environmental Analysis

This section provides an overview of the environmental analysis and presents the format for the environmental analysis in each topical section.

3.1.1 Organization of Issue Areas

Chapter 3 provides an analysis of impacts for those environmental topics that the County determined could result in "significant impacts," based on preparation of an Initial Study and review by the County's Environmental Evaluation Committee and responses received during the scoping process, including the NOP review period and public scoping meeting. Sections 3.2 through 3.16 discuss the environmental impacts that may result with approval and implementation of the project, and where impacts are identified, recommends mitigation measures that, when implemented, would reduce significant impacts to a level less than significant. Each environmental issue area in Chapter 3 contains a description of the following:

- The environmental setting as it relates to the specific issue
- The regulatory framework governing that issue
- The threshold of significance (from Appendix G of the CEQA Guidelines)
- The methodology used in identifying and considering the issues
- An evaluation of the project-specific impacts and identification of mitigation measures
- A determination of the level of significance after mitigation measures are implemented
- The identification of any residual significant impacts following mitigation

3.1.2 Format of the Impact Analysis

This analysis presents the potential impacts that could occur under the project along with any supporting mitigation requirements. Each section identifies the resulting level of significance of the impact using the terminology described below following the application of the proposed mitigation. The section includes an explanation of how the mitigation measure(s) reduces the impact in relation to the applied threshold of significance. If the impact remains significant (i.e., at or above the threshold of significance), additional discussion is provided to disclose the implications of the residual impact and indicate why no mitigation is available or why the applied mitigation does not reduce the impact to a less than significant level.

Changes that would result from the project were evaluated relative to existing environmental conditions within the project site as defined in Chapter 2. Existing environmental conditions are based on the time at which the NOP was published on September 3, 2024. In evaluating the significance of these changes, this EIR applies thresholds of significance that have been developed using: (1) criteria discussed in the CEQA Guidelines; (2) criteria based on factual or scientific information; and (3) criteria

based on regulatory standards of local, state, and/or federal agencies. Mechanisms that could cause impacts are discussed for each issue area.

This EIR uses the following terminology to denote the significance of environmental impacts of the project:

- *No impact* indicates that the construction, operation, and maintenance of the project would not have any direct or indirect effects on the environment. It means no change from existing conditions. This impact level does not need mitigation.
- A *less than significant impact* is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.
- A *significant impact* is defined by CEQA Section 21068 as one that would cause "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to the project must be provided, where feasible, to reduce the magnitude of significant impacts.
- An *unmitigable significant impact* is one that would result in a substantial or potentially substantial adverse effect on the environment, and that could not be reduced to a less than significant level even with any feasible mitigation. Under CEQA, a project with significant and unmitigable impacts could proceed, but the lead agency would be required to prepare a "statement of overriding considerations" in accordance with State CEQA Guidelines California Code of Regulations (CCR) Section 15093, explaining why the lead agency would proceed with the project in spite of the potential for significant impacts.

PC ORIGINAL PKG

3.2 Aesthetics

This section provides a description of the existing visual and aesthetic resources within the project area and relevant state and local plans and policies regarding the protection of scenic resources. Effects to the existing visual character of the project area as a result of project-related facilities are considered and mitigation is proposed based on the anticipated level of significance. The information provided in this section is summarized from the *Visual Resources Report* prepared by Dudek. This report is included in Appendix B of this EIR.

3.2.1 Existing Conditions

Project Site and Surrounding Area

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is designated Agricultural in the Imperial County General Plan. The project parcels are zoned Agricultural lands and/or Rural lands. Current land use of the project parcels includes cropland and irrigated grain and hayfields. The project parcels occur adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy, specifically for PV solar and BESS projects that have been approved and entitled by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Nearby land uses include residential, commercial, transportation, military, electric utility, and renewable energy production. Nearby residential land uses include the town of Seely, and commercial land uses include the Rio Bend Golf Course (and associated Specific Plan Area) to the east of the project site. The I-8 and Union Pacific Railroad transportation corridors are located to the north of the project site, and further north the Department of Defense (DOD) Naval Air Facility El Centro. To the south of the project, utility land uses include the SDG&E 230/500 kV Imperial Valley Substation, as well as additional agricultural lands that have been designated for geothermal, PV solar and BESS renewable energy projects (Appendix B of this EIR).

Visual Character and Quality

Generally, the project site and the immediately surrounding area comprise a relatively flat agricultural landscape that supports low, green grasses and other agricultural crops, irrigation canals, electrical transmission infrastructure, and solar development. The project's valley landscape is generally indistinct from other locations in the agricultural belt of Imperial Valley and is submissive to prominent mountain terrain that provides a scenic backdrop of visual interest (Appendix B of this EIR).

Existing character and viewing conditions present in the project site and in the surrounding area are further described through the use of representative vantage points offering views to the project site (also referred to as Key Observation Points [KOPs]). As an initial step in this process, aerial imagery

PC ORIGINAL PKG

was reviewed to identify locations from which the project would potentially be visible from publicly accessible vantage points. Following this review, preliminary representative viewpoints for site photography were established. A photographic field survey occurred in September 2023 during which representative viewpoints were visited and existing conditions and views towards the project site were photo-documented. A subset of five photographed viewpoints were selected as KOPs. Assessments of existing visual conditions were made based on professional judgment that took into consideration sensitive receptors and sensitive viewing areas in the project area (Appendix B of this EIR).

Figure 3.2-1 illustrates the photo documented KOPs and the direction to which the photographs were taken. The photographs depicting the existing condition at the project site are presented below, and the visual simulations at each KOP depicting the proposed condition are presented in Section 3.2.3. Descriptions of each KOP are as follows:

KOP 1 – Westbound Interstate 8. Located on the shoulder of the eastbound travel lanes of the I-8 approximately 200 feet from the northern boundary of the project site (Figure 3.2-2). The view from KOP 1 is oriented to the southwest and looks across the paved interstate travel lanes, active agricultural lands marked by low and green, grass-like vegetation (likely alfalfa), the low, raised berm of irrigation canals and drainage ditches, clumped trees that have been erected as windbreaks, and more distant desert lands of western Imperial County. The dark and hazy silhouettes of distant hills and mountains are visible and the long mountain range forms the westerly horizon. The visual character of the scene is influenced by the grass-like vegetation of foreground lands and the lack of prominent vertical development. Electrical transmission infrastructure (i.e., lattice transmission towers) are present in the landscape but due to distance and lattice construction/materials, the structures are not visually dominant.

KOP 2 – Eastbound Interstate 8. Situated approximately 0.6 miles to the east of KOP 1, KOP 2 approximates the view to the project site available from the eastbound travel lanes of I-8 (Figure 3.2-3). Located on the interstate shoulder, KOP 2 looks to the southeast across the project site and a landscape dominated by flat terrain and agricultural uses. The northern project boundary is situated approximately 125 feet away (i.e., beyond the existing post and wire fencing in the foreground). The visible reach of the project site is characterized by a wide, dirt roadway that abuts an expansive field of low, green, grass-like vegetation. The elevated profile of Derrick Road is visible to the west as is a collection of mature trees that are located along Derrick Road to the south of the interstate. A series of thin poles supporting electrical distribution lines run north-south along Derrick Road and then scatter in the landscape to the southeast of KOP 2. Lastly, a collection of rectangular hay bale stacks covered with white tarps/fabric material is located to the southeast (the white of the tarps slightly stand out in a landscape dominated by brown and green tones).

KOP 3 – Southbound Derrick Road. KOP 3 is located atop the elevated bridge profile of Derrick Road as it spans I-8 (Figure 3.2-4). The view is oriented to the south-southwest and due to an elevated vantage point, the landscape is somewhat expansive and visibility extends to prominent albeit somewhat hazy landforms to the south (mounded and pyramidal El Centinela) and southwest (Jacumba Mountains). In the foreground and beyond the deck and railing of the Derrick Road bridge, the landscape is marked by north-south alignment of wood poles supporting a local electrical distribution line. A concrete lined canal generally parallels the distribution line (and Derrick Road) and fronts active agricultural lands covered with low, green, grass-like vegetation. Rectangular hale bay stacks covered with white tarps occur off-center in the KOP 3 scene and isolated or small clustered tree groupings are scattered throughout the landscape. Visible electrical infrastructure

PC ORIGINAL PKG

rises from the valley floor to the southwest and congregates at the existing Imperial Valley Substation that is located nearly 3.7 miles to the south-southwest of KOP 3 (in the KOP 3 view, the substation is marked by a collection of dark and thin, overlapping vertical lines near the northwesterly base of El Centinela). Despite the presence of multiple electrical transmission lines and a large substation, El Centinela and the distant mountain range to the southwest-west are the dominant features in the landscape.

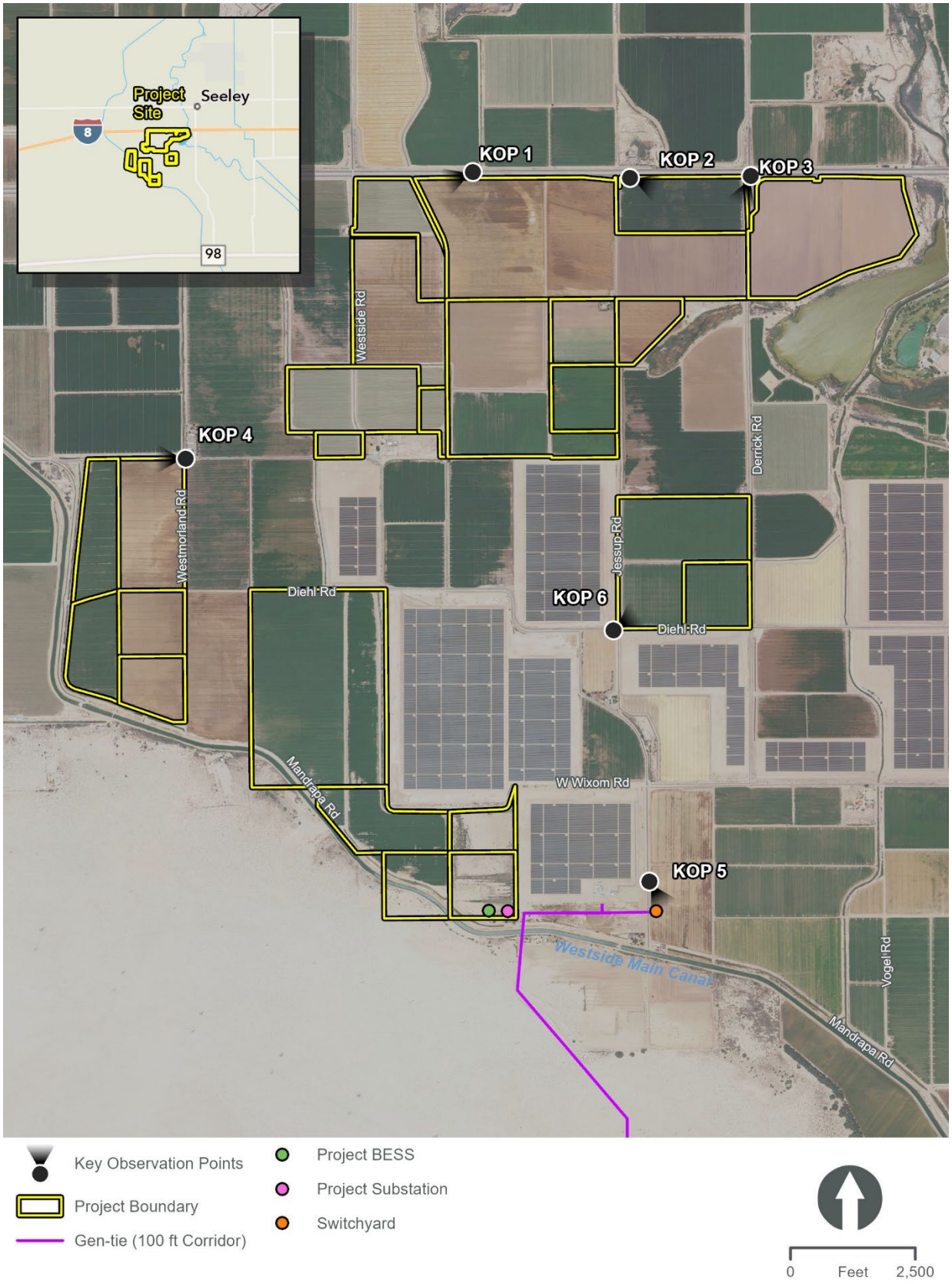
KOP 4 – Westbound Vaughn Road. Located on westbound Vaughn Road adjacent to the project boundary and the Westside Drain, KOP 4 looks southwest towards the southwestern corner of the project site that is currently occupied by low, green, grass-like vegetation (likely alfalfa hay). In Figure 3.2-5, KOP 4 is an unmarked, paved, east-west road (approximately 20 feet wide) that in the KOP 4 landscape, abuts the Westside Drain, rural residential lands, and agricultural lands to the north, and additional irrigation drains, and agricultural fields to the south. Beyond the project site and agricultural lands, a visible, north-south line of mature trees (a planted windbreak) occurs to the west-southwest and several tall and vertical steel lattice towers supporting transmission lines extend from the desert floor and above the tree line. Lastly and as at other KOPs, the background of the KOP 4 landscape is marked by dark, slightly hazy, and rugged hill and mountain terrain.

KOP 5 – Southbound Liebert Road. Situated adjacent to the concrete lined Fern Canal and on the dirt shoulder of Liebert Road (a paved road), the KOP 5 view is oriented to the southeast and looks across active agricultural lands and undeveloped yet vegetated lands occurring to the north and south of the nearby All-American Canal (Figure 3.2-6). The vegetation to the south of the All-American Canal presents as taller and more untamed than the agricultural grasses in the foreground of the KOP 5 view. A small, modest residential structure (assumed to be vacant) is visible to the southwest near the small cluster of palm trees and an assortment of numerous thin, dark, and vertical structures/lines occurs to the south and marks the Imperial Valley Substation (and lines terminating/originating at the substation). A transmission line is aligned along Liebert Road and while located nearly 6 miles away, the dark and mounded form of El Centinela dominates the southern horizon. Additional mountainous terrain is visible to the southeast but due to distance and apparent scale, these features are not visually dominant.

Lastly and while not visible in the KOP 5 view, an existing operational solar facility (Campo Verde Solar Facility) that includes a project substation is located approximately 200 feet to the west of KOP 5 and Liebert Road.

KOP 6 – Eastbound Diehl Road. Located at the intersection of Diehl Road and Jessup Road near the Wixom Drain, KOP 6 is located within 150 feet of the nearest project boundary that is located north of Diehl Road (Figure 3.2-7). As experienced from KOP 6, the local landscape is comprised of flat terrain with visible bermed land in the foreground that parallel Diehl Road and Jessup Road (and obscured irrigation drains). At the time of the field visit to obtain photographs of the view from KOP 6 the project site was partially inundated with water. The remainder of the site appears to have been recently tilled or otherwise disturbed. Beyond the project site, several indeterminant, light-colored, boxy structures appear on the low horizon as do pockets of tall, dark green vegetation/trees. Lastly. thin and narrow poles supporting electrical transmission infrastructure dot the low horizon and are visible along the Diehl Road corridor in the distance.

Figure 3.2-1. Key Observation Points



PC ORIGINAL PKG

Figure 3.2-2. Existing Key Observation Point 1



Existing View from westbound Interstate 8 towards the Project site (approximately 200 feet away)

PC ORIGINAL PKG

Figure 3.2-3. Existing Key Observation Point 2



Existing View from eastbound Interstate 8 towards the Project site (approximately 125 feet away)

PC ORIGINAL PKG

Figure 3.2-4. Existing Key Observation Point 3



Existing View from southbound Derrick Road over Interstate 8

PC ORIGINAL PKG

Figure 3.2-5. Existing Key Observation Point 4



Existing view from westbound Vaughn Road adjacent to Project site

PC ORIGINAL PKG

Figure 3.2-6. Existing Key Observation Point 5



Existing view from southbound Liebert Road (approximately 0.25 mile north of All-American Canal)

PC ORIGINAL PKG

Figure 3.2-7. Existing Key Observation Point 6



Existing view from eastbound Diehl Road at Jessup Road intersection (approximately 150 feet from nearest project boundary)

PC ORIGINAL PKG

Scenic Vista

Scenic vistas are generally broad and expansive views that may or may not be sited at elevated areas. They may or may not be located at a designated scenic overlook or other area that offers a static, scenic view of a landscape. Lands within the project site are located in an agricultural area of the County and do not encompass lands containing a scenic vista designated as such by the State or the County General Plan. Scenic vistas are not specifically discussed in the Final Program EIR for the Imperial County General Plan; however, natural and developed areas including deserts, sand hills, mountains, the Salton Sea, agricultural lands, and urban areas are identified as County visual resources (Appendix B of this EIR). Due to the general lack of dominant vertical development in the immediate project area (and presence of agricultural lands), broad and long views to regional mountains including the Jacumba Mountains located west of the project site and pyramidal El Centinela (also known as “Weeishpa” by local tribes; located south of the project site) are generally available from I-8 and local roads near the project site (Appendix B of this EIR).

Scenic Highways

There are no designated State scenic highways in Imperial County (County of Imperial 2016). Lands within the project site are not located within a state scenic highway corridor, nor are there any state scenic highways located near the project site. The nearest eligible state scenic highway, State Route (SR)-111 between Bombay Beach and SR-195 near Mecca, is over 40 miles away. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles away (Appendix B of this EIR).

Due to distance and intervening topography and development, views to the project site are not available from a designated scenic highway.

Light and Glare

While glare is considered a continuous source of brightness (relative to diffused light), glint is a direct redirection of the sun beam in the surface of a PV solar module. Glint is highly directional, since its origin is purely reflective, whereas glare is the reflection of diffuse irradiance; it is not a direct reflection of the sun.

The project site consists of active agricultural lands and thus, does not include existing sources of light or glare. Most existing light and glare in the project area is associated with motor vehicles traveling on surrounding roadways, air traffic, and farm vehicles/equipment. Local roadways generate glare both during the night hours when cars travel with lights on, and during daytime hours because of the sun’s reflection from cars and pavement surfaces. Overall, existing light and glare sources are muted and do not contribute significantly to the existing night or day environment (Appendix B of this EIR).

3.2.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

PC ORIGINAL PKG

State

California Department of Transportation

Caltrans manages the California Scenic Highway Program. The goal of the program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to the scenic corridor.

California Scenic Highways Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highway Code, Section 260 et seq. The Scenic Highways Program is comprised of officially designated scenic highways (i.e., highways for which corridor protection programs have been adopted and the highways are listed in the Streets and Highway Code) and eligible scenic highways (i.e., highways designated as scenic by the local planning department).

Local

Imperial County General Plan

The Imperial County General Plan contains policies for the protection and conservation of scenic resources and open spaces within the County. These policies also provide guidance for the design of new development. The Conservation and Open Space Element of the General Plan provides specific goals and objectives for maintaining and protecting the aesthetic character of the region. Table 3.2-1 provides an analysis of the proposed project’s consistency with the Conservation and Open Space Element Goal 7. Additionally, the Circulation and Scenic Highways Element of the General Plan provides policies for protecting and enhancing scenic resources within highway corridors in Imperial County, consistent with the Caltrans State Scenic Highway Program.

PC ORIGINAL PKG

Table 3.2-1. Consistency with Applicable General Plan Conservation and Open Space Element Policies

General Plan Policies	Consistency with General Plan	Analysis
Goal 7: The aesthetic character of the region shall be protected and enhanced to provide a pleasing environment for residential, commercial, recreational, and tourist activity.	Consistent	The project would result in changes to the visual character of the project area, which is currently characterized as an agricultural landscape. As described in Impact 3.2-3, the existing visual character would not be substantially altered by the project. Proposed PV module frames are expected to be approximately 6 to 8 feet in height and as such, the introduction of solar panels would not result in substantial obstruction of views to distant mountain ranges such as those available from I-8 and Derrick Road (i.e., KOPs 1 and 3). Furthermore, project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) and existing operational Campo Verde Solar Facility that have altered the existing project area landscape. For these reasons, the introduction of a solar facility to the project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.
Objective 7.1: Encourage the preservation and enhancement of the natural beauty of the desert and mountain landscape.	Consistent	The Project site is located within an agricultural portion of the County and generally avoids both desert and mountain landscapes.

Source: County of Imperial 2016

County of Imperial Land Use Ordinance, Title 9

The County's Land Use Ordinance Code provides specific direction for lighting requirements.

Division 17: Renewable Energy Resources, Section 91702.00 – Specific Standards for All Renewable Energy Projects

(R) Lights should be directed or shielded to confine direct rays to the project site and muted to the maximum extent consistent with safety and operational necessity.

3.2.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to aesthetic and visual resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

PC ORIGINAL PKG

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to aesthetics are considered significant if any of the following occur:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Methodology

This visual impact analysis is based on field observations conducted in September 2023, as well as a review of maps and aerial photographs for the project area. A representative subset of photographed viewpoints was selected as KOPs, which collectively serve as the basis for this assessment. Assessments of existing visual conditions were made based on professional judgment that took into consideration sensitive receptors and sensitive viewing areas in the project area. The locations of the six KOPs in relation to the project site are presented in Figure 3.2-1 above.

The site photos were used to generate a rendering of the existing conditions and a proposed visualization of the implemented project. The visual simulations, as provided below, provide clear before-and-after images of the location, scale, and visual appearance of the features affected by and associated with the project. Design data — consisting of engineering drawings, elevations, site and topographical contour plans, concept diagrams, and reference pictures — were used as a platform from which digital models were created. In cases where detailed design data were unavailable, more general descriptions about alternative facilities and their locations were used to prepare the digital models.

Impact Analysis

Impact 3.2-1 Would the project have a substantial adverse effect on a scenic vista?

There are no County-designated scenic vistas near the project site. The project site is located adjacent to I-8 and local roads and thus, construction and operational activities associated with the project would be visible from and experienced by motorists and the limited residents in the immediate area. As previously discussed, broad and long views to regional mountains including the Jacumba Mountains (located west of the project site) and pyramidal El Centinela (located south of the project site) are generally available from I-8 and local roads near the project site. Since the County generally identifies mountains as “County visual resources,” views to area mountains are considered scenic vistas for purposes of this analysis (Appendix B of this EIR).

During construction, typical equipment including, but not limited to, tractors, graders, compactors, scrapers, loaders, forklifts, and cranes would be present and operate on site. Combined with a temporary influx of construction personnel and equipment/vehicles, and the visual impacts of

PC ORIGINAL PKG

vegetation removal, construction within the project site would alter views of the existing agricultural fields to an active construction site. However, during construction, impacts to existing views would be short-term, temporary, and be experienced by a limited number of permanent residents in the immediate surrounding area. A larger volume of viewers on nearby I-8 would experience construction activities as they approach and pass the project (the northern boundary of the project site parallels the eastbound I-8 travel lanes for approximately 2.1 miles); however, views to construction activities would be fleeting (and limited to the landscape to the south of the interstate). In addition, the visual impacts of construction activities on the project site as experienced from I-8 would be diminished by the incorporation of development setbacks from the interstate. Specifically, project development would be set back between approximately 1,100 feet to up to 2,000 feet from the eastbound lanes of I-8 and thus, project elements including solar arrays, perimeter fencing, and the visual effects of vegetation removal would not be visually prominent and would not detract from existing available views. Further, as westbound motorists and passengers travel alongside the project site, views to distant mountains to the southwest and west would be maintained over the 18-24 month construction schedule and would not be substantially blocked by equipment/vehicles or the installation of project components.

During operations, mobile views to the prominent visual resources in the project area landscape (i.e., rugged hills and distant mountain ranges) would remain available to motorists along I-8 and most local roads and would not be blocked or otherwise encumbered by project components. In addition, views to regional mountains from I-8 would not be blocked by the installation of 7-foot-high perimeter fencing or other project components. As previously discussed, project development would be set back between approximately 1,100 feet to up to 2,000 feet from I-8 and thus, solar arrays, perimeter fencing, and all other permanent features would appear small in the landscape and would not block or interrupt existing available views. While perimeter fencing would be visible from the interstate (see Figure 3.2-8 and Figure 3.2-9), the degree of visual change on the project site as experienced from the interstate would be minimal and overall effects to existing views would be minor. As shown in Figure 3.2-8 and Figure 3.2-9, the existing, interrupted view to distant mountains would be maintained and no blockage or significant interruption of existing views from the interstate to regional mountains would occur. As such, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.2-2 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no designated or eligible state scenic highways in the project vicinity or in Imperial County. The nearest eligible state scenic highway, SR-111 between Bombay Beach and SR-195 near Mecca, is over 40 miles from the project site. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles from the project site. Due to distance, and intervening development and topography, construction and operation of the project would not be visible from a state scenic highway and thus, construction and operation would not result in substantial damage to scenic resources within a state scenic highway. Therefore, no impacts to scenic resources within any state scenic highways would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.2-3 In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The existing visual character in views of the project (Figure 3.2-2 through Figure 3.2-7) would not be substantially altered based primarily on the proximity of viewpoints to the project site. The proposed project would convert existing active agricultural lands to a PV solar facility. Components to be installed on the project site include rows of PV solar panels up to between 6 feet and 8 feet in height, up to 500 MW ac of BESS that would typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H), 66-kV collector lines, and a dedicated approximately 5-acre project substation. Temporary and permanent access roads would also be constructed. Slatted chain-link fencing would be installed along the northern perimeter of the project site (portion of the project site adjacent to I-8) and non-slatted chain-link fencing would be installed around the remainder of the project perimeter. Lastly, and to reduce the potential for glare exposure along I-8, project development would be set back between approximately 1,100 feet to up to 2,000 feet from the eastbound lanes of I-8.

Construction. During construction of the project, visual impacts would be temporarily and intermittently experienced by most receptors/viewed over the phased 18-24 month construction period. Short-term visual impacts associated with project construction would occur as construction equipment, materials delivery and movement, and additional traffic is drawn to the project site and utilizes roadways in the surrounding area. Additional changes occurring on the site including removal of existing vegetation, preparation of the site to accommodate components/facilities, and installation of project components/facilities previously identified above. These short-term impacts would be experienced by local motorists and by the limited number of residences in the immediate area. As experienced from I-8, construction activities would be visible but would not be visually prominent due to provided development setbacks from the interstate. As further described in the light and glare analysis below in Impact 3.2-4, there would also be potential for light and glare impacts during the construction period.

As individual construction phases are completed, the overall amount of equipment on-site would be reduced and/or moved to other areas of the project site to initiate other phases and activities. As such, the visual characteristics of construction would be spread out across a large area and difficult to fully experience from any single vantage point in the surrounding area. Due to the temporary and intermittent nature of construction activities, impacts to existing visual character and public views available in the surrounding area would be of a short-term duration, varied, and spread over distinct locations across a large geographical area (i.e., the nearly 1,500-acre Project footprint), thereby reducing the overall severity of visual impacts as experienced by most viewer groups in the area. While construction of the project would result in a noticeable change to the existing character of the site and existing site qualities/features would be removed to accommodate construction equipment and vehicles (and the installation/construction of project components), construction impacts to existing visual character would be less than significant.

The assessment of visual character and view quality considered existing aesthetic conditions and anticipated visual change associated with project development as experienced from six selected KOPs that include west- and eastbound I-8, Derrick Road, Vaughn Road, and Liebert Road. Figure 3.2-8 through Figure 3.2-13 show the simulated views of the proposed project for all six KOPs.

As experienced from KOPs 1 and 2 (west- and eastbound I-8), the introduction of solar panels and slatted, chain-link fencing, and the transformation of the grass covered site to one surfaced with exposed local soils, would produce minimal visual change from existing conditions (see Figure 3.2-8 and Figure 3.2-9). As previously discussed, project development would be set back from the interstate and intervening vegetation and terrain on the project site (i.e., vegetation and terrain between the interstate and project footprint) would be retained/would not be altered. As such, the foreground landscape as experienced from the interstate would retain its existing character and open qualities and existing views to regional mountains would remain largely unchanged.

Similar to anticipated visual change at KOPs 1 and 2, the overall visual change at KOP 3 would be relatively minor as the low, grass-like covered fields in the foreground would be retained and unaltered (Figure 3.2-10). As shown in the KOP 3 visual simulation, the tan slatted chain-link fence and solar arrays would be visible in the distance but would be contained to a relatively small portion of the seen landscape. The installation of rows of dark solar panels would be evident from the elevated vantage point available; however, the existing landscape character would remain and would continue to exude existing agricultural qualities.

The introduction of solar panels and removal of existing vegetation from the project site would produce noticeable visual change as experienced from KOP 4 and KOP 6 (Figure 3.2-11 and Figure 3.2-13). The transformation of the project site from active agricultural lands to an operational solar facility (and more specifically, the introduction of chain-link fencing in the immediate foreground), would produce strong visual change when viewed absent context; however, the anticipated severity of change would be like that associated with development of the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) (located to the immediate south and east of KOP 4) and the operational Campo Verde Solar Facility (located to immediate west of KOP 5 and west and south of KOP 6). Laurel Cluster Solar Farms Project (Laurel Solar 4 site) and Campo Verde Solar Facility Project components are not visible in the specific views selected for KOPs 4 and 6 but will and have noticeably altered the existing landscapes near these KOPs. Given the proximity of approved and existing energy development that includes similar components as those anticipated to be installed on the project site, overall severity of visual change would be lessened as the project would bear a resemblance to existing features (i.e., solar development) in the immediate landscape.

Lastly, the anticipated visual change associated with the development of the project substation and gen-tie line as experienced from Liebert Street (KOP 5) is illustrated in Figure 3.2-12. As shown in Figure 3.2-12, the introduction of multiple vertical structures (e.g., bays and racks) within the footprint of the project substation would create noticeable visual change and would alter the existing quality of the southeasterly view to distant mountain terrain. Additionally, while the existing grass-like covered footprint of the project substation would be replaced by a fenced electrical substation with a greyish gravel covered surface, overall visual change would be dampened by existing solar and electrical transmission/substation development in the immediate area. In addition to the transmission lines in the foreground and structures of the Imperial Valley Substation that are visible in the KOP 5 view, the existing Campo Verde Solar Facility (located across a 1,400-acre site) and project substation are located approximately 200 feet to the west of KOP 5 and Liebert Road. While not visible in the specific view selected for KOP 5, an electrical substation and multiple rows of PV modules associated with the Campo Verde Solar Facility have permanently altered the local

PC ORIGINAL PKG

landscape. As such, the introduction of the project substation to the KOP 5 landscape would result in overall minor visual change when considered in the context of the existing visual landscape that includes prominent electrical transmission and substation infrastructure and large, utility-scale solar development.

Conclusion

Project operations would convert existing agricultural fields across approximately 1,849 acres to a solar facility with BESS. The primary visual change that would be experienced by viewers in the surrounding area is the introduction of numerous rows of orderly solar panels, and installation of slatted/non-slatted chain-link fencing along the site perimeter. As illustrated in the project visual simulations, proposed PV module frames are expected to be approximately 6 to 8 feet in height and as such, the introduction of solar panels would not result in substantial obstruction of views to distant mountain ranges such as those available from I-8 and Derrick Road (i.e., KOPs 1 and 3). Furthermore, project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Cluster Solar Farms Project (Laurel Solar 3 and 4 sites) and existing operational Campo Verde Solar Facility that have altered the existing project area landscape. For these reasons, the introduction of a solar facility to the project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, impacts are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

PC ORIGINAL PKG

Figure 3.2-8. Key Observation Point 1 – Proposed Condition



Visual Simulation of Project (visible segments of project fence line setback between approximately 1,700 to 2,000 feet from Interstate 8)

Figure 3.2-9. Key Observation Point 2 – Proposed Condition



Visual Simulation of Project (visible segments of project fence line setback approximately 1,100 feet from Interstate 8)

PC ORIGINAL PKG

Figure 3.2-10. Key Observation Point 3 – Proposed Condition



Figure 3.2-11. Key Observation Point 4 – Proposed Condition



PC ORIGINAL PKG

Figure 3.2-12.Key Observation Point 5 – Proposed Condition



Figure 3.2-13. Key Observation Point 6 – Proposed Condition



PC ORIGINAL PKG

Impact 3.2-4 Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Light. Construction activities would generally occur between the hours of 6:00 a.m. and 5:00 p.m. and therefore, construction would not generally require the use of mobile light fixtures/sources that could potentially illuminate the evening or night sky. However, additional hours beyond 5:00 p.m. may be necessary to make up schedule deficiencies and nighttime activities including but not limited to refueling equipment, concrete pours, staging material for the following day's construction activities may potentially occur between the hours of 10:00 p.m. and 7:00 a.m.

While limited construction activities could require the use of mobile light fixtures/sources for general illumination of work areas, their frequency would be irregular and duration would be limited/short. In addition, public views to the project site are mostly limited to I-8 (views are also available from local roads in the immediate project area). Due to the anticipated infrequent use and short duration of nighttime lighting during construction, the limited presence of sensitive receptors in the immediate surrounding area, and because lighting sources would generally be hooded and directed downward onto the active area of construction, project construction would not create a new source of substantial light and glare that would adversely affect nighttime views in the area. Accordingly, impacts associated with project use of lighting during construction would be less than significant.

Lighting installed for use during project operations would be minimal. For example, site lighting may include motion sensor lights for security purposes and these sources may be installed at site entrance gates or at the on-site O&M building (if an on-site building is constructed). Despite the inclusion of lighting on-site and use during operations, the total number of lighting sources to be installed would be limited and occurrences of use/illumination would be infrequent due to motion sensor activation. Furthermore, lighting installed on the project site would be of the lowest intensity foot candle level available while still providing for safe working conditions/adequate deterrence and compliant with applicable local regulations (e.g., County Ordinance, Division 17: Renewable Energy Resources, Section 91702). Lastly, installed site lighting would be directed away from public right-of-way to avoid unsafe driving conditions during periods of lighting activation. For these reasons, the low number of fixtures and anticipated infrequent use of lighting on the project site during operations would not create a new source of substantial light and glare that would adversely affect nighttime views in the area. Impacts would be considered less than significant.

Glare. The presence of heavy equipment and vehicles on the project site during construction may momentarily generate glare that could be experienced from vantage points in the surrounding area due to the presence of reflective construction equipment and materials. However, and as previously stated, public views of the project site are mostly limited to I-8 and given the regular presence of construction vehicles in the landscape, construction-related glare associated with equipment and vehicle presence is not anticipated to adversely affect daytime views. The duration of equipment and vehicle-generated glare that may be experienced by viewers in the surrounding area during project construction would also be short-term. Therefore, constructed-generated glare is considered a less than significant impact.

The proposed project would involve the installation of PV solar arrays which have low reflectivity. Solar PV modules are specifically designed to reduce reflection as any reflected light cannot be converted into energy. With the incorporation of development setbacks from I-8 and the installation of 7-foot-high slatted chain-link fencing around the project site perimeter, the PV panels would not create a significant source of glare that could impact views during daylight hours. Additionally, public views of the project site are relatively limited and, as such, operation-related glare and glint are not

anticipated to adversely affect day or nighttime views. The project would not use other reflective materials such a fiberglass, aluminum or vinyl/plastic siding, galvanized products, and brightly painted steel roofs that have the potential to create on- and off-site glare.

Nevertheless, reflected light from the proposed PV panels can cause glint (a quick reflection) and glare (reflection that lasts for a longer duration), which can create hazards for air-traffic-control personnel, motorists, and other potential receptors. Glare can result in visual hazards and temporary loss of vision (also known as flash blindness). As such, a glare analysis was conducted for the project (contained in Appendix B of this EIR), to assess the potential glare impacts associated with project implementation. The glare analysis was conducted per the Federal Aviation Administration's (FAA) recommended procedures described in the Technical Guidance for Evaluating Selected Solar Technologies on Airports, and the geometric glare modeling software used adheres to the FAA policy regarding solar energy system projects on federally obligated airports (Appendix B of this EIR). This policy does not apply to the project but was included in the Glare Analysis Report to describe the standard methodologies used to assess solar glare near operating airports. Specifically, the glare analysis and software quantify the level of ocular impact hazard (reported as green or yellow glare) and pinpoints the exact time of year the glare would occur.

The hazard level of glare depends on the ocular impact to the observer. Generally, an ocular impact is calculated as a function of the size of the glare spot and the intensity of the light. For the purpose of the Glare Analysis Report contained in Appendix B of this EIR, an ocular impact is classified in one of three categories, as follows:

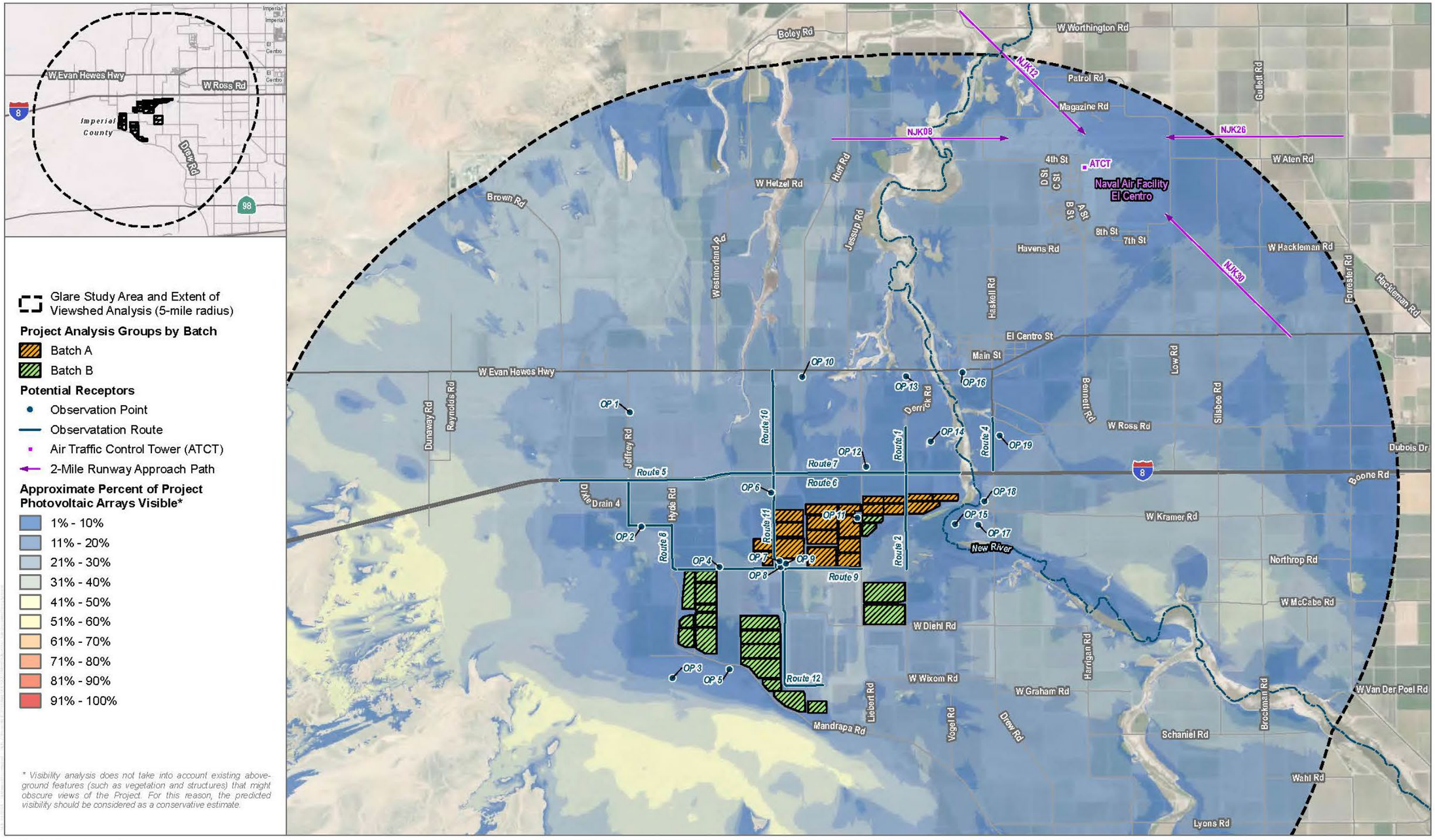
- Green: Low potential for the glare to cause an after-image
- Yellow: Potential to cause a temporary after-image
- Red: Potential to cause retinal burn and permanent eye damage

Because of the project's vicinity to the Naval Air Facility El Centro (NAF), which is a U.S. Navy facility (located approximately 3 miles to the northeast), the presence of I-8, and potential dwellings with direct view of the project, a 5-mile-radius study area was used for the glare analysis. A typical 5-mile study radius was used because that distance approximates the maximum distance that an observer standing at ground-level could see the proposed photovoltaic panels before the curvature of the Earth would intervene (assuming a perfect sphere, no built environmental obstruction, and flat topography) (Appendix B of this EIR). Dudek performed a visibility analysis on the surrounding terrain to predict where the project would be visible at any location within the study area and a geometric glare analysis for the identified potential receptors to determine where and when glare might be encountered. From the visibility and geometric glare analysis, the identified five airport receptors and all observation points and routes are shown in Figure 3.2-14.

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.2-14.Glare Study Area and Potential Receptors



This page is intentionally blank.

PC ORIGINAL PKG

Glare Analysis Results

Results for Airport Receptors. According to the Glare Analysis Report prepared for the project, the project would not result in any glare in the "Green" or "Yellow" ocular hazard levels to any of the receptors associated with airport operations at NAF.

Results for Point and Route Receptors. The results of the analysis indicate that, under the proposed project parameters described in Section 4.1 of the Glare Analysis Report contained in Appendix B of this EIR, most of the point and route receptors analyzed will receive some "green" glare (low potential for after image) and some will receive "yellow" glare (potential for after image). The summarized "Green" and "Yellow" glare results can be found in Table 6 and Table 7 of the Glare Analysis Report contained in Appendix B of this EIR.

- **Interstate 8 Receptors:** The eastbound and westbound lanes of I-8 (Route IDs 5, 6, and 7 as shown in Figure 3.2-14) will receive a small duration of "green" glare and no "yellow" glare from the proposed PV arrays. This "green" glare will occur around 6 minutes per day, on average, during the fall and winter months, and only when the sun is low in the sky (in the early mornings and early evenings). There are currently no thresholds for acceptable levels of glare towards road receptors, but because this low-hazard glare is predicted to occur at a time when there will be considerable baseline levels of glare from the rising or setting sun, it is not anticipated that the project will have a significant impact on motorists traveling on I-8 (Appendix B of this EIR).
- **Dwelling Receptors:** A total of 13 of the 19 dwellings analyzed are predicted to receive some amount of "green" glare (low potential for after image), with 2 of the dwellings predicted to also receive "yellow" glare (potential for after image). The average daily duration of glare is predicted to occur for less than 7 minutes, with maximum daily durations less than 14 minutes. All the glare predicted towards dwelling receptors is anticipated to occur when the sun is around 1° above the horizon, in the very early mornings and very early evenings. There are currently no thresholds for acceptable levels of glare towards dwelling receptors, but because the glare predicted towards these receptors occurs for less than 15 minutes per day and is coincident with the glare from the rising and setting sun, it is not anticipated that the project will have a significant impact on nearby dwelling receptors (Appendix B of this EIR).
- **Other Route Receptors:** Of the non-interstate routes analyzed, four were predicted to receive glare in the "green" (low potential for after image) or "yellow" (potential for after image) ocular impact categories. These routes are identified as Routes 8, 9, 11, and 12 in Figure 3.2-14. All four of these routes are located south of I-8 and west of New River. After the completion of the project, all the affected portions of these routes will likely be used primarily as access roads for the operation and maintenance of the various solar facilities in the area. These four routes will receive, on average, between 4 and 12 daily minutes of "green" glare, and between 1 and 16 daily minutes of "yellow" glare. This glare could occur on most days of the year and would be limited to times when the sun is less than 1° above the horizon, in the early mornings and early evenings. During these times, the glare will be aligned coincident with the glare from the rising/setting sun, which is a significantly more intense source of glare. Because of this and the fact that these routes will be traveled at relatively low speeds by vehicles associated with the operation and maintenance of the solar

PC ORIGINAL PKG

facilities, it is not anticipated that the project will have a significant effect on these route receptors (Appendix B of this EIR).

According to the glare analysis results contained in Appendix B of this EIR, nearly all the glare predicted towards receptors will occur when the sun is less than 1° above the horizon, during sunrise and sunset. From the observer's point of view, this glare will be aligned with the setting/rising sun, similar to what would be seen over a lake or ocean during these times, but less intense due to the implementation of antireflective coatings on the project's PV modules. The results indicate that the glare produced by the project will not result in more ocular impact than a smooth water body under conservative assumptions and will result in far less impact than the hazards posed due to viewing the unfiltered sun.

Based on the rationale and the results of the glare analysis provided above, project-related glare impacts would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.2.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the proposed project, the proposed project will be decommissioned and dismantled. No grading or significant landform modifications would be required during decommissioning activities upon site restoration in the future. Although the project site would be visually disrupted in the short-term during decommissioning activities, because extensive grading is not required and these activities would be temporary, the visual character of the project site would not be substantially degraded in the short-term and related impacts would be less than significant.

Residual

Impacts related to glare and glint impacts to roadway travelers, nearby residences, or flights would be less than significant and no additional mitigation measures are required. Changes to visual character of the project area would be less than significant and would be transitioned back to their prior (pre-solar project) conditions following site decommissioning. Based on these conclusions, implementation of the proposed project would not result in residual significant unmitigable impacts to the visual character of the project site or add substantial amounts of light and glare.

PC ORIGINAL PKG

3.3 Agricultural Resources

This section provides an overview of existing agricultural resources within the project site and identifies applicable federal, state, and local policies related to the conservation of agricultural lands. This includes a summary of the production outputs, soil resources, and adjacent operations potentially affected by the project. The impact assessment in Section 3.3.3 provides an evaluation of potential adverse effects on agricultural resources based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. Section 3.3.4 provides a discussion of residual impacts, if any. In addition, HDR prepared a land evaluation and site assessment (LESA) for the project site. This report is included in Appendix C of this EIR.

No forestry resources are present within the project site and, therefore, this section focuses on issues related to agricultural resources.

3.3.1 Existing Conditions

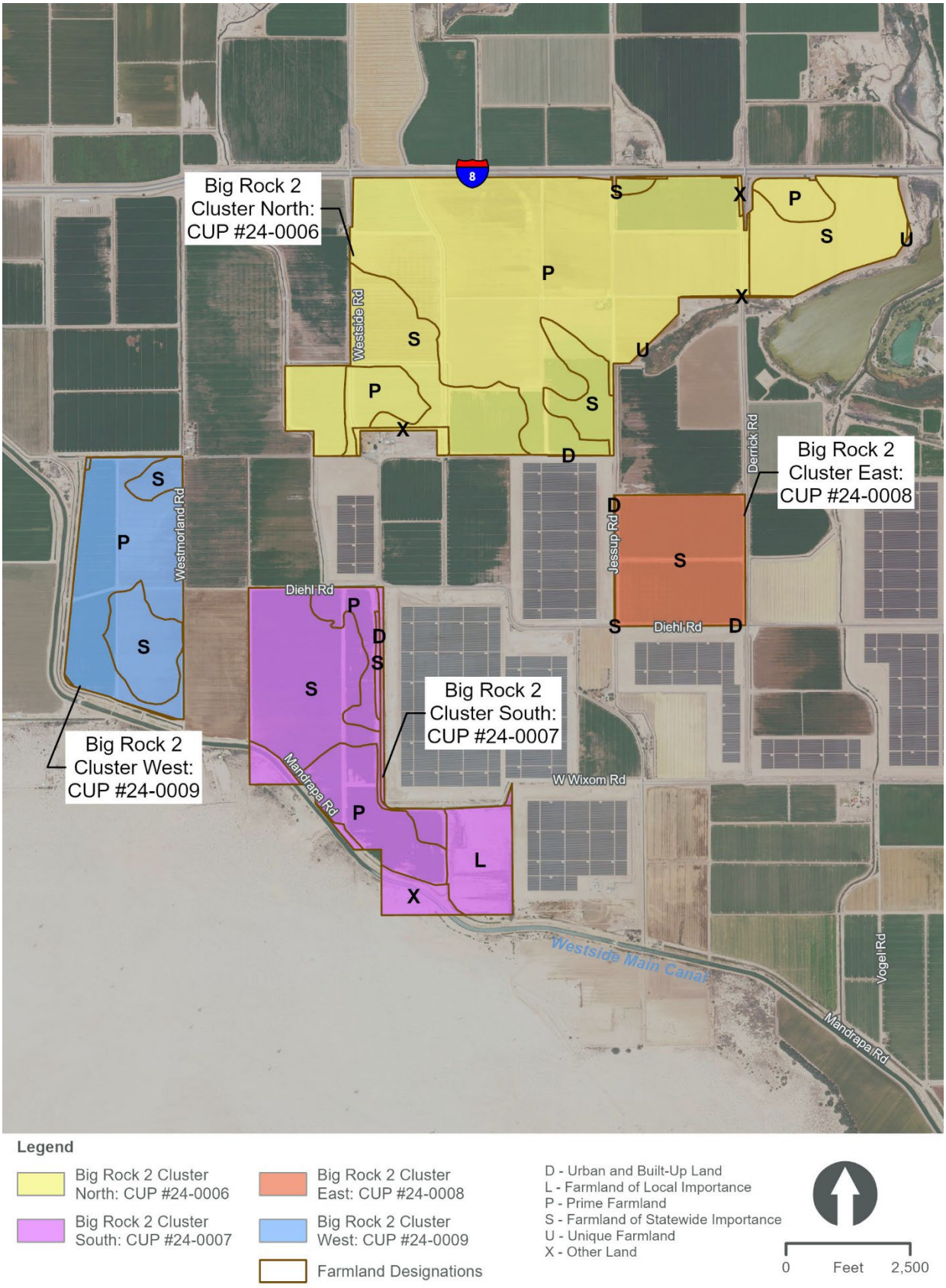
Agriculture has been the single most important economic activity of Imperial County throughout the 1900s, and is expected to play a major economic role in the foreseeable future. The gross annual value of agricultural production in the County has hovered around $1 billion for the last several years, making it the County's largest source of income and employment.

Imperial County agriculture is a major producer and supplier of high quality plant and animal foods and non-food products. According to the 2023 Imperial County Agricultural Crop and Livestock Report, gross production for 2023 was valued at $2,692,716,000. This is an increase of 2.36 percent compared to the 2022 gross value. In 2023, there were 578,659 harvested acres reported, up 4.80 percent from 2022. The number one commodity continues to be cattle followed by alfalfa, leaf lettuce, head lettuce, spinach, onions, broccoli, bermuda grass hay, carrots and alfalfa seed rounding out the top ten commodities (Imperial County Agricultural Commissioner 2023).

Important Farmland

According to the California Department of Conservation’s (DOC) California Important Farmland Finder and as shown in Figure 3.3-1, the project site is designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Other Land, and Urban and Built-Up Land (DOC 2021). Table 3.3-1 provides an acreage breakdown of Important Farmland within the project site.

Figure 3.3-1. Important Farmlands



PC ORIGINAL PKG

Table 3.3-1. Farmland Mapping and Monitoring Program Designations within the Project Site

Important Farmland	Acreage
Prime Farmland	973.24
Farmland of Statewide Importance	753.80
Unique Farmland	0.06
Farmland of Local Importance	65.08
Other Land	51.04
Urban and Built-Up Land	9.81
Total	**1,853.03**

Williamson Act Contract Land

According to the California Williamson Act Enrollment Finder Web map produced by the DOC, Imperial County has a status of "Non-Participating or Withdrawn" (DOC 2024). Therefore, the project site does not contain Williamson Act contracted land.

3.3.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

State

California Land Conservation Act

The Williamson Act (California Land Conservation Act, California Government Code, Section 51200 et seq.) is a statewide mechanism for the preservation of agricultural land and open space land. The Act provides a comprehensive method for local governments to protect farmland and open space by allowing land in agricultural use to be placed under contract (agricultural preserve) between a local government and a landowner.

Under the provisions of the Williamson Act (California Land Conservation Act 1965, Section 51200), landowners contract with the County to maintain agricultural or open space use of their lands in return for reduced property tax assessment. The contract is self-renewing and the landowner may notify the County at any time of intent to withdraw the land from its preserve status. Withdrawal involves a 10-year period of tax adjustment to full market value before protected open space can be converted to urban uses. Consequently, land under a Williamson Act Contract can be in either a renewal status or a nonrenewable status. Lands with a nonrenewable status indicate the farmer has withdrawn from the Williamson Act Contract and is waiting for a period of tax adjustment for the land to reach its full market value. Nonrenewable and cancellation lands are candidates for potential urbanization within a period of 10 years.

The requirements necessary for cancellation of land conservation contracts are outlined in Government Code Section 51282. The County must document the justification for the cancellation through a set of findings. Unless the land is covered by a farmland security zone contract, the Williamson Act requires that local agencies make both the Consistency with the Williamson Act and Public Interest findings.

On February 23, 2010, the Imperial County Board of Supervisors voted to not accept any new Williamson Act contracts and not to renew existing contracts because of the elimination of the subvention funding from the state budget. The County reaffirmed this decision in a vote on October 12, 2010, and notices of nonrenewal were sent to landowners with Williamson Act contracts following that vote. The applicable deadlines for challenging the County's actions have expired, and, therefore, all Williamson Act contracts in Imperial County terminated on or before December 31, 2018.

California Farmland Mapping and Monitoring Program

The California DOC, under the Division of Land Resource Protection, has set up the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the state's farmland to and from agricultural use. The map series identifies eight classifications, as defined below, and uses a minimum mapping unit size of 10 acres.

- Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
- Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
- Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.
- Farmland of Local Importance is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.
- Urban and Built-up Land is occupied by structures with a building density of at least one unit to 1.5 acre, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, prisons, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.
- Water is defined as perennial water bodies with an extent of at least 40 acres.
- Other Land is land not included in any other mapping category. Common examples include low density rural developments, vegetative and riparian areas not suitable for livestock grazing, confined animal agriculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. More detailed data on these uses is available in counties containing the Rural Land Use Mapping categories.

The program also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of state agricultural land and updates its

PC ORIGINAL PKG

"Important Farmland Series Maps" every 2 years. Table 3.3-2 provides a summary of agricultural land within Imperial County converted to non-agricultural uses during the time frame from 2016 to 2018.

Table 3.3-2. Imperial County Change in Agricultural Land Use Summary (2016 to 2018)

Land Use Category	Total Acreage Inventoried		2016 to 2018 Acreage Changes			
	2016	2018	Acres Lost (-)	Gained (+)	Total Acreage Changed	Net Acreage Changed
Prime Farmland	190,206	189,163	1,699	656	2,355	-1,043
Farmland of Statewide Importance	297,272	291,596	6,330	654	6,984	-5,676
Unique Farmland	2,071	1,905	190	24	214	-166
Farmland of Local Importance	38,923	39,711	1,587	2,375	3,962	788
Important Farmland Subtotal	***528,472***	***522,375***	***9,806***	***3,709***	***13,515***	***-6,097***
Grazing Land	0	0	0	0	0	0
Agricultural Land Subtotal	528,472	522,375	9,806	3,709	13,515	-6,097
Urban and Built-Up Land	37,412	41,764	301	4,653	4,954	4,352
Other Land	461,891	463,488	712	2,309	3,021	1,597
Water Area	749	897	125	273	398	148
Total Area Inventoried	**1,028,524**	**1,028,524**	**10,944**	**10,944**	**21,888**	**0**

Source: DOC 2018

Local

County of Imperial General Plan

The Agricultural Element of the County's General Plan serves as the primary policy statement for implementing development policies for agricultural land use in Imperial County. The goals, objectives, implementation programs, and policies found in the Agricultural Element provide direction for new development as well as government actions and programs. Imperial County's Goals and Objectives are intended to serve as long-term principles and policy statements to guide agricultural use decision-making and uphold the community's ideals.

Agriculture has been the single most important economic activity in the County throughout its history. The County recognizes the area as one of the finest agricultural areas in the world because of several environmental and cultural factors including good soils, a year-round growing season, the availability of adequate water transported from the Colorado River, extensive areas committed to agricultural production, a gently sloping topography, and a climate that is well-suited for growing crops and raising livestock. The Agricultural Element in the County General Plan demonstrates the long-term commitment by the County to the full promotion, management, use, and development and protection of agricultural production, while allowing logical, organized growth of urban areas (County of Imperial 2015).

PC ORIGINAL PKG

The County's Agricultural Element identifies several Implementation Programs and Policies for the preservation of agricultural resources. The Agricultural Element recognizes that the County can and should take additional steps to provide further protection for agricultural operations and at the same time provide for logical, organized growth of urban areas. The County must be specific and consistent about which lands will be maintained for the production of food and fiber and for support of the County's economic base. The County's strategy and overall framework for maintaining agriculture includes the following policy directed at the preservation of Important Farmland:

> The overall economy of the County is expected to be dependent upon the agricultural industry for the foreseeable future. As such, all agricultural land in the County is considered as Important Farmland, as defined by federal and state agencies, and should be reserved for agricultural uses. Agricultural land may be converted to non-agricultural uses only where a clear and immediate need can be demonstrated, such as requirements for urban housing, commercial facilities, or employment opportunities. All existing agricultural land will be preserved for irrigation agriculture, livestock production, aquaculture, and other agriculture-related uses except for non-agricultural uses identified in this General Plan or in previously adopted City General Plans.

The following program is provided in the Agricultural Element:

> No agricultural land designated except as provided in Exhibit C [of the Agricultural Element] shall be removed from the Agriculture category except where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long-term economic benefit to the County can be demonstrated through the planning and environmental review process. The Board (or Planning Commission) shall be required to prepare and make specific findings and circulate same for 60 days (30 days for parcels considered under Exhibit C of this [Agricultural] element) before granting final approval of any proposal, which removes land from the Agriculture category.

Also, the following policy addresses Development Patterns and Locations on Agricultural Land:

> "Leapfrogging" or "checkerboard" patterns of development have intensified recently and result in significant impacts on the efficient and economic production of adjacent agricultural land. It is a policy of the County that leapfrogging will not be allowed in the future. All new non-agricultural development will be confined to areas identified in this plan for such purposes or in Cities' adopted Spheres of Influence, where new development must adjoin existing urban uses. Non-agricultural residential, commercial, or industrial uses will only be permitted if they adjoin at least one side of an existing urban use, and only if they do not significantly impact the ability to economically and conveniently farm adjacent agricultural land.

Agricultural Element Programs that address "leapfrogging" or "checkerboard" development include:

> All non-agricultural uses in any land use category shall be analyzed during the subdivision, zoning, and environmental impact review process for their potential impact on the movement of agricultural equipment and products on roads located in the Agriculture category, and for other existing agricultural conditions which might impact the projects, such as noise, dust, or odors.

PC ORIGINAL PKG

The Planning and Development Services Department shall review all proposed development projects to assure that any new residential or non-agricultural commercial uses located on agriculturally zoned land, except land designated as a Specific Plan Area, be adjoined on at least one entire property line to an area of existing urban uses. Developments that do not meet these criteria should not be approved.

Table 3.3-3 provides a General Plan goal and policy consistency evaluation for the project.

Table 3.3-3. Project Consistency with Applicable General Plan Agricultural Policies

General Plan Policies	Consistency with General Plan	Analysis
Goal 1. All Important Farmland, including the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, as defined by federal and state agencies, should be reserved for agricultural uses.	Consistent	The project would temporarily convert land designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance to non-agricultural uses. However, as part of the project, the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance to non-agricultural uses.
Goal 2. Adopt policies that prohibit "leapfrogging" or "checkerboard" patterns of nonagricultural development in agricultural areas and confine future urbanization to adopted Sphere of Influence area.	Consistent	The project site is designated for agriculture land use in the County General Plan. The project would include development of a solar facility, BESS, and associated infrastructure adjacent to productive agricultural lands surrounding the project site. The project would not include a residential component that would induce urbanization adjacent to the project. Furthermore, with the approval of a General Plan Amendment, Zone Change, and CUPs, the project would be consistent with the County's Land Use Ordinance. Consistency with the Land Use Ordinance implies consistency with the General Plan land use designation.
Objective 2.1. Do not allow the placement of new non-agricultural land uses such that agricultural fields or parcels become isolated or more difficult to economically and conveniently farm.	Consistent	The project would include development of a solar facility adjacent to productive agricultural lands surrounding the project site. Neither construction nor operation of the solar facility would not make it difficult to economically or conveniently farm.
Objective 2.2. Encourage the infilling of development in urban areas as an alternative to expanding urban boundaries.	Consistent	The project involves the construction and operation of solar facility in a rural area. While the proposed project will introduce development in the area, it does not include residential uses that would, in turn, create a demand for other uses such as commercial, employment centers, and supporting services.
Objective 2.3. Maintain agricultural lands in parcel size configurations that help assure	Consistent	The project would temporarily convert agricultural land to non-agricultural uses. However, the project

PC ORIGINAL PKG

that viable farming units are retained.		would not be subdivided into smaller parcels. A reclamation plan will be prepared for the project site, which when implemented, would return the site to pre-project conditions after the solar uses are discontinued.
Objective 2.4. Discourage the parcelization of large holdings.	Consistent	See response to Objective 2.3 above.
Objective 2.6. Discourage the development of new residential or other non-agricultural areas outside of city "sphere of influence" unless designated for non-agricultural use in the County General Plan, or for necessary public facilities.	Consistent	Upon approval of a General Plan Amendment, Zone Change, and CUPs, the proposed project would be an allowable use within an applicable agricultural zone, and the existing zoning of the project site would be consistent with the existing General Plan land use designation.
Goal 3. Limit the introduction of conflicting uses into farming areas, including residential development of existing parcels which may create the potential for conflict with continued agricultural use of adjacent property.	Consistent	Upon approval of a General Plan Amendment, Zone Change, and CUPs, the proposed project would be an allowable use within an applicable agricultural zone. Additionally, the project does not include the development of housing.
Objective 3.2. Enforce the provisions of the Imperial County Right-to-Farm Ordinance (No. 1031).	Consistent	The Imperial County Right-to-Farm Ordinance would be enforced. Existing nuisance issues such as noise, dust, and odors from existing agricultural use would not impact the project given the general lack of associated sensitive uses (e.g., residences). Likewise, with mitigation measures and BMPs proposed in other resource sections, project-related activities would not adversely affect adjacent agricultural operations.
Objective 3.3. Enforce the provisions of the State nuisance law (California Code Sub-Section 3482).	Consistent	The provisions of the State nuisance law would be incorporated into the project. As discussed below, there is the potential that weeds or other pests may occur within the solar facility if the area is not properly maintained and managed to control weeds and pests. Mitigation Measure AG-2 requires the project applicant to develop a Pest Management Plan prior to the issuance of a grading permit or building permit (whichever occurs first).

Source: County of Imperial General Plan 2015

3.3.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to agricultural resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to agricultural resources are considered significant if any of the following occur:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use
- Conflict with existing zoning for agricultural use, or a Williamson Act contract

PC ORIGINAL PKG

- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description, to adversely impact agricultural resources within the project site based on the applied significance criteria as identified above. The analysis utilizes the LESA model in conjunction with other readily available information sources in assessing impacts on agriculture and farmland. As indicated in the environmental setting, a LESA model has been prepared that addresses the project site. This report is included as Appendix C of this EIR. The analysis prepared for this EIR also relied on Important Farmland and Williamson Act maps for Imperial County produced by the California DOC's Division of Land Resource Protection. These sources were used to determine the agricultural significance of the land in the project site. Per the County of Imperial General Plan, Farmland of Local Importance is also considered an important farmland. These sources were used to determine the agricultural significance of the land within the project site.

Additionally, potential conflicts with existing agricultural zoning or other changes resulting from the implementation of the project, which could indirectly remove Important Farmland from agricultural production or reduce agricultural productivity were considered. Sources used in this evaluation included, but were not limited to, the Imperial County General Plan and zoning ordinance. The conceptual site plan for the project was also used to evaluate potential impacts.

Impact Analysis

Impact 3.3-1 Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use?

Implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

- 973.24 acres of Prime Farmland
- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

The loss of agricultural land designed Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is typically considered a significant impact under CEQA.

Approximately 65.08 acres of the project site are classified as Farmland of Local Importance and 51.04 acres are classified as Other Land. It should be noted that analysis of Farmland of Local Importance and Other Land is not required under CEQA significance criteria, as these designations are not considered an "agricultural land" per CEQA Statute Section 21060.1(a).

To verify the farmland designations on the project site, the LESA model was used with the results provided in Appendix C of this EIR. Based on the LESA's scoring methodology (Table 3.3-4), a site scoring of 60 points or higher is typically considered "significant" unless either land evaluation (LE) or site assessment (SE) subscore is less than 20 points. As shown in Table 3.3-5, the project site's LE subscore is 33.71, while the SA subscore is 36.00. The final LESA score is 69.71. Therefore, with both subscores above 20, the project is considered to have a significant impact on agricultural

resources. As shown, the LESA score for the project site supports the farmland designations as identified in the FMMP. Therefore, their conversion to non-agricultural use, albeit temporary, is considered a significant impact. Implementation of Mitigation Measures AG-1a and AG-1b would reduce this impact to a level less than significant.

Table 3.3-4. California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA subscores are greater than or equal to 20 points
60 to 79 points	Considered significant unless either LE or SA subscore is less than 20 points
80 to 100 points	Considered significant

Source: Appendix C of this EIR

Table 3.3-5. Final Land Evaluation Site Assessment Score Sheet Summary

	Factor Rating (0-100 Rating)	Factor Weighting (Total =1.00)	Weighted Factor Rating
Land Evaluation			
1. LCC Rating	76.16	0.25	19.04
1. Storie Index Rating	58.68	0.25	14.67
LE Subscore	--	--	33.71
Site Assessment			
1. Project Size Rating	100	0.15	15
2. Water Resource Availability Rating	100	0.15	15
3. Surrounding Agricultural Land Rating	40	0.15	6
4. Surrounding Protected Resource Lands Rating	0	0.05	0
Site Assessment Subscore	--	--	36
TOTAL	**--**	**--**	**69.71**

Source: Appendix C of this EIR

As discussed in Chapter 2, Project Description, the project applicant would be required to restore the project site to pre-existing conditions following project operations; therefore, agricultural uses would be possible in the future. Given that the project facilities would be constructed near the existing grade, restoration of the project site to facilitate future cultivated agriculture would generally be feasible. However, implementation of the project would replace existing agricultural uses within the solar facilities during the term of the CUPs and until the site is restored. Additionally, although the project applicant is proposing agriculture as the proposed end use, it is possible that project-related activities (e.g., soil disturbance) and subsequent restoration of the site could result in a net reduction

PC ORIGINAL PKG

in Prime Farmland, Farmland of Statewide Importance, or Unique Farmland within the project site. These acreage reductions could occur through alterations in soil productivity or the retention of project-related structures. As a condition of project approval (CUP condition), a reclamation plan will be prepared for the project site. The reclamation plan will provide guidance and performance criteria to ensure that no net reduction in Important Farmland occurs. Implementation of Mitigation Measure AG-1b would reduce long-term impacts to a level less than significant by ensuring compliance with a Site Reclamation Plan documenting procedures by which the project site will be returned to its current agricultural conditions.

Mitigation Measure(s)

AG-1a **Payment of Agricultural and Other Benefit Fees.** Prior to the issuance of a grading permit or building permit for the project, one of the following options included below shall be implemented:

A. Mitigation for Non-Prime Farmland:

Option 1: *Provide Agricultural Conservation Easement(s).* The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Pay Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or,

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that: 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County"), as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.

B. Mitigation for Prime Farmland:

Option 1: *Provide Agricultural Conservation Easements.* Provide Agricultural Conservation Easement(s). The permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC

regulations and shall be recorded prior to issuance of any grading or building permits; or

Option 2: *Agricultural In-Lieu Mitigation Fee.* The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or

Option 3: *Public Benefit Agreement.* The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that 1) is consistent with Board Resolution 2023-#17; and 2) must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program (as amended by the Board of Supervisors on November 7, 2023: Resolution "Amending the Public Benefit Program for use with Solar Power Plants in Imperial County", as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project; or

Option 4: *Avoid Prime Farmland.* The Permittee must revise their Conditional Use Permit Application/Site Plan to avoid Prime Farmland.

AG-1b **Site Reclamation Plan.** In addition to Mitigation Measure AG-1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County, a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which the project site will be returned to its current agricultural condition. Permittee shall also provide financial assurance/bonding in the amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.

Significance after Mitigation

With the implementation of Mitigation Measure AG-1a, potential impacts on valuable farmlands would be minimized through provision of an agricultural conservation easement, payment into the County agricultural fee program, or entering into a public benefit agreement. With implementation of Mitigation Measure AG-1b, potential impacts on valuable farmlands would be minimized by ensuring the project applicant adheres to the terms of a site Reclamation Plan documenting procedures by which the project site will be returned to its current agricultural conditions. These mitigation measures would reduce the impact on Important Farmlands, including Prime Farmland, to a less than significant level.

PC ORIGINAL PKG

Impact 3.3-2 Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Williamson Act. The project site is not located on Williamson Act contracted land (DOC 2024). Therefore, the project would not conflict with a Williamson Act contract and no impact would occur.

Agricultural Zoning. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

Upon approval of the CUPs, the project's uses would be consistent with the Imperial County Land Use Ordinance and thus is also consistent with the General Plan land use designation of the site. Additionally, the operation of the solar energy facility with an integrated BESS is not expected to inhibit or adversely affect adjacent agricultural operations through the placement of sensitive land uses or generation of excessive dust or shading. Based on these considerations, the impact is considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.3-3 Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

The Agricultural Element of the County's General Plan serves as the primary policy statement for implementing development policies for agricultural land use in Imperial County. The goals, objectives, implementation programs, and policies found in the Agricultural Element provide direction for private development as well as government actions and programs. A summary of the relevant Agricultural goals and objectives and the project's consistency with applicable goals and objectives is provided in Table 3.3-3. As provided, the project is generally consistent with certain Agricultural Element Goals and Objectives of the County General Plan, but mitigation is required for the project.

Per County policy, agricultural land may be converted to non-agricultural uses only where a clear and immediate need can be demonstrated, such as requirements for urban housing, commercial facilities, or employment opportunities. Further, no agricultural land designated exempt shall be removed from the agriculture category except where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long-term economic benefit to the County can be demonstrated through the planning and environmental review process.

As discussed under Impact 3.3-1, although the project would temporarily convert lands currently under agricultural production, the project applicant is proposing agriculture as the end use and will prepare a site-specific Reclamation Plan to minimize impacts related to short- and long-term conversion of farmland to non-agricultural use. Additionally, the County is requiring Mitigation Measure AG-1b to ensure that post-restoration of the project facilities result in no net reduction in Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. With implementation of Mitigation Measure AG-1b, this impact would be reduced to a level less than significant.

The project would not directly impact the movement of agricultural equipment on roads located within the agriculture category and access to existing agriculture-serving roads would not be precluded or hindered by the project. Furthermore, existing nuisance issues such as noise, dust, and odors from existing agricultural use would not impact the project given the general lack of associated sensitive uses (e.g. residences). Likewise, with mitigation measures and best management practices (BMPs) proposed in other resource sections, project-related activities would not adversely affect adjacent agricultural operations. Further, the provisions of the Imperial County Right-to-Farm Ordinance (No. 1031) and the State nuisance law (California Code Sub-Section 3482) would continue to be enforced.

With the implementation of the project, it is possible that the physical and chemical makeup of the soil materials within the upper soil horizon may change. For example, improper soil stockpiling and management of the stockpiles could result in increased decomposition of soil organic materials, increased leaching of plant available nitrogen, and depletion of soil biota communities (e.g., Rhizobium or Frankia). Any reductions in agricultural productivity could significantly limit the types of crops (e.g., deeper rooting crops, orchards, etc.) that may be grown within the project site in the future. However, implementation of Mitigation Measure AG-1b would require the project applicant or its successor in interest for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes restoration of the site to its pre-project

PC ORIGINAL PKG

condition. Implementation of Mitigation Measure AG-1b would reduce this impact to a level less than significant.

Additionally, there is the potential that weeds or other pests may occur within the solar field if the area is not properly maintained and managed to control weeds and pests. This is considered a significant impact. Implementation of Mitigation Measure AG-2 would reduce this impact to a level less than significant.

Mitigation Measure(s)

AG-2 **Pest Management Plan.** Prior to the issuance of a grading permit or building permit (whichever occurs first), a Pest Management Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The project applicant shall maintain a Pest Management Plan until reclamation is complete. The plan shall provide the following:

1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line);
2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows:
    - Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner's office that a pest problem is present on the project site. The assistance of a licensed pest control advisor is recommended. All treatments must be performed by a qualified applicator or a licensed pest control business;
    - All treatments must be performed by a qualified applicator or a licensed pest control operator;
    - "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments;
    - Use of "permanent" soil sterilants to control weeds or other pests is prohibited because this would interfere with reclamation;
    - Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture and the U.S. Department of Agriculture. Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species. Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner's Office and/or California Department of Food and Agriculture;
    - Obey all pesticide use laws, regulations, and permit conditions;

PC ORIGINAL PKG

- Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties;
- Ensure all project employees that handle pest control issues are appropriately trained and certified, all required records are maintained and made available for inspection, and all required permits and other required legal documents are current;
- Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, EPA Registration numbers, and application rates. A pesticide use report may be used for this;
- Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon reasonable request. The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request.

3. A long-term strategy for weed and pest control and management during the operation of the proposed project. Such strategies may include, but are not limited to use of specific types of herbicides and pesticides on a scheduled basis.
4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on surrounding agricultural lands.
5. The project shall reimburse the Agricultural Commissioner's office for the actual cost of investigations, inspections, or other required non-routine responses to the site that are not funded by other sources.

Significance after Mitigation

With implementation of Mitigation Measure AG-1b, the project applicant would be required to adhere to the terms of the comprehensive reclamation plan that would restore the project site to preexisting (pre-project) conditions following decommissioning of the project (after their use for solar generation and BESS activities). In addition, the proposed project would be required to implement a weed and pest management control plan per Mitigation Measure AG-2. Compliance with these measures would reduce this impact to a level less than significant.

3.3.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

In any land restoration project, it is necessary to minimize disruption to topsoil or stockpiled topsoil for later use during restoration following project decommissioning. With the implementation of the project, it is possible that the physical and chemical makeup of the soil materials within the upper soil horizon may change during construction and associated stockpiling operations. Improper soil

PC ORIGINAL PKG

stockpiling and management of the stockpiles could result in increased decomposition of soil organic materials, increased leaching of plant-available nitrogen, and depletion of soil biota communities (e.g., Rhizobium or Frankia). Each of these circumstances could have an adverse effect on the future productivity of the restored soils. Any reductions in agricultural productivity could significantly limit the types of crops (e.g., deeper rooting crops, orchards, etc.) that may be grown within the project site in the future. With implementation of Mitigation Measure AG-1b, the project applicant would be required to adhere to the terms of the comprehensive reclamation plan that would restore the project site to pre-existing (pre-project) conditions following decommissioning of the project (after their use for solar generation activities). Implementation of Mitigation Measure AG-1b would reduce this impact to a level less than significant.

Residual

With mitigation, issues related to the conversion of Important Farmland to non-agricultural use would be mitigated and reduced to a less than significant level. Operation of the project, subject to the approval of the CUPs, would generally be consistent with applicable federal, state, regional, and local plans and policies. Following the proposed use (e.g., solar facility and BESS), the project would be decommissioned and the project site would be restored to pre-project conditions. Based on these circumstances, the project would not result in any residual significant and unmitigable impacts on agricultural resources.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.4 Air Quality

This section includes an overview of the existing air quality within the project area and identifies applicable local, state, and federal policies related to air quality. The impact assessment provides an evaluation of potential adverse effects on air quality based on criteria derived from the CEQA Guidelines and Imperial County Air Pollution Control District's (ICAPCD) Air Quality Handbook in conjunction with actions proposed in Chapter 2, Project Description, of this EIR. Information contained in this section is summarized from the *Air Quality and Greenhouse Gas Emissions Technical Report* prepared by HDR Engineering, Inc. This report is included in Appendix D of this EIR.

3.4.1 Existing Conditions

Regional Setting

The project is located in Imperial County within the Salton Sea Air Basin (SSAB). The SSAB consists of all of Imperial County and a portion of Riverside County. Both the ICAPCD and South Coast Air Quality Management District (SCAQMD) have jurisdiction within the SSAB. The ICAPCD has full jurisdiction within Imperial County and SCAQMD only has jurisdiction within Riverside County.

The climate of Imperial County is governed by the large-scale sinking and warming of air in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The high-pressure ridge blocks out most mid-latitude storms, except in the winter, when it is weakest and located farthest south. The coastal mountains prevent the intrusion of any cool, damp air found in California coastal areas. Because of the barrier and weakened storms, Imperial County experiences clear skies, extremely hot summers, mild winters, and little rainfall. The sun shines, on the average, more in Imperial County than anywhere else in the United States.

The lack of clouds and atmospheric moisture creates strong diurnal and seasonal temperature variations ranging from an average summer maximum of 108 degrees Fahrenheit (° F) down to a winter morning minimum of 38° F. The most pleasant weather occurs from about mid-October to early May when daily highs are in the 70s and 80s with very infrequent cloudiness or rainfall. Imperial County experiences rainfall on an average of only four times per year (>0.10 inches in 24 hours). The local area usually has three days of rain in winter and one thunderstorm day in August. The annual rainfall in this region is less than three inches per year.

Humidity is low throughout the year, ranging from an average of 28 percent in summer to 52 percent in winter. The large daily oscillation of temperature produces a corresponding large variation in the relative humidity. Nocturnal humidity rises to 50 to 60 percent but drops to about 10 percent during the day.

The wind in Imperial County follows two general patterns. Wind statistics indicate prevailing winds are from the west-northwest through southwest; a secondary flow maximum from the southeast is also evident. The prevailing winds from the west and northwest occur seasonally from fall through spring and are known to be from the Los Angeles area. Occasionally, Imperial County experiences periods of extremely high wind speeds. Wind speeds can exceed 31 miles per hour (mph), and this occurs most frequently during the months of April and May. However, speeds of less than 6.8 mph account for more than one-half of the observed wind measurements (Appendix D of this EIR).

Major Air Pollutants

Criteria Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone, coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 3.4-1.

Table 3.4-1. Criteria Air Pollutants - Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health and Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N_2O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} and $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze)
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: CAPCOA 2021

Attainment Status

The CAA requires the USEPA to designate areas within the country as either “attainment” or “nonattainment” for each criteria pollutant based on whether the NAAQS have been achieved. Similarly, the CCAA requires the CARB to designate areas within California as either “attainment” or “nonattainment” for each criteria pollutant based on whether the CAAQS have been achieved. If a pollutant concentration is lower than the standard, the area is classified as “attainment” for that

PC ORIGINAL PKG

pollutant. If a pollutant exceeds the standard, the area is classified as “nonattainment” for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards.

The attainment status for the portion of the SSAB encompassing the project site is shown in Table 3.4-2. As shown in Table 3.4-2, the Imperial County portion of the SSAB is currently designated as nonattainment for O_3 under State standards. Under federal standards, the Imperial County portion of the SSAB is in nonattainment for O_3, and $PM_{2.5}$. The area is currently in attainment or unclassified status for CO, NO_2, and SO_2.

Table 3.4-2. Attainment Status of Criteria Pollutants in the Imperial County Portion of the Salton Sea Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Attainment	Attainment
$PM_{2.5}$	Attainment	Nonattainment
CO	Attainment	Unclassified/attainment
NO_2	Attainment	Unclassified/attainment
SO_2	Attainment	Unclassified/attainment
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Lead	Attainment	Unclassified/Attainment

Source: Appendix D of this EIR

Local Ambient Air Quality

Ambient air quality at the project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. The ICAPCD operates a network of monitoring stations throughout the County that continuously monitor ambient levels of criteria pollutants in compliance with federal monitoring regulations.

Table 3.4-3 shows the most recent monitoring data from CARB from 2019 to 2023 from the El Centro monitoring station.

PC ORIGINAL PKG

Table 3.4-3. Ambient Air Quality Monitoring Data

	Year				
	2019	2020	2021	2022	2023
O_3					
Maximum 1-hour concentration (ppm)	0.080	0.097	0.096	0.113	0.100
Maximum 8-hour concentration (ppm)	0.071	0.077	0.084	0.079	0.091
Number of days standard exceeded					
National 1-hour standard	0	1	1	2	5
State 8-hour standard	1	2	7	10	15
NAAQS 8-hour (>0.07 ppm)	1	2	6	10	15
PM_{10}					
National maximum 24-hour concentration (µg/m^3)	123.9	197.5	194.5	554.6	231.6
State maximum 24-hour concentration (µg/m^3)	130.0	197.7	186.9	553.6	224.0
National annual average concentration (µg/m^3)	34.9	41.5	41.8	44.7	36.7
State annual average concentration (µg/m^3)	35.6	41.5	41.6	45.5	36.7
Number of days standard exceeded					
National 24-hour standard	0	2	1	2	3
State 24-hour standard	54	92	89	99	65
$PM_{2.5}$					
National maximum 24-hour concentration (µg/m^3)	21.4	28.5	19.1	30.6	42.0
State maximum 24-hour concentration (µg/m^3)	21.4	28.5	19.1	30.6	42.0
National annual average concentration (µg/m^3)	7.9	9.8	8.4	8.9	7.8
State annual average concentration (µg/m^3)	7.9	9.8	8.3	8.9	*
Number of days standard exceeded					
NAAQS 24-hour standard	1	5	2	5	3

Source: CARB 2024a

Notes: O_3 = ozone; PM_{10} = particles of 10 micrometers and smaller; $PM_{2.5}$ = particles of 2.5 micrometers and smaller; µg/m^3 = micrograms per cubic meter; ppb = parts per billion; NAAQS = national ambient air quality standards; CAAQS = California Ambient air quality standards.

PC ORIGINAL PKG

Valley Fever

Valley Fever (also called *coccidioidomycosis* or "cocci") is a fungal lung infection that is caused by a fungus that lives in the soil. This fungus, Coccidioides, has been found in the southwestern United States and can be breathed in when soil is disturbed, and the fungus is spread through the air. People can contract Valley Fever when working or living in areas with soil disturbance such as during construction activities for grading or soil movement. Valley Fever causes flu-like symptoms including fatigue, cough, fever, shortness of breath, headache, night sweats, muscle aches, or rash, but can also present no symptoms in some people. Because of these common symptoms, people may delay treatment and let the infection take its course without medical attention. Valley fever can be serious and even fatal. Recently in California, there have been more than 1,000 people hospitalized with Valley fever each year, of which about 1 in 10 have died in the hospital (Appendix D of this EIR).

Valley fever is contracted by breathing in dust from outdoor air that contains spores of the Coccidioides fungus that grows in the soil. Like seeds from a plant, a fungus grows and spreads from tiny spores that are too small to see. When soil or dirt is stirred up by strong winds or while digging, dust containing these fungus spores can get into the air. Anyone who lives, works, or travels in an area where the Valley fever fungus grows can breathe in these fungus spores from outdoor dust without knowing it and become infected (Appendix D of this EIR).

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive Receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or California Air Resources Board may determine (Appendix D of this EIR).

The nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby sensitive receptors include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

3.4.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Clean Air Act and National Ambient Air Quality Standards

The Clean Air Act (CAA) is the primary federal law governing air quality. The CAA is regulated by the USEPA, which sets standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS have been established for six criteria air pollutants that have been linked to potential health concerns: O_3, PM_{10},

$PM_{2.5}$, CO, NO_2, and SO_2. Additionally, national standards exist for Pb. The NAAQS are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. The federal regulatory schemes also cover toxic air contaminants (TACs).

The Federal CAA requires U.S EPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table 3.4-4.

The Federal CAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). USEPA is responsible for implementing the programs established under the CAA, programs such as establishing and reviewing the federal ambient air quality standards and judging the adequacy of SIPs. If a state contains areas that violate the national standards, the Federal CAA requires the State to revise its SIP to incorporate additional control measures to reduce air pollution. USEPA has authorized States such as California with air programs that meet or exceed federal standards to implement many of the federal programs while retaining an oversight role.

State

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the California standards are more health protective (stringent) than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

The CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts (air districts) at the regional and local levels. CARB and local air districts bear responsibility for achieving California's air quality standards, which are to be achieved through air district-level air quality management plans that would be incorporated into the SIP. In California, USEPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. CARB is responsible for establishing state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The act also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures.

As shown in Table 3.4-4, the CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment.

PC ORIGINAL PKG

Assembly Bill 2588

California regulates TACs primarily through the Tanner Air Toxics Act of 1983 (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Toxic Air Contaminant Identification and Control Act (AB 1807) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In August 1998, CARB identified particulate emissions from diesel-fueled engines as TACs. In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. As an ongoing process, CARB reviews air contaminants and identifies those that are classified as TACs. CARB also continues to establish new programs and regulations for the control of TACs, including DPM, as appropriate. Among the programs and strategies CARB has developed to reduce diesel emissions for various sources, including off-road sources (construction equipment), and on-road trucks (haul trucks). In 2015, OEHHA adopted the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.

Senate Bill 375

SB 375, also known as the Sustainable Communities and Climate Protection Act, provides for a new planning process that coordinates land use planning, regional transportation plans (RTPs), and funding priorities, originally in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires RTPs to incorporate a "sustainable communities strategy" (SCS). The goal of the SCS is to reduce regional VMT through land use planning and consequent transportation patterns. SCS measures include transportation demand management, transportation system management, and pricing.

California State Implementation Plan

The CAA mandates that the state submit and implement a State Implementation Plan (SIP) for areas not meeting the NAAQS. These plans must include pollution control measures that demonstrate how the standards will be met. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. The Code of Federal Regulations Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items which are included in the California SIP.

Table 3.4-4. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	
O_3	1 hour	-	Same as Primary Standard	0.09 ppm
	8 hour	0.07 ppm		0.07 ppm
PM_{10}	24 hour	150 µg/m^3	Same as Primary Standard	50 µg/m^3
	Annual	-		20 µg/m^3

PC ORIGINAL PKG

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	
$PM_{2.5}$	24 hour	35 µg/m^3	Same as Primary Standard	-
	Annual Arithmetic Mean	12 µg/m^3	15 µg/m^3	12 µg/m^3
CO	1 hour	35 ppm	-	20 ppm
	8 hour	9 ppm	-	9 ppm
	8 hour (Lake Tahoe)	-	-	6 ppm
NO_2	1 hour	100 ppb	-	0.18 ppm
	Annual Arithmetic Mean	0.053 ppm	Same as Primary Standard	0.03 ppm
SO_2	1 hour	75 ppb	-	0.25 ppm
	3 hour	-	0.5 ppm	-
	24 hour	0.14 ppm	-	0.04 ppm
	Annual Arithmetic Mean	0.03 ppm	-	-
Pb	30-day Average	-	-	1.5 µg/m^3
	Calendar Quarter	1.5 µg/m^3	Same as Primary Standard	-
	Rolling 3-month Average	0.15 µg/m^3		-
Visibility Reducing Particles	8 hour	No National Standards		-[5]
Sulfates	24 hour	No National Standards		25 µg/m^3
Hydrogen Sulfide	1 hour	No National Standards		0.03 ppm
Vinyl Chloride	24 hour	No National Standards		0.01 ppm

PC ORIGINAL PKG

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	

Source: CARB 2024b
Notes:
O_3 = ozone; PM_{10} = particles of 10 micrometers and smaller; $PM_{2.5}$ = particles of 2.5 micrometers and smaller; CO = carbon monoxide; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; Pb = lead; ppm = parts per million; µg/m^3 = micrograms per cubic meter; ppb = parts per billion
1. National standards (other than O_3, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the USEPA for further clarification and current national policies.
2. California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
3. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
4. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
5. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Regional

Imperial County Air Pollution Control District

The ICAPCD is the agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. ICAPCD is responsible for regulating stationary sources of air emissions in Imperial County. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by ICAPCD. ICAPCD is responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. Monitoring of ambient air quality in Imperial County began in 1976. Since that time, monitoring has been performed by ICAPCD, CARB, and by private industry. There are six monitoring sites in Imperial County from Niland to Calexico. The ICAPCD has developed the following plans to achieve attainment for air quality ambient standards.

- **2009 Imperial County Plan for PM_{10}.** Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. As a result, ICAPCD was required to develop a PM_{10} Attainment Plan. The final plan was adopted by ICAPCD on August 11, 2009 (ICAPCD 2009).
- **2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area.** U.S. EPA designated Imperial County as nonattainment for the 2006 24-hr $PM_{2.5}$ standard, effective December 14, 2009. The 2013 $PM_{2.5}$ SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but-for" transport of international emissions from Mexicali, Mexico. The City of Calexico, California shares a border with the City of Mexicali. Effective July 1, 2014, the City of Calexico was designated nonattainment, while the rest of the SSAB was designated attainment (ICAPCD 2014).
- **2017 Imperial County Plan for 2008 8-hour Ozone Standard.** Because of Imperial County's "moderate" nonattainment status for 2008 federal 8-hour O_3 standards, ICAPCD was required to develop an 8-hour Attainment Plan for Ozone (ICAPCD 2017a). The plan includes control measures which are an integral part of how the ICAPCD currently controls the ROG and NO_X

PC ORIGINAL PKG

emissions within the O_3 nonattainment areas. The overall strategy includes programs and control measures which represent the implementation of Reasonable Available Control Technology (40 CFR 51.912) and the assurance that stationary sources maintain a net decrease in emissions.

- **2018 Imperial County Plan for PM_{10}**. Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. The 2018 SIP maintained previously adopted fugitive dust control measures (Regulation VIII) that were approved in the Imperial County portion of the California SIP in 2013 (see above) (ICAPCD 2018a).
- **2018 Imperial County Plan for $PM_{2.5}$.** U.S. EPA designated Imperial County as nonattainment for the 2018 24-hr $PM_{2.5}$ standard. The 2018 $PM_{2.5}$ SIP concluded that the majority of the $PM_{2.5}$ emissions resulted from transport in nearby Mexico. Specifically, the SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but for" transport of international emissions from Mexicali, Mexico. In accordance with the CCAA, the $PM_{2.5}$ SIP satisfies the attainment demonstration requirement satisfying the provisions of the CCAA (ICAPCD 2018b).

In addition to the above plans, the ICAPCD is working cooperatively with counterparts from Mexico to implement emissions reductions strategies and projects for air quality improvements at the border. The two countries strive to achieve these goals through local input from states, county governments, and citizens. Within the Mexicali and Imperial Valley area, the Air Quality Task Force has been organized to address those issues unique to the border region known as the Mexicali/Imperial air shed. The Air Quality Task Force membership includes representatives from federal, State, and local governments from both sides of the border, as well as representatives from academia, environmental organizations, and the general public. This group was created to promote regional efforts to improve the air quality monitoring network, emissions inventories, and air pollution transport modeling development, as well as the creation of programs and strategies to improve air quality.

Imperial County Air Pollution Control District Rules and Regulations

ICAPCD has the authority to adopt and enforce regulations dealing with controls for specific types of sources, emissions or hazardous air pollutants, and New Source Review. The ICAPCD Rules and Regulations are part of the SIP and are separately enforceable by the EPA.

Rule 106 – Abatement. The Board may, after notice and a hearing, issue, or provide for the issuance by the Hearing Board, of an order for abatement whenever the District finds that any person is in violation of the rules and regulations limiting the discharge of air contaminants into the atmosphere.

Rule 107 – Land Use. The purpose of this rule is to provide ICAPCD the duty to review and advise the appropriate planning authorities within the District on all new construction or changes in land use which the Air Pollution Control Officer believes could become a source of air pollution problems.

Rule 201 – Permits Required. The construction, installation, modification, replacement, and operation of any equipment which may emit or control Air Contaminants require ICAPCD permits.

Rule 207 – New and Modified Stationary Source Review. Establishes preconstruction review requirements for new and modified stationary sources to ensure the operations of equipment does not interfere with attainment or maintenance of ambient air quality standards.

Rule 208 – Permit to Operate. The ICAPCD would inspect and evaluate the facility to ensure the facility has been constructed or installed and will operate to comply with the provisions of the Authority to Construct permit and comply with all applicable laws, rules, standards, and guidelines.

PC ORIGINAL PKG

Rule 310 – Operational Development Fee. The purpose of this rule is to provide ICAPCD with a sound method for mitigating the emissions produced from the operation of new commercial and residential development projects throughout the County of Imperial and incorporated cities. All project proponents have the option to either provide off-site mitigation, pay the operational development fee, or do a combination of both. This rule will assist ICAPCD in attaining the state and federal ambient air quality standards for PM_{10} and O_3.

Rule 401 – Opacity of Emissions. Sets limits for release or discharge of emissions into the atmosphere, other than uncombined water vapor, that are dark or darker in shade as designated as No.1 on the Ringelmann Chart[1] or obscure an observer's view to a degree equal to or greater than smoke does as compared to No.1 on the Ringelmann Chart, for a period or aggregated period of more than three minutes in any hour.

Rule 403 – General Limitations on the Discharge of Air Contaminants. Rule 403 sets forth limitations on emissions of pollutants, including particulate matter, from individual sources.

Rule 407 – Nuisance. Rule 407 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Rule 801 – Construction and Earthmoving Activities. Rule 801 aims to reduce the amount of PM_{10} entrained in the ambient air as a result of emissions generated from construction and other earthmoving activities by requiring actions to prevent, reduce, or mitigate PM_{10} emissions. This rule applies to any construction and other earthmoving activities, including, but not limited to, land clearing, excavation related to construction, land leveling, grading, cut and fill grading, erection or demolition of any structure, cutting and filling, trenching, loading or unloading of bulk materials, demolishing, drilling, adding to or removing bulk of materials from open storage piles, weed abatement through disking, back filling, travel on-site and travel on access roads to and from the site.

Regulation VIII – Fugitive Dust Rules. Regulation VIII sets forth rules regarding the control of fugitive dust, including fugitive dust from construction activities. The regulation requires implementation of fugitive dust control measures to reduce emissions from earthmoving, unpaved roads, handling of bulk materials, and control of track-out/carry-out dust from active construction sites. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:

- Phasing of work in order to minimize disturbed surface area
- Application of water or chemical stabilizers to disturbed soils
- Construction and maintenance of wind barriers
- Use of a track-out control device or wash down system at access points to paved roads.

Compliance with Regulation VIII is mandatory for all construction sites, regardless of size; however, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the Air District is required

[1] The Ringelmann scale is a scale for measuring the apparent density or opacity of smoke.

PC ORIGINAL PKG

10 days prior to the commencement of any construction activity. Furthermore, any use of engine(s) and/or generator(s) of 50 horsepower or greater may require a permit through ICAPCD.

Southern California Association of Governments – 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.

On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:

- Reduce greenhouse gas emissions and improve air quality.

Imperial County General Plan

The Imperial County General Plan serves as the overall guiding policy for the County. The Conservation and Open Space Element includes objectives for helping the County achieve the goal of improving and maintaining the quality of air in the region. Table 3.4-5 summarizes the project's consistency with the applicable air quality goal and objectives from the Conservation and Open Space Element. While this EIR analyzes the project's consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.4-5. Project Consistency with Applicable Plan Policies

Applicable Policies	Consistency Determination	Analysis
Conservation and Open Space Element		
Protection of Air Quality and Addressing Climate Change Goal 7: The County shall actively seek to improve the quality of air in the region.	Consistent	The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities. Therefore, the proposed project is consistent with this goal.

PC ORIGINAL PKG

Objective 7.1: Ensure that all project and facilities comply with current Federal, State and local requirements for attainment of air quality objectives.	Consistent	The proposed project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Further, the project would comply with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Measures. Therefore, the proposed project is consistent with this objective.
Objective 7.2: Develop management strategies to mitigate fugitive dust. Cooperate with all federal and state agencies in the effort to attain air quality objectives.	Consistent	The Applicant would cooperate with all federal and State agencies in the effort to attain air quality objectives through compliance with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Measures. Therefore, the proposed project is consistent with this objective.

Source: County of Imperial 2016

3.4.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to air quality, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to air quality are considered significant if any of the following occur:

- Conflict with or obstruct implementation of the applicable air quality plan
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

Imperial County Air Pollution Control District

ICAPCD amended the *Air Quality Handbook: Guidelines for the Implementation of CEQA* on December 12, 2017 (ICAPCD 2017b). ICAPCD established significance thresholds based on the state CEQA thresholds. The handbook was used to determine the proper level of analysis for the project.

CONSTRUCTION

For construction projects, the *Air Quality Handbook* indicates that the significance threshold for NO_x is 100 pounds per day, 75 pounds per day for ROG, and 150 pounds per day for PM_{10}. As discussed in the ICAPCD's *Air Quality Handbook*, the approach to evaluating construction emissions should be qualitative rather than quantitative. In any case, regardless of the size of the project, the standard mitigation measures for construction equipment and fugitive PM_{10} must be implemented at all construction sites. The implementation of discretionary mitigation measures, as listed in Section 7.1 of the ICAPCD's *Air Quality Handbook*, apply to those construction sites that are 5 acres or more

PC ORIGINAL PKG

for non-residential developments or 10 acres or more in size for residential developments. The mitigation measures found in Section 7.1 of the ICAPCD's handbook are intended as a guide of feasible mitigation measures and are not intended to be an all-inclusive comprehensive list of all mitigation measures. Table 3.4-6 presents the construction emission thresholds that are identified by ICAPCD.

Table 3.4-6. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities

Pollutant	Thresholds
PM_{10}	150 pounds per day
ROG	75 pounds per day
NO_X	100 pounds per day
CO	550 pounds per day

Source: ICAPCD 2017b

CO – carbon monoxide; NO_x – nitrogen oxide; PM_{10} - particulate matter less than 10 microns in diameter; ROG - reactive organic gas

OPERATIONS

Air quality analyses should compare all operational emissions of a project, including motor vehicle, area source, and stationary or point sources to the thresholds in Table 3.4-7. Projects can be classified as either Tier 1 or Tier 2 projects, depending on the project's operational emissions. As shown in Table 3.4-7, Tier 1 projects are projects that emit less than 137 pounds per day of nitrogen oxide (NOx) or reactive organic gases (ROGs); less than 150 pounds per day of PM_{10} or SOx; or less than 550 pounds per day of CO or $PM_{2.5}$.

Tier 1 projects are not required to develop a Comprehensive Air Quality Analysis Report or an EIR and require the implementation of all feasible mitigation measures listed in Section 7.2 of the ICAPCD's Air Quality Handbook (ICAPCD 2017b). Alternatively, Tier 2 projects are projects that emit 137 pounds per day of NOx or ROG or greater; 150 pounds per day of PM_{10} or SOx or greater; or 550 pounds per day of CO or $PM_{2.5}$ or greater. Tier 2 projects are required to develop a Comprehensive Air Quality Analysis Report at a minimum, and are required to implement all standard mitigation measures as well as all feasible discretionary mitigation measures listed in Sections 7.2 and 7.3 of the ICAPCD's Air Quality Handbook (ICAPCD 2017b).

Table 3.4-7. Imperial County Air Pollution Control District Significance Thresholds for Operation

Criteria Pollutant	Tier 1 Thresholds	Tier 2 Thresholds
NO_x and ROG	Less than 137 pounds per day	137 pounds per day and greater
PM_{10} and SO_2	Less than 150 pounds per day	150 pounds per day and greater
CO and $PM_{2.5}$	Less than 550 pounds per day	550 pounds per day and greater
Level of Significance	Less than Significant	Significant Impact

PC ORIGINAL PKG

Table 3.4-7. Imperial County Air Pollution Control District Significance Thresholds for Operation

Criteria Pollutant	Tier 1 Thresholds	Tier 2 Thresholds

Source: ICAPCD 2017b

CO – carbon monoxide; NO_x – nitrogen oxide; O_3 – ozone; Pb – lead; $PM_{2.5}$ – particulate matter less than 2.5 microns in diameter; PM_{10} - particulate matter less than 10 microns in diameter; ROG - reactive organic gas; S0x – sulfur oxide

Diesel Toxic Risk Thresholds

There are inherent uncertainties in risk assessment with regard to the identification of compounds as causing cancer or other health effects in humans, the cancer potencies and reference exposure levels of compounds, and the exposure that individuals receive. It is common practice to use conservative (health protective) assumptions with respect to uncertain parameters. The uncertainties and conservative assumptions must be considered when evaluating the results of risk assessments.

There is debate as to the appropriate levels of risk assigned to diesel particulates. The U.S. EPA has not yet declared diesel particulates as a toxic air contaminant. Using the CARB threshold, a risk concentration of one in one million (1:1,000,000) per micrograms per cubic meter ($\mu g/m^3$) of continuous 70-year exposure is considered less than significant.

Methodology

The analysis criteria for air quality impacts are based on the approach and methods discussed in the ICAPCD's *Air Quality Handbook* (ICAPCD 2017b). The ICAPCD's *Air Quality Handbook* establishes aggregate emission calculations for determining the potential significance of a project. In the event that the emissions exceed the established thresholds (Table 3.4-6 and Table 3.4-7), air dispersion modeling may be conducted to assess whether the project results in an exceedance of an air quality standard.

An air quality technical report was prepared by HDR Engineering, Inc. (Appendix D of this EIR). The emissions of criteria air pollutants were estimated using methodologies recommended by the ICAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Imperial County as well as timing and equipment identified by the project proponent. Associated emissions calculations and assumptions are included in Appendix D of this EIR.

The air quality impacts are mainly attributable to construction phases of the project, including site preparation, facility installation, and gen-tie and site restoration. Operational impacts include inspection and maintenance operations, which includes washing of the solar panels.

Construction

For purposes of estimating project emissions, and based on information provided by the applicant, it is assumed that construction of the project would commence in April 2026 and is anticipated ending in October 2027. The project is assumed to have a 30-year lifespan and at the end of operation will be decommissioned. However, the EMFAC and OFFROAD models in CalEEMod only have

emission factors through 2050. As such, the year 2050 was assumed for estimating emissions from the decommissioning phase.

Earthmoving activities are expected to include the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The project is not anticipated to require paving, removal, or significant alteration of existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface. However, the analysis conservatively assumes all 1,849 acres will be graded.

Regional emissions during construction have been estimated by assuming a conservative estimate of construction activities (i.e. assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. Assuming an early date for construction activities is conservative because emission factors decrease in future years due to improvements in engine technology and the retirement of older, dirtier equipment and vehicles from the fleet. , This is pursuant to state regulations that require vehicle fleet operators to phase-in less-polluting trucks.

All worker, vendor, and hauling trips would occur on public roadways (i.e., not within the project construction boundary). However, some driving on unpaved roads could occur to unload materials and installation of PV arrays. Therefore, an input value of 85% paved roads is utilized in the emissions model to account for some unpaved road usage. Vehicle speed would also be restricted to 15 miles per hour on both paved and unpaved roads.

Construction emissions were estimated using CalEEMod, version 2022, which incorporates CARB's EMFAC2021 model. For the purposes of the air quality analysis, it has been assumed that the contractor would implement dust control measures during construction pursuant to ICAPCD Regulation VIII. The applicant provided the number of construction workers and vendor trips as well as the trip lengths.

Operations

Once constructed, periodic maintenance of the PV solar and BESS facility would generally be limited to cleaning PV panels, monitoring, and site security. Since the project would share O&M, substation, and/or transmission facilities with other nearby PV solar and BESS projects, it is assumed the project would share personnel, thereby reducing the project's on-site staff to below the anticipated 4 to 10 full-time employees.

There are no expected sources of stationary emission sources (i.e. emergency generators). During operation of the proposed project, minimal amounts of emissions could be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and emissions will be analyzed qualitatively.

PC ORIGINAL PKG

Impact Analysis

Impact 3.4-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

The air quality attainment plan (AQAP) for the SSAB, through the implementation of the AQMP (previously AQAP) and SIP for PM_{10}, sets forth a comprehensive program that will lead the SSAB into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections, meeting the land use designation set forth in the local General Plan, and comparing assumed emissions in the AQMP to proposed emissions.

The project must demonstrate compliance with all ICAPCD applicable rules and regulations, as well as local land use plans and population projections. As the project does not contain a residential component, the project would not result in an increase in the regional population. While the project would contribute to energy supply, which is one factor of population growth, the proposed project is a solar energy and BESS project and would not significantly increase employment or growth within the region. Moreover, development of the proposed project would increase the amount of renewable energy and help California meet its RPS.

As shown in Table 3.4-6, the project is consistent with the applicable air quality goal and objectives from the Conservation and Open Space Element of the Imperial County General Plan. The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities.

Furthermore, the thresholds of significance adopted by the air district (ICAPCD), determine compliance with the goals of the attainment plans in the region. As such, emissions below the ICAPCD regional mass daily emissions thresholds presented in Table 3.4-6 and Table 3.4-7 would not conflict with or obstruct implementation of the applicable air quality plans.

As shown in Table 3.4-2, the project region is classified as nonattainment for federal O_3 and $PM_{2.5}$ standards. The region's SIP is made up of the following ICAPCD plans; 2009 Imperial County Plan for PM_{10}, 2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area, 2017 Imperial County Plan for 2008 8-hour Ozone Standard, 2018 Imperial County Plan for PM_{10}, and 2018 Imperial County Plan for $PM_{2.5}$. Construction of the project would generate emissions of VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ that could result in short-term impacts on ambient air quality in the study area. Sources of construction emissions include heavy-duty construction equipment (such as graders, trenchers, and loaders), worker, vendor, and haul truck vehicle emissions, and fugitive dust from material movement. As shown in Table 3.4-8under Impact 3.4-2, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissions. As shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

It is assumed the project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects. The facility would operate 24/7 with potentially 4 to 10 full-time employees at any given time. During long-term operations of the project, minimal amounts of criteria air pollutants would be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. However, these events are expected to be occasional and result in minimal emissions. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes.

Additionally, the project does not include residential or commercial development. The project would have 4 to 10 full-time employees but would not induce unplanned population or employment growth. Therefore, the project would not conflict with or obstruct the implementation of the applicable air quality plan.

As described above, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections and comparing assumed emissions in the AQMP to proposed emissions. Because the proposed project complies with local land use plans and population projections and would not exceed ICAPCD's regional mass daily emissions thresholds during construction and operation with mitigation, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This is considered a less than significant impact.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.4-2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)?

Construction. Construction-related activities are temporary, short-term sources of emissions. Two basic sources of short-term emissions will be generated through project construction: operation of heavy-duty equipment (i.e., excavators, loaders, haul trucks) and the creation of fugitive dust during clearing and grading. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Construction emissions vary from day-to-day depending on the number of workers, number, and types of active heavy-duty vehicles and equipment, level of activity, the prevailing meteorological conditions, and the length over which these activities occur.

The proposed project is anticipated to take approximately 18 to 24 months from the commencement of the construction process to complete. Construction activities would primarily involve site preparation and grading of the project site to establish access roads and pads for electrical equipment, trenching for underground electrical collection lines, and the installation of solar equipment/battery units and security fencing.

As shown in Table 3.4-2, the project region is classified as nonattainment for federal O_3 and $PM_{2.5}$ standards. The ICAPCD's application of thresholds of significance for criteria air pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As shown in Table 3.4-8, the emissions of criteria pollutants from project

construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would reduce construction emissions.

As previously discussed above, the proposed project is not anticipated to significantly alter existing soils. Rather solar panels, which would occupy approximately 61 percent of the project site, would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. All 1,849 acres were assumed to be graded with 15 percent of roads unpaved. Due to this conservative assumption, the ICAPCD threshold for PM_{10} would be exceeded. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. The proposed project must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Therefore, implementation of the Regulation VIII fugitive dust control measures (Mitigation Measure AQ-1) is required for the project.

Mitigation Measure AQ-2 would require all off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, meet, at a minimum, the Tier 4 Final California Emission Standards for Off-Road Compression-Ignition Engines as specified in C.C.R., Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NOx and particulate matter emissions that are equivalent to Tier 4 engine. Implementation of Mitigation Measure AQ-2 would be implemented to reduce PM_{10} emissions, but as shown in Table 3.4-9, would also have the co-benefit of reducing NOx emissions during construction. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NOx analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds.

Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

Table 3.4-8. Unmitigated Daily Construction Maximum Criteria Air Pollutant Emissions

Construction Phase	Pounds/Day (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	5.6	36.8	59.6	0.1	71.5	9.0
Phase 2: Civil Improvements – Grading/Roads/Earthwork (2026)	7.3	47.9	71.5	0.1	80.9	10.3
Phase 3: PV Panel & BESS Construction (2026)	11.4	51.6	160.2	0.1	79.3	10.8
Phase 3: PV Panel & BESS Construction (2027)	9.3	50.0	114.2	0.1	79.1	10.7
Phase 4: Testing & Commissioning (2027)	0.4	1.9	5.7	0.0	67.1	6.9
Phase 5: Decommissioning (2050)	3.5	18.8	57.2	0.1	78.1	9.7
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	12.9	84.7	131.1	0.2	152.4	19.3
Maximum	**12.9**	**84.7**	**160.2**	**0.2**	**152.4**	**19.3**
ICAPCD Thresholds	*75*	*100*	*550*	*N/A*	*150*	*N/A*
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**Yes**	**N/A**

Source: Appendix D of this EIR

Notes:

CO = carbon monoxide, NO_X = oxides of nitrogen, PM_{10} = coarse particulate matter, $PM_{2.5}$ = fine particulate matter, SO_X = oxides of sulfur, VOC = volatile organic compounds, ICAPCD = Imperial County Air Pollution Control District; N/A = Not applicable

PC ORIGINAL PKG

Table 3.4-9. Mitigated Daily Construction Maximum Criteria Air Pollutant Emissions

Construction Phase	Pounds/Day (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	1.9	7.8	74.3	0.1	69.1	7.4
Phase 2: Civil Improvements – Grading/Roads/Earthwork (2026)	3.7	18.8	89.1	0.1	78.7	8.8
Phase 3: PV Panel & BESS Construction (2026)	8.5	24.9	166.1	0.1	77.7	9.8
Phase 3: PV Panel & BESS Construction (2027)	6.5	25.0	119.9	0.1	77.6	9.8
Phase 4: Testing & Commissioning (2027)	0.4	1.8	5.6	0.0	66.2	6.8
Phase 5: Decommissioning (2050)	2.7	13.7	63.9	0.1	77.4	9.6
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	5.7	26.7	163.4	0.2	147.8	16.2
Maximum	**8.5**	**26.7**	**166.1**	**0.2**	**147.8**	**16.2**
ICAPCD Thresholds	*75*	*100*	*550*	*N/A*	*150*	*N/A*
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**N/A**

Source: Appendix D of this EIR

Notes:

CO = carbon monoxide, NO_X = oxides of nitrogen, PM_{10} = coarse particulate matter, $PM_{2.5}$ = fine particulate matter, SO_X = oxides of sulfur, VOC = volatile organic compounds, ICAPCD = Imperial County Air Pollution Control District; N/A = Not applicable

Operations. As previously discussed, it is assumed the project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects or with any future nearby proposed renewable energy projects. During long-term operations of the project, minimal amounts of criteria air pollutants would be generated from periodic vehicle trips for maintenance, inspections, and routine cleaning. However, these events are expected to be occasional and result in minimal emissions. Operational emissions are not anticipated to exceed ICAPCD's significance thresholds. Although no significant air quality impact would occur during operation, the project applicant is required to submit a Dust Suppression Management Plan for both construction and operation in order to reduce fugitive dust emissions. Implementation of Mitigation Measures AQ-3 and AQ-4 would ensure that a Dust Suppression Management Plan is implemented, thereby ensuring that this potential impact would remain less than significant. In addition, implementation of Mitigation Measure AQ-5 would limit the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less and Mitigation Measure

PC ORIGINAL PKG

AQ-6 would ensure an Operational Dust Control Plan is implemented. Therefore, operational impacts would be less than significant.

Mitigation Measure(s)

AQ-1 **Fugitive Dust Control.** Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the project applicant is required to implement all standard mitigation measures as well as any feasible discretionary and enhanced measures from the ICAPCD CEQA Handbook listed below prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process.

ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control

- All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover.
- All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.
- The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering.

ICAPCD “Discretionary” Measures for Fugitive Dust (PM_{10}) Control

PC ORIGINAL PKG

- Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust.
- Replace ground cover in disturbed areas as quickly as possible.
- Automatic sprinkler system installed on all soil piles.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.
- Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.
- Implement a shuttle service to and from retail services and food establishments during lunch hours.

Standard Mitigation Measures for Construction Combustion Equipment

- Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Enhanced Mitigation Measures for Construction Equipment

To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures:

- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

AQ-2 **Construction Equipment.** All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression-Ignition Engines as specified in CCR, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. Drill rig engines shall meet a minimum of Tier 4 Interim California Emission Standards. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X

analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed the significance thresholds. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant. The project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-4 **Dust Suppression Management Plan.** Prior to any earthmoving activity, the project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and ICPDS approval.

AQ-5 **Speed Limit.** During construction and operation of the project, the project applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.

AQ-6 **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule 301 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Significance After Mitigation

As discussed above, the proposed project would exceed the ICAPCD's threshold for PM_{10}. To mitigate the potential impacts associated with construction-generated emissions with regard to PM_{10}, the project would adhere to the requirements of ICAPCD Regulation VIII for the control of fugitive dust (Mitigation Measure AQ-1). Furthermore, implementation of Mitigation Measure AQ-2 would ensure construction equipment will be equipped with an engine designation of EPA Tier 4 engine. ICAPCD will utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds. Operation of the project, subject to the approval of CUPs, would be consistent with applicable federal, state, regional, and local plans and policies. Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

PC ORIGINAL PKG

Impact 3.4-3 Would the project expose sensitive receptors to substantial pollutant concentrations?

The nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby sensitive receptors include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

Construction. The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project.

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to OEHHA, health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 24 months), the proposed project and project-related offsite improvements would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities. The project would be consistent with the applicable ICAPCD rules and regulations intended to reduce emissions from construction equipment and activities. The project would comply with regulatory control measures including the CARB Air Toxics Control Measure (ATCM) that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that requires fleets to retire, replace, or repower of older, dirtier engines with newer emission-controlled models; compliance with these would minimize emissions of TACs during construction. Although sensitive receptors, residential uses, are located onsite and in the project vicinity, construction is relatively short-term, anticipated at 24 months and would result in an overall low level of DPM concentrations at the project site. Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions in the project site and project-related offsite improvements.

The project would also comply with best practices to limit exposure to Valley Fever. During excavation, grading, and other earth-moving activities, construction workers and nearby sensitive receptors have the potential to be exposed to Valley Fever. As this risk cannot be eliminated entirely, Valley Fever risk from construction-related dust from the project will be partially mitigated by implementation of fugitive dust control measures within ICAPCD Regulation VIII (Mitigation Measure AQ-2).

Additionally, traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO “hotspots.” CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels affecting sensitive receptors. Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

Title 40 of the Code of Federal Regulations, Section 93.123(c)(5), Procedures for Determining Localized CO, PM_{10}, and $PM_{2.5}$ Concentrations (Hot-Spot Analysis), states that "CO, PM_{10}, and $PM_{2.}$ hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site." Project construction would involve on-road vehicle trips from trucks and workers during construction. Construction activities would last approximately 24 months and would not require a project-level construction hotspot analysis.

Operations. CARB recommends that health risk assessments be conducted for substantial sources of operational DPM emissions (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions. The Project would not include any truck stop or warehouse distribution uses, and, as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Project operations would not be considered a substantial source of diesel particulates. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes, which the project is not.

With respect to the use of consumer products and architectural coatings, the project's land uses would not include installation of industrial-sized paint booths, emergency generators, or require extensive use of commercial or household cleaning products. Therefore, impacts operational impacts from TACs would be less than significant.

As previously mentioned, minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, since only limited vehicle trips are anticipated. The proposed project would not result in the creation of a CO hotspot and would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hotspot.

In summary, construction and operation of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.4-4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

An odor impact depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies.

Among possible physical harms is inhalation of VOCs that cause smell sensations in humans. These odors can affect human health in four primary ways:

- The VOCs can produce toxicological effects
- The odorant compounds can cause irritations in the eye, nose, and throat
- The VOCs can stimulate sensory nerves that can cause potentially harmful health effects

PC ORIGINAL PKG

- The exposure to perceived unpleasant odors can stimulate negative cognitive and emotional responses based on previous experiences with such odors

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project would not include any of these land uses. Therefore, impacts associated with odors during operations would be less than significant.

During construction, odors would come predominantly from construction equipment, which would cease immediately after construction is complete. Furthermore, the project would be required to comply with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. As discussed, construction-related odors would be short-term and cease upon project completion. Therefore, impacts associated odors during construction would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.4.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Similar to construction activities, decommissioning and restoration of the project site would generate air emissions. A summary of the daily unmitigated construction emissions for the project is provided in Table 3.4-8. Solar equipment has a lifespan of approximately 20 to 25 years. The emissions from on- and off-road equipment during decommissioning are expected to be significantly lower than project construction emissions, as the overall activity would be anticipated to be lower than project construction activity. No significant air quality impacts are anticipated during decommissioning and restoration of the project site. However, all construction projects within Imperial County must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. In addition, the ICAPCD's Air Quality Handbook lists additional feasible mitigation measures that may be warranted to control emissions of fugitive dust and combustion exhaust. Mitigation Measures AQ-1 through AQ-5 would provide additional reduction strategies to further improve air quality. Therefore, a less than significant impact is identified during decommissioning and site restoration of the project site.

Residual

As discussed above, the proposed project would exceed the ICAPCD's threshold for PM_{10}. To mitigate the potential impacts associated with construction-generated emissions with regard to PM_{10}, the project would adhere to the requirements of ICAPCD Regulation VIII for the control of fugitive dust (Mitigation Measure AQ-1). Furthermore, implementation of Mitigation Measure AQ-2 would ensure construction equipment will be equipped with an engine designation of EPA Tier 4 engine. ICAPCD will utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds. Operation of the project, subject to the approval of CUPs, would be consistent with

applicable federal, state, regional, and local plans and policies. Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 3.4-9, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant. The project would not result in any residual operational significant and unavoidable impacts with regards to air quality.

PC ORIGINAL PKG

3.5 Biological Resources

This section identifies the biological and aquatic jurisdictional resources that may be impacted by the proposed project. The following identifies the existing biological and jurisdictional resources in the project area, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project. The information for this section is summarized from the *Biological Resources Technical Report* prepared by Dudek. This report is included in Appendix E of this EIR.

As part of the *Biological Resources Technical Report*, Dudek conducted a literature review, desktop survey, and biological reconnaissance survey of the project site to document the existing biological resources, to assess the habitat for its potential to support sensitive plant and wildlife species, and to determine the potential impacts of the project on biological resources.

3.5.1 Existing Conditions

Vegetation Communities and Land Cover Types

Five vegetation communities/land cover types were observed within the project site during the biological reconnaissance survey: general agriculture, stream channel, creosote bush scrub and allscale scrub shrubland, urban/developed, and disturbed habitat. The acreage of each vegetation community/land cover type within the project site is summarized in Table 3.5-1 and shown in Figure 3.5-1 and Figure 3.5-2. The majority of vegetation communities and land cover types mapped within the project site consisted of general agriculture and disturbed habitat.

Table 3.5-1. Vegetation Communities or Land Cover Types within the Project Site

Vegetation Community or Land Cover Type	Acres within Project Site[a]
General Agriculture	1,590.38
Stream Channel	5.80
Creosote Bush Scrub and Allscale Scrub Shrubland	80.97
Urban/Developed	5.81
Disturbed Habitat	165.86
Project Site Total	**1,848.82**

Source: Appendix E of this EIR

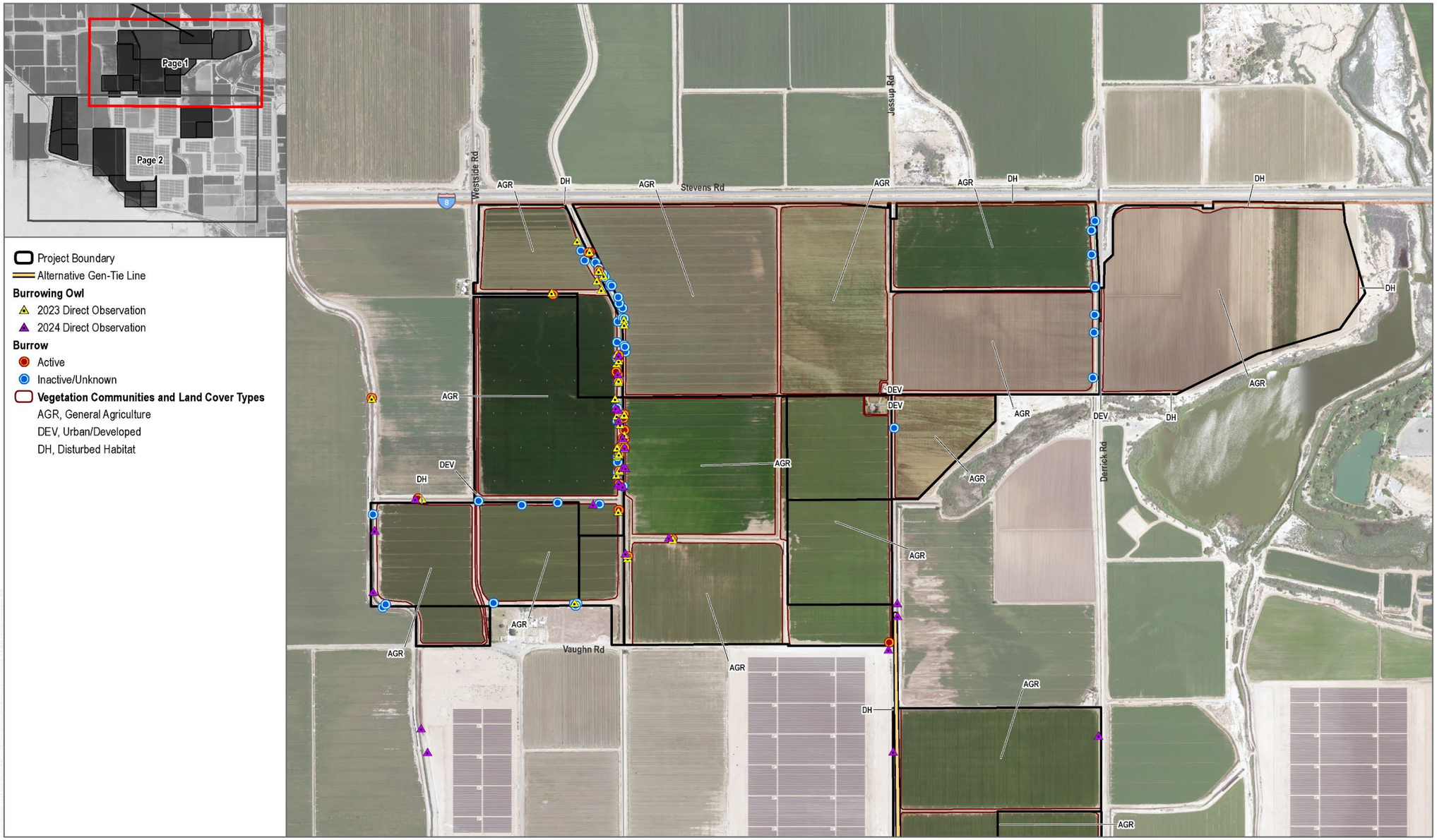
[a] *Vegetation and land cover type acreages are rounded to the nearest hundredth acre.*

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

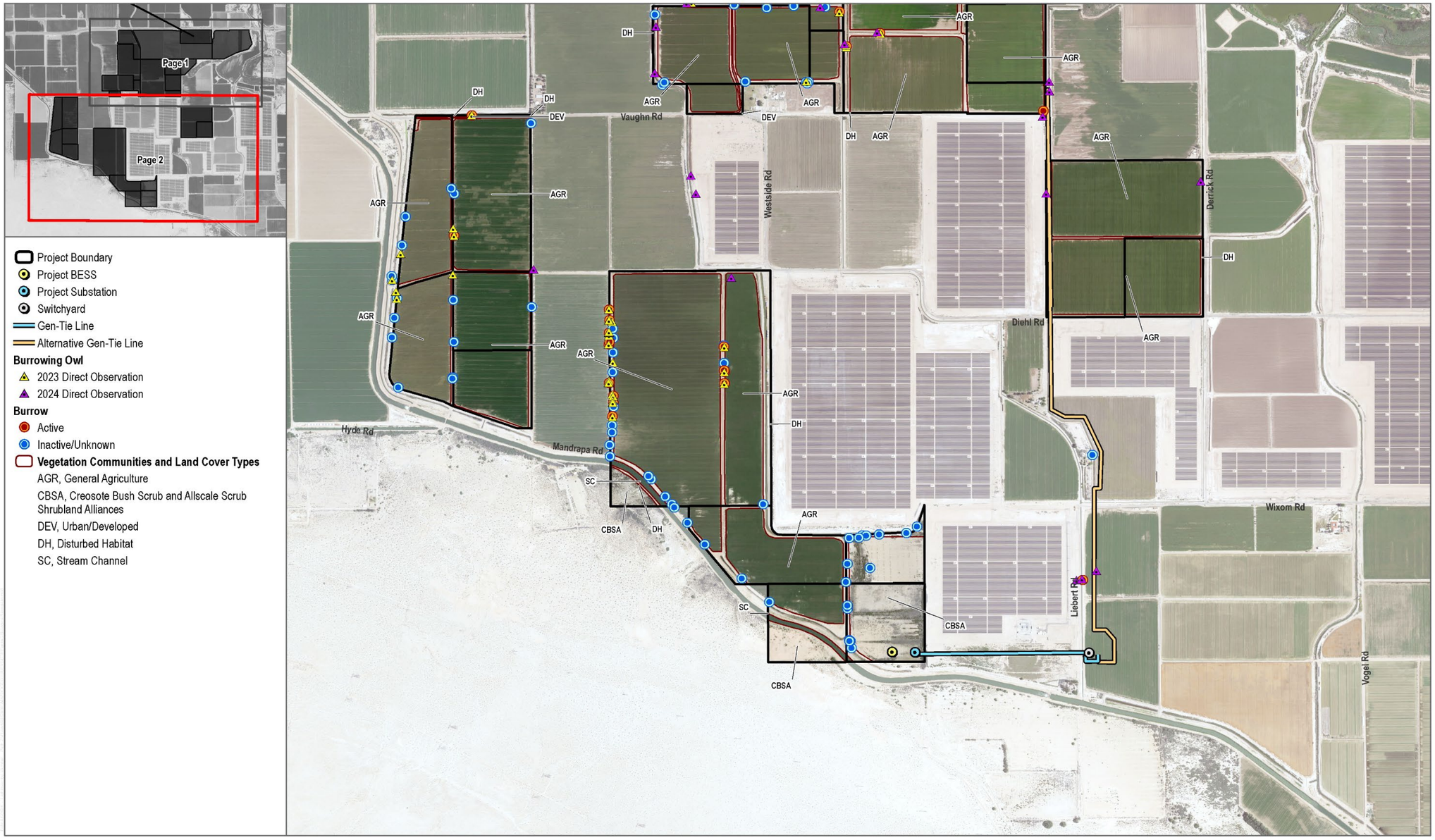
Figure 3.5-1. Vegetation Communities and Land Cover Types within the Project Site (Map 1 of 2)



Source: Appendix E of this EIR

PC ORIGINAL PKG

Figure 3.5-2. Vegetation Communities and Land Cover Types within the Project Site (Map 2 of 2)



Source: Appendix E of this EIR

PC ORIGINAL PKG

Detailed descriptions of the applicable vegetation communities and land cover types occurring within the project site are described below.

General Agriculture

Agricultural lands are an anthropogenic habitat and are not described by the California Department of Fish and Wildlife (CDFW) or by the California Native Plant Society (CNPS). Within the project site, agricultural lands consist of alfalfa (*Medicago sativa*), date palms (*Phoenix dactylifera*), Bermudagrass (*Cynodon dactylon*), and herbaceous vegetables, as well as several fallow fields. On-site farming practices include soil disking, plowing, herbicide application, and regular anthropogenic maintenance and disturbance associated with ongoing management actions. Compacted dirt roads and brow ditches are included within this land cover type (Appendix E of this EIR).

Stream Channel

Although not recognized by the Manual of California Vegetation, Online Edition, or the Natural Community List, stream channel is described by Oberbauer et al. (2008) as areas that exhibit ephemeral or intermittent flow and are barren or sparsely vegetated as a result of the scouring effects of floods or other anthropogenic causes. Within the project site, stream channel is characterized by irrigation ditches that convey flows throughout active agricultural lands. These areas include irrigation ditches that are unvegetated or vegetated with ruderal species such as giant reed (*Arundo donax*), nettleleaf goosefoot (*Chenopodium murale*), and asthmaweed (*Erigeron bonariensis*) (Appendix E of this EIR).

Creosote Bush Scrub and Allscale Scrub Shrubland Alliances

Desert scrub habitats generally consist of open areas with vegetative cover less than or equal to 50 percent populated with scattered shrubs and evergreen or deciduous species. Within the project site, creosote bush scrub and allscale scrub shrubland alliances are present in undeveloped areas that are absent of agricultural crops. These areas are primarily found around the southern project boundaries.

Creosote bush scrub shrubland alliance is dominated by creosote (*Larrea tridentata*), which serves as a canopy in most settings. Interspaces typically include saltbush (*Atriplex* spp.), goldenheads (*Acamptopappus* spp.), ragweed (*Ambrosia* spp.), woolly brickellbush (*Brickellia incana*), brittlebush (*Encelia farinose*), California jointfir (*Ephedra californica*), Nevada jointfir (*Ephedra nevadensis*), and Anderson wolfberry (*Lycium andersonii*). Emergent trees may be present at low cover, including honey mesquite (*Prosopis glandulosa*) or Joshua tree (*Yucca brevifolia*).

Allscale scrub shrubland alliance is dominated by allscale (*Atriplex polycarpa*). Interspaces typically include white bursage (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), four-winged saltbush (*Atriplex canescens*), red brome (*Bromus rubens*), smallseed sandmat (*Chamaesyce polycarpa*), bladderpod (*Cleome isomeris*), alkali goldenbush (*Isocoma acradenia*), and creosote. Emergent trees may be present at low cover, including honey mesquite (Appendix E of this EIR).

Urban/Developed

Urban/developed areas contain a mixture of constructed materials and vegetation. Within the project site, urban/developed land takes the form of maintained roads for access to crops and irrigation canals, and residences.

Disturbed Habitat

Disturbed habitat are areas that have physical anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized vegetation association. The existing vegetation is typically composed of non-native ornamental or exotic species. There can also be impacts from animal uses, grading, or repeated clearing for fuel management that leave the land incapable of providing a suitable or sustainable habitat for native species to persist (Appendix E of this EIR).

Sensitive Vegetation Communities

No vegetation communities considered sensitive by CDFW (Rank S1, S2, or S3) were mapped within the project site during the biological survey.

Special-Status Species

Literature Review

Prior to conducting field surveys, a literature search was conducted to identify special-status plant and animal species with potential to occur within the project site. Special-status plants and animal species were evaluated for their potential to occur within the project site where impacts could potentially occur.

Using information from the literature review and observations in the field, a list of special-status plant and animal species that have potential to occur within the project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal or California Endangered Species Acts (ESA);
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code Sections 3511, 4700, 5050, or 5515; and
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Plant Species

Based on the results of the literature review and database searches, 19 special-status plant species were identified as occurring within the region. Due to the current conditions present on site, including the vegetation communities; soils; elevation ranges; previous known locations documented in the CNDDB, by CNPS, and/or by USFWS; and current disturbance levels, none have moderate or high potential to occur. Four of these species have a low potential to occur on the project site, which is generally not suitable due to the predominantly agricultural landscape. These four species are Abrams' spurge (*Euphorbia abramsiana*), Baja California ipomopsis (*Ipomopsis effusa*), brown turbans (*Malperia tenuis*), and hairy stickleaf (*Mentzelia hirsutissima*). The complete results of this potential to occur evaluation for special-status plants are included within Appendix E of this EIR. No special-status plant species were recorded within the project site. No USFWS designated critical habitat for a federally listed plant species occurs within 1 mile of the project site (Appendix E of this EIR).

PC ORIGINAL PKG

Wildlife Species

Based on the results of the literature review and database searches, 23 special-status wildlife species were identified as occurring within the region. The western burrowing owl was recently named by the CDFW as a candidate for potential listing as a protected species under the California Endangered Species Act (CESA) and is present within the project site. Additionally, based on results of the literature review, database searches, and site conditions, one additional state-listed special-status species, California black rail (*Laterallus jamaicensis coturniculus*), was determined to have a low potential to occur within the irrigation ditches on the project site. All other listed species are not expected to occur.

One non-listed special-status species, northern harrier, was observed within the project site. One additional candidate for listing under the CESA, Crotch's bumble bee (*Bombus crotchii*), has a low potential to occur on the project site as a transient during foraging, but is not expected to nest.

The following eight non-listed special-status species were determined to have a low potential to occur, nest, or roost within the project site: Colorado Desert fringe-toed lizard (*Uma notata*), mountain plover (*Charadrius montanus*), California black rail, Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), LeConte's thrasher (*Toxostoma lecontei*), Colorado Valley woodrat (*Neotoma albigula venusta*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), and American badger (*Taxidea taxus*).

The following three non-listed special-status bat species were determined to have a low potential to forage on the project site, but no potential to roost on the project site: western yellow bat (*Dasypterus xanthinus*), western mastiff bat (*Eumops perotis californicus*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*).

Pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*) have yearlong ranges that encompass the project site.

The complete results of the potential-to-occur evaluation for special-status wildlife species are included as Appendix E of this EIR. No USFWS designated critical habitat for a federally listed wildlife species occurs within 1 mile of the project site (Appendix E of this EIR).

CALIFORNIA BLACK RAIL

California black rail is designated as state threatened and a fully protected species in California, and primarily occurs in California, Arizona, Baja California, and the Colorado River delta in Sonora. Suitable California black rail habitat generally includes salt marshes, freshwater marshes, and wet meadows. The species is typically identified in conjunction with common threesquare (*Schoenoplectus pungens*), arrowweed (*Pluchea sericea*), Fremont cottonwood (*Populus fremontii*), and seepwillow (*Baccharis salicifolia*). California black rails typically prey on small (less than 1 centimeter [0.39 inches]) invertebrates, chiefly insects, gleaned from marsh vegetation and mudflats; they also eat small seeds.

No California black rails were detected on the project site during the 2023 general biological survey. There are no CNDDB occurrences within the project site, and no focused surveys were performed. The closest records are from approximately 2.7 miles north of the project site in 2001. There is marginal suitable marsh habitat within some drainage canals that could potentially support foraging; however, the species is not expected to breed due to the limited suitable habitat on the project site (Appendix E of this EIR).

BURROWING OWL

Burrowing owl is a California Species of Special Concern and Bird of Conservation Concern, and was recently named by the CDFW as a candidate for potential listing as a protected species under the CESA. This species inhabits much of California. Burrowing owls prefer open, dry, annual or perennial grasslands; deserts; and scrublands characterized by low-growing vegetation. They usually nest in old burrows of ground squirrels, badgers, or other small mammals, although they may dig their own burrows in soft soil. Within disturbed or developed areas, burrowing owls may also nest in burrow surrogates (e.g., rock cavities, pipes, culverts, debris piles). Prey consists mostly of insects, small mammals, reptiles, birds, and carrion.

During the four focused survey passes in 2023 and 2024, approximately 89 burrowing owls were detected on the project site (Figure 3.5-1 and Figure 3.5-2). Burrowing owls were observed at 40 burrows, and an additional 143 burrows were found to have suitable habitat for the species. Most detections were concentrated along roads within the northern and southern areas of the project site. Due to the close proximity and high density of burrowing owls and repeated observations in several areas, it is likely that some of the same individuals were documented across several survey passes, and that the number of burrowing owls that reside on site may be fewer. Furthermore, due to the close proximity of many burrows, it is likely that there are several well-established burrow systems/complexes on site that the owls regularly use (Appendix E of this EIR).

NORTHERN HARRIER

Northern harrier is a California Species of Special Concern that inhabits much of California. Northern harriers use a wide variety of open habitats in California, including deserts, coastal sand dunes, pasturelands, croplands, dry plains, grasslands, estuaries, floodplains, and marshes. The species also forages over coastal sage scrub and other open scrub communities. Nesting areas are associated with marshes, pastures, grasslands, prairies, croplands, desert shrubsteppe, and riparian woodland. Undisturbed grasslands and wetlands that have dense vegetation have been documented to have higher nesting rates. Winter habitats similarly include a variety of open habitats dominated by herbaceous cover. Northern harrier populations are most concentrated in areas with low vegetation and occur from sea level to 3,048 meters above mean sea level.

During June 2023 burrowing owl surveys, one northern harrier was observed foraging in agricultural fields at the project site. The project site contains potentially suitable nesting habitat within fallow agricultural fields where human-caused disturbance is infrequent (Appendix E of this EIR).

Nesting Birds

The vegetation communities and open landscape within the project site provide potentially suitable habitat for commonly occurring nesting birds, including Anna's hummingbird (*Calypte anna*), Gambel's quail (*Callipepla gambelii*), and Abert's towhee (*Melozone aberti*). Although no nests were identified during the site visit, suitable nesting habitat exists within the project site and surrounding areas.

Critical Habitat

There is no USFWS designated critical habitat within 5 miles of the project site (Appendix E of this EIR).

PC ORIGINAL PKG

Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal.

On a regional level, the Imperial Valley is an important component of the Pacific Flyway, which is a major north/south passage for migratory birds. The Salton Sea is known to serve as a stopover for birds migrating along this flyway, with as many as 400 different bird species having been recorded. The project site is located approximately 23 miles southeast of the Salton Sea.

Because the project site is primarily surrounded by, and includes extensive, active agriculture, the project site has limited value as a potential wildlife corridor or habitat linkage for most wildlife species. The irrigation canals are not large enough to support large populations of birds, amphibians, or other wildlife species associated with water and riparian vegetation; however, it could provide stopover habitat for migratory species. The agriculture fields provide habitat for migratory birds that forage in open fields. As such, the project site likely does not serve as an important wildlife corridor or habitat linkage for larger mammals or species that are limited to native habitats, but it does provide foraging or stopover habitat for migratory birds.

Jurisdictional Aquatic Resources

According to the project's Aquatic Resources Delineation Report (Appendix E of this EIR), the project site contains approximately 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW. These non-wetland waters are characterized as IID irrigation canals that convey water throughout the Imperial Valley and are connected to a vast network of canals that source water from the Colorado River. Table 3.5-2 provides a summary of aquatic resources delineated within the project site (Appendix E of this EIR).

Many smaller, likely non-jurisdictional concrete canals with gates exist within and along the boundaries of agricultural fields on the project site. Although technically connected to potentially jurisdictional irrigation canals, they are constructed in uplands purely for the function of irrigating individual fields, and do not serve as critical conveyance pathways for regional irrigation like the larger, likely jurisdictional, irrigation canals.

During the field delineation, surface water was present in all of the non-wetland waters/ditches mapped within the project site; therefore, the waters onsite are likely considered relatively permanent waters. Based on site conditions observed in April 2023, the 24.74 acres of non-wetland waters/ditches and 0.05 acres of culverts connecting these non-wetland waters/ditches within the project site contain surface water and include, or have a continuous surface connection to, the Fern Canal, Fig Canal, and the Westside Main Ditch. These have a continuous surface connection to the Salton Sea, a traditional navigable water. Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters. Accordingly, all non-wetland waters mapped in the review area may be subject to USACE regulation (Appendix E of this EIR).

All of the features described in Table 3.5-2 have also been identified as potential waters of the state. These features are subject to regulation by the RWQCB under the Porter-Cologne Water Quality Control Act and CDFW under California Fish and Game Code Section 1600.

Table 3.5-2. Aquatic Resource Summary for the Project Site

Feature Name	Cowardin[1]	OHWM Indicators	Location	Acres/Linear Feet
Non-Wetland Waters (Below OHWM)				
Irrigation Ditch[2]	R4SBCx	BBS, occasional CVS and CVC	Throughout project site	24.74/71,760
Culvert	N/A	N/A	Throughout project site	0.05/1,059

Source: Appendix E of this EIR

OHWM = ordinary high-water mark; R4SBCx = Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated; BBS = break in bank slope; CVS = change in vegetation species; CVC = change in vegetation cover

[1] Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979).

[2] Feature likely classified as seasonal "relatively permanent water" that flows for at least 3 months of the year, based on conditions observed during the delineation.

3.5.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most listed plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain listed marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The Migratory Bird Treaty Act protects more than 800 species of birds and prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.).

Section 404 Permit (Clean Water Act)

The Clean Water Act (CWA) is the major federal legislation governing water quality, providing guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. CWA Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

Wetlands and Other Waters of the United States

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient

PC ORIGINAL PKG

to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high-water mark (OHWM), which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

State

California Endangered Species Act

CDFW administers the California Endangered Species Act (CESA), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

California Fish and Game Code Section 1600 et. seq (as amended)

The California FGC Section 1600 et. seq. requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake."

California Fish and Game Code Sections 3503, 3503.5, and 3513

Under the California Fish and Game Code, CDFW provides protection from "take" for a variety of species. Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law. Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey, or to take, possess, or destroy any nest or eggs of such birds.

California Department of Fish and Wildlife Streambed and Riparian Habitat

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Under California Fish and Game Code Section 1602, a notification to CDFW is required prior to beginning any project activity that may (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. CDFW requires a Lake and Streambed Alternation Agreement when one of the above project activities may substantially adversely affect fish and wildlife resources. Therefore, wetlands are not regulated by CDFW under California Fish and Game Code Section 1602 unless the wetlands are part of a river, stream, or lake.

State and Regional Water Quality Control Boards

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water

Resources Control Board develops statewide water quality plans, and the RWQCBs develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a "water of the state" (California Water Code Section 13260[a]). Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter–Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a CWA Section 401 Certification. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter–Cologne Act.

California Environmental Quality Act

Title 14 CCR, Section 15380 requires the identification of endangered, rare, or threatened species or subspecies of animals or plants that may be impacted by a project. If any such species are found, appropriate measures should be identified to avoid, minimize, or mitigate the potential effects of projects.

Local

Imperial County General Plan

The Conservation and Open Space Element of the Imperial County General Plan provides detailed plans and measures for the preservation and management of biological resources. The purpose of this element is to recognize that natural resources must be maintained for their ecological value for the direct benefit to the public and to protect open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and for public health and safety. In addition, the purpose of this element is to promote the protection, maintenance, and use of the County's natural resources with particular emphasis on scarce resources, and to prevent wasteful exploitation, destruction, and neglect of the state's natural resources. Table 3.5-3 analyzes the consistency of the project with specific policies contained in the Imperial County General Plan associated with biological resources.

PC ORIGINAL PKG

Table 3.5-3. Project Consistency with General Plan Goals and Policies

General Plan Policies	Consistency with General Plan	Analysis
Conservation and Open Space Element - *Open Space and Recreation Conservation* **Policy No. 2 -** The County shall participate in conducting detailed investigations into the significance, location, extent, and condition of natural resources in the County. **Program:** Notify any agency responsible for protecting plant and wildlife before approving a project which would impact a rare, sensitive, or unique plant or wildlife habitat.	Consistent	A biological assessment has been conducted at the project site to evaluate the proposed project's potential impacts on biological resources. Although special-status wildlife species were observed and have potential to occur within the project site, implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts on these species to a level that is less than significant. Applicable agencies responsible for protecting plants and wildlife will be notified of the proposed project and provided an opportunity to comment on this EIR prior to the County's consideration of any approvals for the project. As described in Chapter 2, Project Description, implementation of the project would require the approval of CUPs by the County to allow for the construction and operation of the project.
Conservation of Environmental Resources for Future Generations **Goal 1 -** Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value. **Objective 1.6 -** Promote the conservation of ecological sites and preservation of cultural resource sites through scientific investigation and public education.	Consistent	A biological assessment has been conducted at the project site to evaluate the proposed project's potential impacts on biological resources. Although special-status wildlife species were observed and have potential to occur within the project site, implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts on these species to a level that is less than significant. With implementation of Mitigation Measures BIO-1 through BIO-7, the project would not result in residual significant and unmitigable impacts on biological resources.

Source: County of Imperial 2016
BLM=Bureau of Land Management; CDFW – California Department of Fish and Wildlife; EIR – environmental impact report; USFWS – U.S. Fish and Wildlife Service

3.5.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering the respective Project's impacts on biological resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, Project impacts related to biological resources are considered significant if any of the following occur:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS

- Have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Impact Analysis

Impact 3.5-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Construction

Special-Status Plants

No special-status plant species were identified within the project site. There are small pockets of creosote bush scrub and allscale scrub shrubland, but, overall, the project site lacks suitable habitat or site characteristics required for special-status plant species; thus, special-status plant species are either not expected to occur or have a low potential to occur within the project site (Appendix E of this EIR). As such, there would be no anticipated direct and/or indirect impacts to special-status plant species.

Special-Status Wildlife

As described above, burrowing owls and one northern harrier were observed on the project site during biological surveys conducted in 2023 and 2024. Potential impacts are described below.

BURROWING OWL

Burrowing owls and active burrow sites were recorded on the project site during the 2023 and 2024 burrowing owl surveys (Figure 3.5-1 and Figure 3.5-2). Potential direct impacts to burrowing owls, including unintentional clearing or trampling of occupied habitat and/or destruction of burrowing owl dens, eggs, young, or adults, would be significant. However, construction-related direct impacts to burrowing owls would be reduced to a level less than significant with implementation of Mitigation Measures BIO-1 through BIO-4.

Mitigation Measure BIO-1 requires pre-construction clearance surveys to be conducted within 14 days prior to the start of ground disturbance by qualified and agency-approved biologists to determine the presence or absence of this species within the project footprint. These surveys are necessary because burrowing owls may not use the same burrow every year. The identification of any active burrows would result in the establishment of appropriate buffers and avoidance/minimization of impacts to burrowing owls. Mitigation Measure BIO-2 establishes compensation for unavoidable direct impacts

PC ORIGINAL PKG

to burrowing owls. Mitigation Measure BIO-3 establishes an education program to provide information on burrowing owl biology, regulations, protection measures, and reporting procedures. Mitigation Measure BIO-4 requires evaluation and implementation of best measures to reduce burrowing owl mortality along access roads and establishment of a speed limit.

Potential short-term, indirect impacts to burrowing owls include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, burrowing owls present within the project site are likely accustomed to increased human presence and noise and vibration. Construction-related indirect impacts to burrowing owls would be reduced to a level less than significant with implementation of Mitigation Measure BIO-1. Mitigation Measure BIO-1 establishes measures at active burrows, including passive relocation, shelter in place (using hay bales to shelter the burrow from construction activities), and abandoned burrow destruction.

CALIFORNIA BLACK RAIL AND YUMA RIDGEWAY'S RAIL

California black rail and Yuma Ridgeway's rail were not recorded during the 2023 reconnaissance survey; however, marginally suitable habitat occurs in small quantities within the irrigation canals on the project site. Focused surveys were not conducted within the project site; therefore, habitat suitability is conservatively based on the presence of a small amount of aquatic vegetation within the irrigation canals. Potential direct impacts to California black rail or Yuma Ridgeway's rail, including destruction of nests, eggs, and/or young if one or both species nest on site, would be considered significant. Implementation of Mitigation Measure BIO-5 would require nesting bird pre-construction surveys to be completed if construction occurs during the nesting bird season (February 1 through September 15). These surveys would identify any California black rails and Yuma Ridgeway's rails within the project site, establish appropriate buffers, and avoid impacts to California black rails and Yuma Ridgeway's rails. Construction-related direct impacts to California black rails and Yuma Ridgeway's rails would be reduced to a level less than significant with implementation of Mitigation Measure BIO-5.

Potential short-term, indirect impacts to California black rails and Yuma Ridgeway's rails include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, California black rails and Yuma Ridgeway's rails potentially present are likely accustomed to increased human presence and noise and vibration. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to a level less than significant.

NORTHERN HARRIER

One northern harrier was recorded foraging during the June 2023 burrowing owl survey. Potential direct impacts to northern harriers, including destruction of nests, eggs, and/or young if they nest on site, would be significant. The proposed project also has the potential to impact the species' migratory movement. The agriculture fields on the project site provide foraging habitat for northern harrier, and the migratory movements of the species may be adversely affected by construction and presence of

construction on the project site. However, implementation of Mitigation Measure BIO-6 would require a qualified biologist to conduct a pre-construction bird survey within and adjacent to the project area. The survey will account for breeding and nesting birds, as wells other bird activity, such as foraging, and for behavior possibly caused by project activities, such as agitation, stress, and/or nest abandonment. The survey would identify any northern harriers within the project site, establish appropriate buffers, and avoid impacts to northern harriers. Construction-related direct impacts to northern harriers would be reduced to a level less than significant with incorporation of Mitigation Measure BIO-6.

Potential short-term, indirect impacts to northern harriers include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, northern harriers potentially present within the project site are likely accustomed to increased human presence and noise and vibration. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to a level less than significant.

NESTING BIRDS

The project site has the potential to support avian nests, which are protected under the Migratory Bird Treaty Act and the California Fish and Game Code (Section 3503), under which it is unlawful to “take, possess, or needlessly destroy” avian nests or eggs. Thus, potentially significant impacts could occur if vegetation clearing is undertaken during the breeding season (February 1 through September 15). Removal of habitat would occur outside of the breeding season. If vegetation removal cannot occur outside of the breeding season, Mitigation Measure BIO-5 would be implemented to require a pre-construction nesting bird survey, thus addressing direct and indirect impacts to nesting birds. Construction-related direct impacts to nesting birds would be reduced to a level less than significant with implementation of Mitigation Measure BIO-5.

Potential short-term, indirect impacts to nesting birds include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the project site is active agricultural lands, nesting birds potentially present within the project site are likely accustomed to increased human presence and noise and vibration. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to a level less than significant.

BATS

The following non-listed special-status bat species were determined to have a low potential to forage on the project site: western yellow bat, western mastiff bat, and pocketed free-tailed bat. In addition, pallid bat and Townsend’s big-eared bat have yearlong ranges that encompass the project site. The project site provides foraging habitat for these bat species, and the movements of these species may be adversely affected by construction and presence of construction on the project site. Implementation of Mitigation Measure BIO-7, which requires a focused bat survey to be conducted for all suitable

PC ORIGINAL PKG

roosting and foraging habitat for local or migratory bat ,would reduce potential impacts on bat species to a level less than significant.

Operation

Potential impacts during project operation could result from lighting, noise, dust, increased human activity, and collision hazards. These impacts are described below.

Lighting

All permanent lighting would be of low intensity and in compliance with local, applicable regulations. Lighting would be directed away from the public right-of-way and pointed inward toward the solar energy facility and may utilize directional hoods or shades as needed to reduce light from shining into the adjacent habitat and disturbing birds or exposing them to increased visibility by predators. In addition, any lighting not required daily for security purposes would have motion sensor or temporary use capabilities. As such, no significant impact due to lighting is anticipated to occur to migratory birds because the vast majority of the light would be directed onto the facility, not onto adjacent habitat, and because the lights would not be on continuously.

Noise

The project site is actively farmed and there are solar facilities operating adjacent to the project site. As described in Section 3.12 Noise and Vibration of this EIR, no equipment or components are anticipated to produce noise that would exceed ambient noise in the vicinity. No significant impact due to noise would occur to migratory birds because their movement and habitat would not be substantially affected.

Dust

Dust from vehicles during project operation could impact suitable habitat for special-status species. This potential impact is considered significant. However, no equipment or components are anticipated to produce dust that would exceed what currently exists in the vicinity. Furthermore, with implementation of Mitigation Measure BIO-4, which requires reduced speed limits, potential operational impacts from dust would be reduced to a level less than significant.

Increased Human Activity

Increased human activity can deter wildlife from using habitat areas near the project site and increase the potential for vehicle collisions. This potential impact is considered significant. However, Mitigation Measure BIO-3 provides for worker training for operational staff to minimize impacts associated with increased human activity. Mitigation Measure BIO-4 imposes speed limits on site and limits allowed activities to reduce effects from increased human activity. Therefore, with implementation of Mitigation Measures BIO-4 and BIO-4, impacts would be reduced to a level less than significant.

Collision Hazards

The project site is approximately 23 miles south of the Salton Sea, a major stopover location for migratory birds. The project could potentially increase the risk of collisions due to sky reflection (or “pseudo-lake effect”). Although avian collisions with towers and structures have been well documented, there are few published papers that study the possibility that large areas of solar PV panels in the desert environment may mimic water bodies and inadvertently attract migrating or

dispersing wetland bird species. There is currently insufficient research to assess the magnitude or likely risk associated with collisions with solar fields. The solar PV modules would be coated to be non-reflective and are designed to be highly absorptive of all light that strikes their glass surfaces. Based on the evidence available—non-reflective design of the solar panels, typical migration patterns, comparatively few documented deaths—glare and pseudo-lake effect are not expected to result in significant impacts to migrating or local avian species.

Mitigation Measure(s)

BIO-1 **Burrowing Owl Mitigation.** Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the project site and a 500-foot buffer, where legally accessible. The project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities.

Pre-Construction Survey and Avoidance Measures

Depending on the project activity type and associated disturbance, an avoidance buffer distance of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0 250 meters (825 feet) during the breeding season (February through August) shall be maintained between active burrows and construction activities. A Qualified Biologist (biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW) shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the project footprint. A report shall be submitted by a qualified and agency-approved biologist. The project footprint

PC ORIGINAL PKG

shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation.

Burrowing Owl Protection and Mitigation Plan

If active burrows are present within the project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the project shall then be excavated and filled in to prevent their reuse. Off-site “replacement burrow site(s)” must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.

As the project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the project applicant.

Incidental Take Authorization

The project applicant shall seek incidental take authorization from CDFW if incidental “take” of burrowing owl as defined by CDFG Code 86 is determined to be unavoidable and the species is a candidate, threatened or endangered species under CESA at such time.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-1 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

BIO-2 **Burrowing Owl Habitat Compensation.** The California Department of Fish and Wildlife’s 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project site.

PC ORIGINAL PKG

Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

If incidental take authorization from CDFW is required, the measures listed in Mitigation Measure BIO-2 above may be superseded by the incidental take authorization permit requirements, if/as applicable.

BIO-3 **Worker Awareness Program and Ongoing Training.** Prior to project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:

- Biology and status of burrowing owl.
- California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations.
- Protection measures designed to reduce potential impacts on the species.
- The function of flagging designated authorized work areas.
- Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field.

All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

BIO-4 **Speed Limit.** During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.

BIO-5 **Migratory Birds and Other Sensitive Non-Migratory Bird Species.** To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the project applicant in conjunction with the County of Imperial.

Construction conservation measures to be incorporated into the ABPP shall include the following:

- Minimizing disturbance to vegetation to the maximum extent practicable.
- Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-

PC ORIGINAL PKG

construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided until a qualified biologist determines that the fledglings are independent of the nest.

- Minimizing wildfire potential.
- Minimizing activities that attract prey and predators.
- Controlling non-native plants.

Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following:

- Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities.
- Minimizing noise.
- Minimizing use of outdoor lighting.

BIO-6 **Pre-Construction Bird Surveys and Nest Avoidance.** Vegetation clearing, initial grading and construction within the project site shall take place outside the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species).

If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a qualified avian biologist shall conduct a pre-construction nesting bird survey prior to project-related disturbance within and adjacent to the project area. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nesting locations and nesting behavior (including but not limited to copulation, carrying food or nesting materials, nest building, agitation, aggressive interaction, feigning injury, or distraction displays). The survey shall be completed no more than 3 days prior to initial ground disturbance. The nesting bird survey shall include the project area and all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures.

If any active nest is identified, the biologist shall establish an appropriately sized no-work buffer zone around the nest, which will be based upon the biologist's best professional judgment, the birds' displayed behavior (agitation or stress), the nesting species, it's sensitivity to disturbance, nesting stage and expected types, and the intensity and duration of disturbance. The no-work buffer zone shall be clearly marked in a way that does not alert predators. No construction activity shall occur within any no-work buffer zone until a qualified avian biologist determines that the young birds have successfully fledged and the best is deemed active.

BIO-7 **Focused Bat Surveys and Bat Management Plan.** A focused bat survey shall be conducted for all suitable roosting and foraging habitat for local or migratory bat species known to the project area, including special-status species, found within

the project site shall be surveyed prior to initial site clearing activities. The surveys shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, the features being used may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year, visual and aural surveys (observation during foraging period), and inspection for suitable habitat and bat sign (e.g. guano). The level of survey effort shall be reassessed based on initial survey findings.

If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing project activities and their effect. A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.

Significance after Mitigation

Project construction and operation has the potential to directly and indirectly impact special-status wildlife species. However, implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts on special-status wildlife species to a level less than significant.

Impact 3.5-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

No special-status vegetation communities occur within the project site. Thus, implementation of the proposed project would not result in direct or indirect impacts to special-status vegetation communities. No impact would occur.

Mitigation Measure(s)

No mitigation is required.

PC ORIGINAL PKG

Impact 3.5-3 Would the project have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means?

According to the project's Aquatic Resources Delineation Report (Appendix E of this EIR), the project site contains approximately 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW. While it is assumed that the project would avoid all direct impacts to IID irrigation canals, the smaller canals along the boundaries of agricultural fields on the project site may be impacted. Potential impacts to jurisdictional waters would be significant. The project is expected to comply with the relevant laws that apply to potentially jurisdictional waters and notify the respective agencies of the impacts to determine the jurisdictional status and the need for permits to be acquired for impacts. If permits are required, avoidance and minimization measures would be included in the conditions of the permits and shall be adhered to. All poles associated with the collector areas would be sited outside of non-wetland waters. Mitigation Measure BIO-8 requires the project applicant or its designee to obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. If impacts to jurisdictional waters were to occur, implementation of Mitigation Measure BIO-8 would reduce impacts to less than significant.

Potential short-term, indirect impacts to jurisdictional waters could include generation of fugitive dust and the introduction of chemical pollutants. Mitigation Measure BIO-3 would further ensure no impacts to jurisdictional waters. With implementation of these measures, potential short-term indirect impacts from construction activities would be less than significant.

Mitigation Measure(s)

Implement Mitigation Measure BIO-3.

BIO-8 **Federal and State Agency Permits.** Prior to impacts occurring to USACE, RWQCB, and CDFW (collectively, the Resource Agencies) jurisdictional aquatic resources, the project applicant or its designee shall obtain the following permits: USACE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. There must be no net loss of waters or wetlands, and any impacts to wetlands shall be mitigated at a minimum ratio of 1:1 (through creation, restoration and/or enhancement). A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.

Significance after Mitigation

The smaller canals along the boundaries of agricultural fields on the project site may be impacted. Potential impacts to jurisdictional waters would be significant. However, implementation of Mitigation Measures BIO-3 and BIO-8 would reduce potential impacts on jurisdictional waters to a level less than significant.

PC ORIGINAL PKG

Impact 3.5-4 Would the project interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project is not likely to have direct or indirect impacts on movement of any native resident or migratory fish or wildlife species regionally or locally. The project site is approximately 23 miles southeast of the Salton Sea and would not affect its use by migratory birds. Locally, the project site is primarily surrounded by and includes extensive historical and present-day agricultural practices. As such, the project site has limited value as a potential wildlife corridor or habitat linkage for fish and wildlife species, and likely does not serve as an important wildlife corridor. Impacts to wildlife movement would be less than significant.

Mitigation Measure(s)

No mitigation is required.

Impact 3.5-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As demonstrated in Table 3.5-3 and discussed further in Section 3.11, Land Use Planning, with approval of CUPs and General Plan Amendment, the project would be consistent with the Imperial County General Plan, and with biological resources policies contained therein. Therefore, implementation of the proposed project would not result in a significant impact associated with the project's potential to conflict with local policies protecting biological resources.

Mitigation Measure(s)

No mitigation is required.

Impact 3.5-6 Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No adopted Habitat Conservation Plan area overlaps with the project site. Thus, implementation of the proposed project would not result in direct or indirect impacts to any Habitat Conservation Plan.

Mitigation Measure(s)

No mitigation is required.

3.5.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Project decommissioning activities will require construction vehicles to drive across the solar facility, transmission line, and access roads. Concrete footings, foundations, and pads would

PC ORIGINAL PKG

be removed using heavy equipment and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. Similar to project construction, decommissioning activities have the potential to directly impact special-status species, nesting birds, raptors, bats, and jurisdictional resources. This is a potentially significant impact; however, implementation of Mitigation Measures BIO-1 through BIO-8 at the time of decommissioning would reduce potential impacts to a level less than significant.

Residual

The proposed project would not impact sensitive vegetation communities, state or federally-protected wetlands, would not conflict with any local policies or ordinances protecting biological resources and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

With the implementation of Mitigation Measures BIO-1 through BIO-8, potential impacts on special-status species, nesting birds, raptors, bats, and jurisdictional resources would be reduced to a level less than significant. Therefore, the project would not result in residual significant and unmitigable impacts related to biological resources.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.6 Cultural Resources

This section discusses cultural resources that may be potentially impacted by the proposed project. The following identifies the existing cultural resources within the project site, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project. Information from this section is summarized from the *Cultural Resources Inventory Report* and *Built Environment Inventory and Evaluation Report* prepared by Dudek. These reports are included in Appendix F1 and F2 of this EIR, respectively.

The Phase I cultural resources inventory included a records search, literature review, and pedestrian survey. In addition to the Phase I cultural resources inventory, Dudek prepared the Built Environment Inventory and Evaluation Report which identifies previously identified and unidentified build environment cultural resources within or adjacent to the project site.

3.6.1 Existing Conditions

Cultural Setting

The project site is within California's Colorado Desert, a small part of the larger Sonoran Desert. The Colorado Desert encompasses Imperial County, and includes parts of San Diego County, Riverside County, and a small section of San Bernardino County, California. The cultural setting for the Colorado Desert is described in detail in the *Cultural Resources Inventory Report* (Appendix F of this EIR) prepared for the project and includes the following time periods: Late Pleistocene, Terminal Pleistocene-Very Early Holocene, Mid-Holocene, and Late Holocene. The ethnohistoric and historic periods are also described in detail in the *Cultural Resources Inventory Report* (Appendix F1 of this EIR) prepared for the project.

Records Search

A records search dated March 31, 2023 was obtained from the South Coastal Information Center (SCIC) at San Diego State University. The records search provided information on all documented cultural resources and previous archaeological investigations within the 1-mile record search radius. Dudek returned to the SCIC in June 2023 to retrieve three resource reports that were not recovered from the March 31, 2023 records search. Resources consulted during the records search conducted by the SCIC included the National Register of Historic Places (NRHP), California Historical Landmarks, California Points of Historical Interest, and the California Register of Historical Resources (CRHR) Inventory. Results of the records search and additional research are detailed below.

Previously Conducted Cultural Resources Studies

Fifty-one (51) cultural resources studies have been previously conducted within a one-mile radius of the project site. Seven of those studies intersect the project site (see Table 1 of Appendix F of this EIR). All seven studies were conducted between 1979 to 2006 and include two Class II cultural resources inventories, two archaeological assessments, two environmental studies, and a management plan. Although approximately 30 percent of the project site overlaps with previous study areas, none of the studies are considered adequate according to the Secretary of Interior's standards and guidelines for a cultural resources inventory (Appendix F1 of this EIR).

Previously Recorded Cultural Resources

Historical resources significant under CEQA include those designated or eligible for designation in the NRHP, the CRHR or other state program, or a local register of historical resources. Historical resources may also include resources listed in the State Historic Resources Inventory as significant at the local level or higher, and resources evaluated as potentially significant in a survey or other professional evaluation.

The NRHP and CRHR eligibility criteria are described below.

- **NRHP Eligibility Criteria.** Four criteria have been established to determine if a resource is significant to American history, architecture, archaeology, engineering, or culture and should be listed in the NRHP. These criteria include:
    A. It is associated with events that have made a significant contribution to the broad patterns of our history;
    B. It is associated with the lives of persons significant in our past;
    C. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and
    D. It yields, or may be likely to yield, information important in prehistory or history.
- **CRHR Eligibility Criteria.** For the purposes of CEQA review, a historical resource is defined as follows (14 CCR 15064.5[a]):
    1. A resource listed in, or determined eligible by the State Historical Resources Commission for listing in, the CRHR
    2. A resource included in a local register of historical resources
    3. A resource identified as significant in a historical resource survey meeting the requirements specified in PRC 5024.1(g)
    4. Any resource that the lead agency determines to be historically significant

The SCIC records search indicates that seven previously recorded cultural resources are located within the project site (Table 3.6-1). Table 3.6-1 provides brief descriptions and CRHR/NRHP eligibility for each resource identified within the project site, based on the SCIC records search.

The seven resources consist of an historic wagon road (P-13-003403), four canal/water conveyance systems for agricultural use (P-13-012688, P-13-12689, P-13-12693, and P-13-014975), and two single-family residences (P-13-013758 and P-13-014263). The recorded sections of three canal/water conveyance systems (P-13-012689, P-13-012693 and P-13-014975), and the two single-family residences have all been recommended not eligible for listing on the CRHR and the NRHP. The historic wagon road and portions of one water-conveyance system (P-13-012688) have not been formally evaluated for listing on the CRHP and the NRHP. The SCIC records search also indicates that an additional 18 cultural resources have been recorded within the one-mile radius of the project site (Appendix F1 of this EIR).

PC ORIGINAL PKG

Table 3.6-1. Previously Recorded Cultural Resources Within 1-mile of the Project Site

Primary Number	Trinomial	Age	Description	CRHR/NRHP Status
Within the Project Site				
P-13-003403	CA-IMP-3403/H	Historic	Wagon Road from Fort Yuma to Warner's Ranch	Unevaluated
P-13-012688	--	Historic	Dixie Drains 2, 3, and 4 and Dixie Lateral 1	Dixie Drain 3 and Lateral 1 recommended not eligible; Dixie Drains 2 and 4 unevaluated
P-13-012689	--	Historic	Fern Canal and Drain System	Recommended not eligible
P-13-012693	--	Historic	Fig Canal	Recommended not eligible
P-13-013758	CA-IMP-11759/H	Historic	1651 Westside Road	Recommended not eligible
P-13-014263	--	Historic	Preece Residence	Recommended not eligible
P-13-014975	--	Historic	Wixom Drain	Recommended not eligible
Not within the Project Site				
P-13-014264	--	Historic	HP15; Westside Elementary School	Recommended not eligible
P-13-014265	--	Historic	HP3; Multiple Residence Compound	Recommended not eligible
P-13-014266	--	Historic	HP2; Black Residence	Recommended not eligible
P-13-017714	CA-IMP-13040	Prehistoric	AP2, AP11; Lithic scatter and hearth	No formal recommendation
P-13-017729	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017730	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017731	--	Prehistoric	Lithic utilized flake tool isolate	Not eligible
P-13-017732	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017733	--	Prehistoric	Lithic assayed cobble isolate	Not eligible

PC ORIGINAL PKG

P-13-017734	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017735	--	Prehistoric	Lithic debitage isolate	Not eligible
P-13-017736	--	Prehistoric	Lithic retouched flake tool	Not eligible
P-13-017737	--	Prehistoric	Lithic core fragment and debitage isolate	Not eligible
P-177740	--	Prehistoric	Colorado Buff Ceramic body fragment	Not eligible

Source: Appendix F1 of this EIR

P-13-003403/CA-IMP-3403/H (WAGON ROAD FROM FORT YUMA TO WARNER'S RANCH)

P-13-003403 is a wagon road that historically connected Fort Yuma in Imperial County to Warner's Ranch in San Diego County. It was first recorded in 1956. The historic placement of P-13-003403 crosses the project site on a roughly east to west axis, although there is no current evidence to indicate this resource still exists with the integrity it was first recorded.

P-13-012688 (DIXIE DRAINS 2, 3, AND 4, AND DIXIE LATERAL 1)

P-13-012688 consists of Dixie Drains 2, 3, and 4 and Dixie Lateral 1. Dixie Drain 3 was first recorded in 2009 and given the primary number P-13-012688. In 2011, DPR forms for P-13-012688 were updated to include a larger section of Dixie Drain 3, as well as Dixie Drains 2 and 4, and Dixie Lateral 1. The Dixie Drain Irrigation System is a part of a larger water conveyance system that includes Westside Drain, Forget-Me-Not Drain, and Salt Creek Drain that all empty into the New River. Dixie Lateral 1 dates back to before 1914, while Dixie Drains 2, 3, and 4 were likely constructed ca. 1940. In 2009, Dixie Drain 3 was recommended as not eligible for listing on the CRHR or NRHP due to its loss of integrity from the regular dredging and widening of the canals and drains over time. In 2011, Dixie Lateral 1 was recommended as not eligible for listing on the CRHR or NRHP for similar reasons. Formal evaluations or recommendations of eligibility were not conducted for Dixie Drains 2 and 4. The Dixie Drains run along the boundaries of the southwestern portion of the project site on a north to south axis, while Lateral 1 runs through the project site on an east to west axis.

P-13-012689 (FERN CANAL AND DRAIN SYSTEM)

P-13-012689 consists of a section of the Fern Canal and an associated section of the Fern Side Main. This resource was first recorded in 2009. Updates to include additional sections of the Fern Canal were completed in 2010, 2011, and 2017. The Fern Canal was constructed ca. 1909 and is approximately 10 miles long. Modifications were made to the canal in the 1960s, and at present, the canal is lined with concrete. The recorded portions of the Fern Canal are not recommended eligible for listing on the CRHR or NRHP due to a lack of integrity. The Fern Canal runs through the middle of the northern portion of the project site, on a north to south axis.

P-13-012693 (FIG CANAL)

P-13-012693 consists of a concrete-lined section of the Fig Canal that was constructed ca. 1912 and spans over 4 miles on a north to south axis through the easternmost portion of the project site. The Fig Canal was first recorded in 2009. DPR form updates to include additional portions of the Fig Canal

PC ORIGINAL PKG

were conducted in 2011. The recorded portions of the Fig Canal are not recommended eligible for listing on the CRHR or NRHP due to a lack of integrity.

P-13-013758/CA-IMP-11759 (1651 WESTSIDE ROAD)

1651 Westside Road is a one-story ranch style house constructed as a single-family residence ca. 1955. The residence was first recorded in 2011. The building is wood-framed and rectangular in plan with a concrete foundation. The exterior is clad in stucco, and the roof is a low-pitched side gable with a front gable projection on the south section of the building and clad in asphalt roll. 1651 Westside Road was recommended not eligible for listing on the NRHP and the CRHR due to not meeting any of the criteria for inclusion in the national or state register. This resource sits along the northwestern portion of the project boundary on the west side of Westside Road, approximately 0.2 miles south of Interstate Highway 8.

P-13-014263 (2396 VAUGHN ROAD)

2396 Vaughn Road is a modern style ranch house with a low-pitch gable roof and composite roofing, a pedimented front gable entry with full-length porch, and stucco cladding on the exterior. This resource was recorded in 2009. P-13-014263 was recommended not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. This single-family residence sits along Vaugh Road, directly west of Dixie Drain 3 and within the western-central portion of the project site.

P-13-014975 (WIXOM DRAIN)

P-13-014975 (Vaughn and Jessup Roads) is an earthen-dug irrigation drainage ditch constructed ca. 1940. It is approximately 10–20 feet ASM. P-13-014975 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. The drain is located east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixom Road.

Pedestrian Survey

As part of the *Cultural Resources Inventory Report,* Dudek conducted a pedestrian survey on the project site between April 10, 2023, to April 14, 2023 by Dudek archaeologists using standard archaeological procedures and techniques. Intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects spaced no more than 15 meters apart over entire portions of the project site, when appropriate. Several fields were densely vegetated by agricultural crops/grasses and ground visibility was between 0-30 percent (poor visibility). Though physically feasible, the complete intensive-level survey of these fields using formal parallel transects was determined unproductive as these areas are considered to have a low potential for containing significant cultural resources. Instead, a sample of each of these fields was surveyed using formal parallel transects. An opportunistic/reconnaissance survey approach was also utilized, selectively examining exposed ground surface areas (canals, drainages, dirt roads, low lying vegetation) where possible. In summary, 88.9 percent of the project site (1,662 acres) consisted of active agricultural fields with ground visibility ranging from 0 to 30 percent (poor visibility). Dudek surveyed a 5 percent sample of each of these fields. The remaining 11.1 percent of the project site (165 acres) had moderate to excellent visibility (40-60 percent, and 70-100 percent, respectively) and was subject to 50 to 100 percent survey using formal 15 meter parallel transects. The proposed generation intertie (gen-tie) corridor location was also surveyed within a 100’ corridor measured from the center line (Appendix F1 of this EIR).

Within each transect, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire- affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials (Appendix F1 of this EIR).

Built Environment Inventory and Evaluation Report

In addition to the Phase I cultural inventory report, Dudek prepared a built environment and evaluation report for the proposed project to identify and evaluate built environment resources 45 years of age or older (historic era). As part of the *Built Environment Inventory and Evaluation Report*, Dudek developed an Area of Potential Impacts (API), a records search of the CHRIS, an intensive-level survey of the API for built resources of historic age (45 years of age or older); building development and archival research, the creation of an appropriate historic context, and recordation and evaluation of historic-era properties located in the API under National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) designation criteria.

In addition to a discussion of the previously recorded cultural resources within the API (Table 3.6-1), the built environment report also identified five newly recorded properties (Table 3.6-2). Dudek evaluated the API in accordance with Section 15064.5 (a)(2)-(3) of the State CEQA Guidelines and using the criteria outlined in Section 5024.1 of the PRC. Dudek concludes that the properties evaluated within the API do not appear eligible for listing in the NRHP or CRHR due to a lack of significance. As such, no properties within the API are considered to be historical resources under CEQA.

Table 3.6-2. Newly Recorded Built Environment Resources Within the API

Address/APN	Year Built	CRHR/NRHP Status
2250 West Vaughn Road (APN 051-300-027)	ca. 1976	Not eligible
2104 West Wixom Road (APN 051-330-021)	1940	Not eligible
Cattle Corral Shelter (APN 051-310-026)	ca. 1956	Not eligible
Diehl Drain (multiple APNs)	ca. 1950	Not eligible
Fig Drain (multiple APNs)	ca. 1940	Not eligible

Source: Appendix F2 of this EIR

PC ORIGINAL PKG

3.6.2 Regulatory Setting

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

Federal

National Historic Preservation Act

Federal regulations (36 CFR Part 800.2) define historic properties as "any prehistoric or historic district, site, building, structure, or object included, or eligible for inclusion in, in the National Register of Historic Places." Section 106 of the National Historic Preservation Act (NHPA) (Public Law 89-665; 80 Stat 915; USC 470, as amended) requires a federal agency with jurisdiction over a project to take into account the effect of the project on properties included in or eligible for the NRHP, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The term "cultural resource" is used to denote a historic or prehistoric district, site, building, structure, or object, regardless of whether it is eligible for the NRHP.

State

California Office of Historic Preservation

The California Office of Historic Preservation (OHP) administers state and federal historic preservation programs and provides technical assistance to federal, state, and local government agencies, organizations, and the general public with regard to historic preservation programs designed to identify, evaluate, register, and protect California's historic resources.

Section 15064.5 of the CEQA Guidelines also requires that Native American concerns and the concerns of other interested persons and corporate entities, including but not limited to museums, historical commissions, associations, and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (HSC Section 7050.5, PRC Sections 5097.94 et seq.).

CEQA Guidelines: Historical Resources Definition

CEQA Guidelines Section 15064.5(a) defines a historical resource as:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (PRC Section 5024.1; Title 14 CCR, Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of

California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC Section 5024.1; Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important to our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.[1]

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.

(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).

(2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

(3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

[1] Ibid.

PC ORIGINAL PKG

(4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

CEQA Guidelines: Human Remains

Section 15064.5 of CEQA Guidelines provides specific guidance on the treatment of human remains pursuant to PRC § 5097.98, which provides specific guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the NAHC:

(d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

(1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (HSC Section 7050.5).

(2) The requirements of CEQA and the Coastal Act.

(e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

(A) The coroner or the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

(B) If the coroner determines the remains to be Native American:

1. The coroner shall contact the NAHC within 24 hours.
2. The NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
3. The mostly descendent may make recommendations to the landowner of the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or

(2) Where the following conclusions occur the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.

(B) The descendant fails to make a recommendation; or

(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

(f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."

California Health and Safety Code, Section 7050.5

California HSC 7050.5 makes it a misdemeanor to disturb or remove human remains found outside a cemetery. This code also requires a project owner to halt construction if human remains are discovered and to contact the County Coroner.

Local

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, and policies for the identification and protection of significant cultural resources. The Conservation and Open Space Element of the General Plan includes goals, objectives, and policies for the protection of cultural resources and scientific sites that emphasize identification, documentation, and protection of cultural resources. While Section 3.9, Land Use Planning, of this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors and Planning Commission ultimately make a determination as to the project's consistency with the General Plan. Goals and Objectives applicable to the proposed project are summarized in Table 3.6-3.

Table 3.6-3. Project Consistency with Applicable General Plan Goals and Objectives

General Plan Policies	Consistency with General Plan	Analysis
Conservation and Open Space Element - *Open Space and Recreation Conservation* **Goal 1** - Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value. **Objective 1.4** - Ensure the conservation and management of the County's natural and cultural resources.	Consistent	A cultural resources inventory was prepared for the project site. No known archaeological resources within the project site were identified. However, as discussed below, the proposed project has the potential to encounter undocumented archaeological resources and human remains. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the potential impact associated with the inadvertent discovery of archaeological resources to a level less than significant. Mitigation Measure CUL-3 would ensure that the potential impact on previously unknown human

PC ORIGINAL PKG

Table 3.6-3. Project Consistency with Applicable General Plan Goals and Objectives

General Plan Policies	Consistency with General Plan	Analysis
Objective 3.1 - Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.	Consistent	remains does not rise to the level of significance pursuant to CEQA.

Source: County of Imperial 1993
Notes:
CUL=cultural; WEAP= Worker Environmental Awareness Program

3.6.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering proposed Project impacts related to cultural and archeological resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to cultural resources are considered significant if any of the following occur:

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5
- Disturb any human remains, including those interred outside of dedicated cemeteries

Methodology

This analysis evaluates the potential for the proposed project, as described in Chapter 2, Project Description, to interact with cultural resources in the Project area. Based on the extent of these interactions, this analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

As indicated in the environmental setting, the *Cultural Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project* (Appendix F1 of this EIR) and *Built Environment Inventory and Evaluation Report* (Appendix F2 of this EIR) were prepared for the project.

The information from these reports were reviewed and summarized to present the existing conditions and to identify potential environmental impacts, based on the significance criteria presented in this section. Impacts associated with cultural resources that could result from project construction and operational activities were evaluated qualitatively based on site conditions; expected construction practices; materials, locations, and duration of project construction and related activities.

PC ORIGINAL PKG

Impact Analysis

Impact 3.6-1 Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

To be considered historically significant, a resource must meet one of four criteria for listing outlined in the CRHR (CEQA Guidelines 15064.3 (a)(3)). In addition to meeting one of the criteria outlined the CRHR, a resource must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues (CCR Title 14, Chapter 1.5 Section 4852 [c]). Further, based on CEQA Guidelines Section 15064.5 (b), substantial adverse change would include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is materially impaired. This can occur when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR, NRHP, a local register, or historic resources.
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its identification in an historical resources survey meeting the requirements of PRC §5024.1(g), unless the public agency establishes by a preponderance of the evidence that the resource is not historically or culturally significant.

The SCIC records search indicates that seven previously recorded cultural resources are located within the project site (Table 3.6-1). These seven resources consist of an historic wagon road (P-13-003403), four canal/water conveyance systems for agricultural use (P-13-012688, P-13-12689, P-13-12693, and P-13-014975), and two single-family residences (P-13-013758 and P-13-014263). The recorded sections of three canal/water conveyance systems (P-13-012689, P-13-012693 and P-13-014975), and the two single-family residences have all been recommended not eligible for listing on the CRHR and the NRHP. As part of the *Built Environment Inventory and Evaluation Report,* Dudek evaluated the historic wagon road and portions of one water-conveyance system (P-13-012688) for listing on the CRHR and the NRHP.

Historic Wagon Road (P-13-003403). According to the SCIC records search, the road was recorded as recently as 2009. The associated site form provides limited information and no evaluation was completed at this time. On April 11, 2023, Dudek revisited the site and did not find any indications the road was ever at this location and was likely incorrectly mapped in the API. Dudek concluded that the resource as it was previously mapped is not extant in this location (Appendix F2 of this EIR). No further analysis of this resource is warranted.

P-13-012688. Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral appear to be ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the resource is not a historical resource for the purposes of CEQA.

In addition to the previously recorded cultural resources within the API (Table 3.6-1), the built environment report also identified five newly recorded properties (Table 3.6-2). Dudek evaluated the API in accordance with Section 15064.5 (a)(2)-(3) of the State CEQA Guidelines and using the criteria outlined in Section 5024.1 of the PRC. Dudek concludes that the properties evaluated within the API do not appear eligible for listing in the NRHP or CRHR due to a lack of significance. As such, no properties within the API are considered to be historical resources under CEQA.

PC ORIGINAL PKG

Given these findings, the proposed project would not result in any adverse change related to the significance of a historical resource under CEQA and impacts would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.6-2 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Pursuant to CEQA Guidelines §15064.5(c)(1) and (2), an archaeological resource includes an archaeological site that qualifies as a significant historical resource as described for Impact 3.6-1. If an archaeological site does not meet any of the criteria outlined in the provisions under Impact 3.6-1, but meets the definition of a "unique archaeological resource" in PRC 21083.2, the site shall be treated in accordance with the provisions of PRC 21083.2, unless the project applicant and public agency elect to comply with all other applicable provisions of CEQA with regards to archaeological resources. "Unique archaeological resource" means an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1) Contains information needed to answer important scientific research questions that there is a demonstrable public interest in that information.
2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3) Is directly associated with a scientifically recognized important historic event or person.

CEQA Guidelines 15064.5(c)(4) confirms that if an archaeological resource is neither a unique archaeological nor an historic resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

No newly identified prehistoric or historic-era archaeological resources were recorded on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to §15064.5.

Based on available archival information, the presence of archaeological resources adjacent to the project site, and in consideration of the topography, and the project's vicinity to the New River; there is a moderate potential for the inadvertent discovery of archaeological resources on the project site. The project includes ground-disturbing activities that will extend to depths of 20 feet below the ground surface. As such, the project has the potential to disturb previously undocumented cultural resources that could qualify as unique archaeological resources pursuant to CEQA. This potential impact is considered significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the potential impact on archaeological resources to a level less than significant.

Mitigation Measure(s)

CUL-1 **Cultural Resources Worker Environmental Awareness Program Training.** Prior to project construction, a Cultural Resources Worker Environmental Awareness Program Training shall be developed and implemented to train equipment operators about cultural resources. The program shall be designed to inform construction personnel

about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist.

The training shall be provided to all construction supervisors, forepersons, and operators of ground disturbing equipment. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The construction manager shall provide a copy of the signed training roster to the Imperial County Planning and Development Services Department as proof of compliance.

CUL-2 **Archaeological Monitoring.** Prior to the start of construction, the project applicant shall retain a qualified professional archaeologist, who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist and a traditionally and culturally affiliated Native American Monitor, to monitor all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services.

In the event of an unanticipated discovery of archaeological materials during construction, the qualified professional archaeologist shall evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If a resource is deemed significant by the qualified archaeologist, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with Public Resources Code section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource. The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the qualified archaeologist after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Upon completion of the project, all appropriate documentation (reports, site records, etc.) shall be submitted to the Imperial County Department of Planning and Development Services and the South Coastal Information Center.

PC ORIGINAL PKG

Impact 3.6-3 Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

During the construction and operational phases of the proposed project, grading, excavation and trenching will be required. Although the potential for encountering subsurface human remains within the project site is low, there remains a possibility that human remains are present beneath the ground surface, and that such remains could be exposed during construction. The potential to encounter human remains is considered a significant impact. Mitigation Measure CUL-3 would ensure that the potential impact on previously unknown human remains does not rise to the level of significance pursuant to CEQA.

Mitigation Measure(s)

CUL-3 **Discovery of Human Remains.** In the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98 (NPS 1983). If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Imperial County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Imperial County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

3.6.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

No impact is anticipated from restoration activities as the ground disturbance and associated impacts on cultural resources will have occurred during the construction phase of the proposed project.

Residual

Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the potential impact associated with the inadvertent discovery of archaeological resources to a level less than significant. Mitigation Measure CUL-3 would ensure that the potential impact on previously unknown human remains does not rise to the level of significance pursuant to CEQA. No unmitigable impacts on cultural resources would occur with implementation of the proposed project.

This page is intentionally blank.

PC ORIGINAL PKG

3.7 Geology and Soils

This section includes an evaluation of the project in relation to existing geologic and soils conditions within the project site. Information contained in this section is summarized from the *Preliminary Geological and Geotechnical Assessment Report* prepared by HDR. This report is included as Appendix G of this EIR.

3.7.1 Existing Conditions

Regional Geology

The project site is located in the Imperial Valley, a part of the Salton Trough, located in the Colorado Desert physiographic province of California. With surface elevations as low as 275 feet below sea level, the Salton Trough formed as a structural depression resulting from tectonic boundary extension between the Pacific and the North American plates. The Salton Trough is bounded on the east and northeast by the San Andreas Fault and on the west by the San Jacinto Fault Zone. The structural trough is filled with more than 15,000 feet of Miocene and younger, marine and non-marine sediments capped by approximately 100 feet of Pleistocene and later lacustrine deposits that have been deposited by intermittent sedimentation derived from periodic flooding from the Colorado River and the filling of Lake Cahuilla (Appendix G of this EIR).

The project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla comprised of tan and gray fossiliferous clay, silt, sand, and gravel in conjunction with young alluvial deposits of unconsolidated clay, sand, silt, and gravel. West of the project site are mapped uplands consisting of Pliocene and Pleistocene sandstone, shale, and gravel deposits (Appendix G of this EIR).

Subsurface Soil Conditions

Previous geotechnical investigations have been completed in the vicinity of the project site along the I-8 and to the south near the Westside Main Canal. Generally, previous investigations for improvements related to the California Department of Transportation (Caltrans) are located north of the Big Rock 2 Cluster North site. According to nearby Caltrans Log-of-Test-Borings (LOTB), the explored subsurface soils generally consist of fine to coarse sands with interbedded clays and silts to the maximum depth explored of about 110 feet below ground surface (bgs). The granular soils were encountered with relative densities ranging from loose to very dense, increasing in relative density with depth. Generally, soft to stiff clays were encountered in these previous investigations within the upper 10 feet. Additionally, available information from a nearby solar project (Westside Canal Battery Storage Project) located southeast of the Big Rock 2 Cluster South site, indicate that the subsurface soils consisted of soft to hard fine-grained soils (lean clay, sandy lean clay, fat clay, and sandy silts) in the upper 25 feet bgs. Below the fine-grained soils, fine to coarse, medium dense to very dense sands with varying amounts of silts were encountered to the maximum depth of 80 feet bgs (Appendix G of this EIR).

Based on review of the Soil Survey for Imperial County prepared by the United States Department of Agriculture Soil Conservation Service, surface soils at the project site consist of ten primary groups:

- 110 Holtville silty clay
- 114 Imperial silty clay

PC ORIGINAL PKG

- 115 Imperial-Glenbar silty clay loam complex
- 118 Indo loam
- 119 Indo-Vint complex
- 122 Meloland very fine sandy loam
- 123 Meloland-Holtville
- 135 Rositas fine sand
- 142 Vint loamy very fine sand, and
- 144 Vint-Indo very fine sandy loam undifferentiated group.

All of the abovementioned soil groups are described as wet and are generally limited to a 0 to 2 percent slope (Appendix G of this EIR). Figure 4 of the Preliminary Geological and Geotechnical Assessment Report (Appendix G of this EIR) shows the soil series mapped on the project site.

Groundwater Conditions

A review of the online monitoring well database from the California Department of Water Resources indicate that there are no monitoring wells with groundwater data within a 2-mile radius of the project site (Appendix G of this EIR). In the absence of available groundwater data for the project site, a review of available groundwater data was undertaken for the surrounding area.

Available groundwater information from existing Caltrans LOTB indicate the presence of shallow groundwater near the project site along the I-8. Generally, groundwater was encountered during these previous investigations at depths ranging from about 1 to 12 feet bgs, corresponding to groundwater elevations ranging from about -41 and -49 feet North American Vertical Datum (NAVD) 88 (Appendix G of this EIR).

On the southern end of the project near the Big Rock 2 Cluster South site, groundwater was encountered at depths ranging from about 9 to 19 feet, corresponding to groundwater elevations ranging from about -30 to -37 feet NAVD 88(Appendix G of this EIR).

Faulting

Southern California straddles the boundary between two global tectonic plates known as the North American Plate (on the east) and the Pacific Plate (on the west). The main plate boundary is represented by the San Andreas Fault, which extends northwest from the Gulf of California in Mexico, through the desert region of the Imperial Valley, through the San Bernardino region, and into Northern California, where it eventually trends offshore, north of San Francisco (Appendix G of this EIR).

In Southern California, the plate boundary is a complex system of numerous faults known as the San Andreas Fault System (SAFS) that spans a 150-mile-wide zone from the main San Andreas fault in the Imperial Valley westward to offshore of San Diego. The major faults east of San Diego (from east to west) include the San Andreas Fault, the San Jacinto Fault, and the Elsinore Fault. The SAFS is a transform plate boundary dominated by right-lateral fault displacement with the Pacific Plate moving northwest relative to the North American Plate. The significance of this lateral faulting is that transform plate interactions typically generate much smaller maximum magnitude earthquakes than convergent or subduction plate boundaries. Thus, in Southern California the expected maximum moment magnitudes for most faults are typically in the M6.5 to M7.5 range, with only a few faults (San Andreas

PC ORIGINAL PKG

Fault, possibly some thrust faults of the Transverse Ranges) capable of generating earthquakes in the M8 range, such as the 1906 San Francisco and 1857 Fort Tejon earthquakes, on the San Andreas Fault itself (Appendix G of this EIR).

The project site is located in the seismically active Southern California region, with numerous mapped faults traversing the region including the San Andreas, San Jacinto, and Elsinore Fault Zones. Figure 5 of the *Preliminary Geological and Geotechnical Assessment Report* (Appendix G of this EIR) shows the location of nearby faults relative to the project site. There is an unnamed fault (Unnamed Creep-Active Fault) in the vicinity of the project site located approximately three miles northwest. USGS has classified this unnamed fault as "historic-well constrained" with an age of less than 150 years old (Appendix G of this EIR).

Seismic Ground Shaking

Ground shaking is the byproduct of an earthquake and is the energy created as rocks break and slip along a fault during an earthquake. The amount of ground shaking that an area may be subject to during an earthquake is related to the proximity of the area to the fault, the depth of the hypocenter (focal depth), location of the epicenter and the size (magnitude) of the earthquake. Soil type also plays a role in the intensity of shaking. Bedrock or other dense or consolidated materials are less prone to intense ground shaking than soils formed from alluvial deposition.

As the project site is located in the seismically active Southern California region, strong ground shaking can be expected at the project site during moderate to severe earthquakes in the general region.

Fault-Rupture Hazard

Surface rupture occurs when movement along a fault results in actual cracking or breaking of the ground along a fault during an earthquake; however, it is important to note that not all earthquakes result in surface rupture. Surface rupture almost always follows preexisting fault traces, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Fault creep is the slow rupture of the earth's crust. Sudden displacements are more damaging to structures because they are accompanied by shaking.

The California Geologic Survey (CGS) established criteria for faults as active, potentially active, and inactive. Active faults are those that show evidence of surface displacement within the last 11,000 years (Holocene age). Potentially active faults are those that demonstrate displacement within the past 1.6 million years (Quaternary age). Faults showing no evidence of displacement within the last 1.6 million years may be, in general, considered inactive for most structures, except for critical structures. In 1972 the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed, which required fault studies within 500 feet of active or potentially active faults. The Alquist-Priolo Act designates "active" and "potentially active" faults utilizing the same age criteria as that used by the CGS (Appendix G of this EIR).

The project site is not located within a currently delineated State of California Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zones are located approximately 0.7 miles (Route 247 Fault Zone) and 2.5 miles (Yuha Basin Faults) from the Big Rock 2 Cluster South site and Big Rock 2 Cluster West site, respectively. The likelihood of fault rupture at the project site is considered low (Appendix G of this EIR).

Liquefaction

The term liquefaction describes a phenomenon in which saturated, cohesionless soils temporarily lose shear strength (liquefy) when subjected to cyclic ground motions. Cyclic loading of saturated soils leads to the build-up of pore water pressure as a result of soil particles being rearranged with a tendency toward closer packing. Under undrained conditions, shaking of loose noncohesive soils may result in loads being transferred from the soil skeleton to the pore water with consequent reduction in the soil strength and stiffness. Structures founded on or above potentially liquefiable soils may experience bearing capacity failures due to the temporary loss of foundation support, vertical settlements (both total and differential), and/or undergo lateral spreading. The factors known to influence liquefaction potential include soil type, relative density, grain size distribution, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking. Liquefaction is most prevalent in loose- to medium-dense, silty, sandy, and gravelly soils below the groundwater table.

The project site has not been mapped for liquefaction potential by CGS. Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the project site (Appendix G of this EIR).

Landslides

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. The project site is relatively flat. Due to the existing topography, landslides are not considered a potential hazard for the project.

Lateral Spreading

Liquefaction-induced lateral spreading is defined as the lateral displacement of ground as a result of pore pressure build-up or liquefaction in shallow underlying soils during an earthquake. Lateral spreading can occur on sloping ground or where nearby slopes are present. The factors known to influence the magnitude of lateral spreading include earthquake magnitude, peak ground acceleration, distance between the project site and the seismic event, the slope height and gradient, thickness of the liquefied layer, fines content, soil particle gradation, and residual strength of the liquefied soil.

Based on a preliminary evaluation of on site subsurface conditions and general site topography, lateral spreading is not a considered a potential hazard on the project site.

Land Subsidence

Subsidence is the sinking of the ground surface caused by the compression of earth materials or the loss of subsurface soil due to underground mining, tunneling, or erosion. The major causes of subsidence include fluid withdrawal from the ground, decomposing organics, underground mining or tunneling, and placing large fills over compressible earth materials. The effective stress on underlying soils is increased resulting in consolidation and settlement. Subsidence may also be caused by tectonic processes.

The project site is not located in an area of known ground subsidence or within any delineated zones of subsidence due to groundwater pumping or oil extraction. However, according to the City of Calipatria's '2035 General Plan, natural subsidence occurs in the Salton Trough, averaging two inches

PC ORIGINAL PKG

per year in the Salton Sea and decreasing outward until it reaches zero near the Mexican border. Therefore, the potential for subsidence exists at the project site (Appendix G of this EIR).

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures. Based on available data, the onsite near-surface soil deposits primarily consist of granular soils (clayey sand and silty sands) and fine-grained soils (fat clay, lean clay, and silts). Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils.

Clays are expected to be found at the project site. Therefore, the potential for expansive soils exists at the project site.

Collapsible Soils

Collapsible soil is generally defined as soil that will undergo a sudden decrease in volume and its internal support is lost under applied loads when water is introduced into the soil. The internal support is considered to be a temporary strength and is derived from a number of sources including capillary tension, cementing agents, e.g. iron oxide and calcium carbonate, clay-welding of grains, silt bonds, clay bonds and clay bridges. Soils found to be most susceptible to collapse include loess (fine grained wind-deposited soils), valley alluvium deposited within a semi-arid to arid climate, and residual soil deposits.

At this time, it is unknown whether collapsible soils are present at the project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the project site is possible. As such, the potential for collapsible soils exists at the project site.

Corrosive Soils

Corrosive soils can damage underground utilities, including pipelines and cables, or weaken roadway structures. Generally, fine grained soils like clays are more likely to be corrosive. Fine grained and potentially corrosive soils are expected to be encountered at the project site.

Paleontological Resources

Paleontological resources (fossils) are the remains of prehistoric plant and animal life. Fossil remains, such as bones teeth, shell, and wood, are found in geologic deposits (rock formations) within which they were originally buried. Many paleontological fossil sites are recorded in Imperial County and have been discovered during construction activities. Paleontological resources are typically impacted when earthwork activities, such as mass excavation cut into geological deposits (formations) with buried fossils.

The project site is in the Salton Basin near the shoreline of ancient Lake Cahuilla. The lake covered much of the Imperial Valley and created an extensive lacustrine environment. Lake Cahuilla experienced several fill recession episodes before it finally dried up about 300 years ago. In 1905, the Colorado River overflowed into the Salton Basin creating the present-day Salton Sea. As previously mentioned above, the project site sits in a graben valley underlain by lacustrine deposits of ancient

Lake Cahuilla. Sediments from this formation have yielded fossilized remains of continental vertebrates, invertebrates, and plants at numerous previously recorded fossil sites in the Imperial Valley. Therefore, the project site is considered paleontologically sensitive.

3.7.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1977 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in November 1990 by NEHRP, which refined the description of agency responsibilities, program goals, and objectives.

NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards such as those to which the project would be required to adhere.

State

Alquist-Priolo Special Studies Earthquake Hazards Act

The Alquist-Priolo Special Studies Earthquake Hazards Act (APEHA) was passed into law following the destructive February 9, 1971 San Fernando earthquake. The APEHA provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the APEHA is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The state geologist (Chief of the California Division of Mines and Geology) is required to identify "earthquake fault zones" along known active faults in California. Counties and cities must withhold development permits for human occupancy projects within these zones unless geologic studies demonstrate that there would be no issues associated with the development of projects. The project site is not located within a currently mapped APEHA zone.

California Building Code

The California Building Standards Commission is responsible for coordinating, managing, adopting, and approving building codes in California. CCR Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment, known as building standards. The California Building Code (CBC) is based on the Federal Uniform Building Code used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The

California Health and Safety Code (HSC) Section and 18980 HSC Section 18902 give CCR Title 24 the name of California Building Standards Code. The updates to the 2022 California Building Standards Code were published on July 1, 2022, with an effective date of January 1, 2023.

Local

County of Imperial Land Use Ordinance

Title 9 Division 15 (Geological Hazards) of the County Land Use Ordinance has established procedures and standards for development within earthquake fault zones. Per County regulations, construction of buildings intended for human occupancy are prohibited across the trace of an active fault. An exception exists when such buildings located near the fault or within a designated Special Studies Zone are demonstrated through a geotechnical analysis and report not to expose a person to undue hazard created by the construction.

County of Imperial General Plan

The County of Imperial General Plan, Seismic and Public Safety Element identifies potential natural and human-induced hazards and provides policy to avoid or minimize the risk associated with hazards. The Seismic and Public Safety Element identifies 'lifelines and critical facilities' whose disruption could endanger the public safety. Lifelines are defined as networks of services that extend over a wide area and are vital to the public welfare, and can be classified into four categories: energy, water, transportation, and communications. The IID has a formal Disaster Readiness Standard Operating Procedure for the Water Department, Power Department, and the entire District staff for response to earthquakes and other emergencies.

Table 3.7-1 analyzes the consistency of the project with specific policies contained in the County of Imperial General Plan associated with geology, soils, and seismicity. While this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.7-1. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Seismic and Public Safety Element		
Goal 1. Integrate public health and resilience into land use planning.	Consistent	Division 15 of the County Land Use Ordinance has established procedures and standards for development within earthquake fault zones. Per County regulations, construction of buildings intended for human occupancy which are located across the trace of an active fault are prohibited. An exception exists when such buildings located near the fault or within a designated Special Studies Zone are demonstrated through a geotechnical analysis and report not to expose a person to undue hazard created by the construction.
Policy 1.1. Incorporate data on areas with geological and seismic hazards into the land use review process and future development processes. As development is proposed, developers shall be required to provide information related to these hazards.		
Policy 1.3. Regulate development adjacent to or near all mineral deposits and geothermal operations.		

PC ORIGINAL PKG

Table 3.7-1. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Policy 1.4. Require seismic risks be avoided, when feasible, and mitigation measures, commensurate with risks, be taken to reduce injury, loss of life, destruction of property, and disruption of service.		Since the project site is located in the seismically active Southern California region, the project is required to be designed in accordance with the CBC. With implementation of the mitigation requirements outlined in the impact analysis, the risks associated with seismic hazards would be minimized. A preliminary geotechnical study has been prepared for the proposed project. The preliminary geotechnical study has been referenced in this environmental document. Additionally, a design-level geotechnical investigation will be conducted to evaluate the potential for site specific hazards associated with seismic activity.
Goal 2: Avoid loss of life, injury, and property damage from seismic and geologic hazards.		
Policy 2.2. Require new development in areas prone to geologic hazards (e.g., landslides, slope instability) to be adequately protected against these hazards. Any development in hillside areas shall prepare drainage plans to direct runoff and drainage away from potentially unstable slopes. New developments shall incorporate hillside design techniques and features to mitigate and support slope stability.		
Policy 2.5.. Require that geological and geotechnical investigations for new development proposals in areas with potential earthquake-induced liquefaction, landslides, or settlement. To the extent feasible, the County will limit intensive developments and land uses along rivers and waterways where it is likely that erosion could cause property damage or threaten life during high-precipitation events.		

Source: County of Imperial 2022

3.7.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to geologic and soil conditions, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to geology and soils are considered significant if any of the following occur:

PC ORIGINAL PKG

- Directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent AP Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault; (Refer to Division of Mines and Geology Special Publication 42)
    - Strong seismic ground shaking
    - Seismic related ground failure, including liquefaction
    - Landslides
- Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description, to interact with local geologic and soil conditions on the project site. A *Preliminary Geological and Geotechnical Assessment Report* (Appendix G of this EIR) was prepared for the project. The information obtained from the report was reviewed and summarized to present the existing geologic and soil conditions on the project site. This analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

Impact Analysis

Impact 3.7-1 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Rupture of a known earthquake fault, as delineated on the most recent AP Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault; (Refer to Division of Mines and Geology Special Publication 42)?

As previously discussed above, the project site is located in the seismically active Imperial Valley of southern California with several mapped faults of the San Andreas Fault System traversing the region. The project site is not located on an active fault. Furthermore, no portion of the project site is within a designated APEHA zone, and, therefore, the potential for ground rupture to occur within the project site is considered low. The project would not increase or exacerbate existing hazards related to fault rupture. The proposed project would not directly or indirectly cause potential substantial adverse

effects, including the risk of loss, injury or death involving rupture of a major fault as delineated on the most recent Alquist-Priolo Fault Zoning map. This impact would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.7-2 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Strong seismic ground shaking?

The closest mapped fault to the project site is an unnamed fault (Unnamed Creep-Active Fault) which is approximately three miles to the northwest. In the event of an earthquake along this fault or another regional fault, seismic hazards related to ground motion could occur in susceptible areas within the project site. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment magnitude, and the duration of shaking.

Even with the integration of building standards that are designed to resist the effects of strong ground motion, ground shaking within the project site could cause some structural damage to the facility structures or, at least, cause unsecured objects to fall. During a stronger seismic event, ground shaking could result in structural damage or collapse of electrical distribution facilities. Given the potentially hazardous nature of the project facilities, the potential impact of ground motion during an earthquake is considered a significant impact, as proposed structures, such as the substation and transmission lines could be damaged. However, implementation of Mitigation Measure GEO-1, which requires preparation of a design-level geotechnical report, would reduce the potential impacts associated with ground shaking to a level less than significant.

Mitigation Measure(s)

GEO-1 **Prepare Geotechnical Report(s) as Part of Final Engineering for the Project and Implement Required Measures.** Facility design for all project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following:

- Site preparation
- Soil bearing capacity
- Appropriate sources and types of fill
- Potential need for soil amendments
- Structural foundations
- Grading practices
- Soil corrosion of concrete and steel
- Erosion/winterization
- Seismic ground shaking

PC ORIGINAL PKG

- Liquefaction
- Expansive/unstable soils

In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant. The final geotechnical and/or civil engineering report shall be submitted to Imperial County Public Works Department, Engineering Division for review and approval prior to issuance of building permits.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with strong seismic ground shaking would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

Impact 3.7-3 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Seismic related ground failure, including liquefaction?

As previously discussed above, the project site has not been mapped for liquefaction potential by the CGS (Appendix G of this EIR). Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content on the project site. Therefore, the potential for liquefaction exists at the project site. Additional geotechnical investigation would be required during the design phase of the project in order to assess the risk of liquefaction on the project site. The potential impact on liquefaction is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impact associated with liquefaction to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with liquefaction would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

Impact 3.7-4 Would the project directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving:

Landslides?

The project site has a relatively flat topographic gradient. Therefore, the project would not directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving landslides and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.7-5 Would the project result in substantial soil erosion or the loss of topsoil?

During the site grading and construction phases, large areas of unvegetated soil would be exposed to erosive forces by water for extended periods of time due to ICAPCD dust suppression requirements. Unvegetated soils are much more likely to erode from precipitation than vegetated areas because plants act to disperse, infiltrate, and retain water. Construction activities will involve demolition and grubbing, grading of the project site to establish access roads and pads for electrical equipment, trenching for underground electrical collection lines, and the installation of solar equipment and security fencing which could result in increased erosion and sedimentation to surface waters. Construction could produce sediment-laden stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality. If precautions are not taken to contain contaminants, construction-related erosion impacts are considered a significant impact.

As provided in Mitigation Measure GEO-1, during final engineering for the project, a design-level geotechnical study would identify appropriate measures for the project related to soil erosion. In addition, as part of Mitigation Measure HYD-1 provided in Section 3.10 Hydrology/Water Quality, potential impacts from erosion during construction activities would be reduced to a level less than significant with the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for sediment and erosion control and implementation of best management practices (BMPs) to reduce erosion from the construction site.

The project is not expected to result in substantial soil erosion or the loss of topsoil over the long term. The project applicant would be required to implement on-site erosion control measures in accordance with County standards, which require the preparation, review, and approval of a grading plan by the County. Therefore, with implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 identified in Section 3.10 Hydrology/Water Quality, impacts from construction-related erosion would be reduced to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 and Mitigation Measure HYD-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 in Section 3.10 Hydrology/Water Quality, potential impacts from erosion during construction activities would be

PC ORIGINAL PKG

reduced to a level less than significant with the preparation of a SWPPP and implementation of BMPs to reduce erosion from the construction site.

Impact 3.7-6 Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Landslides. The project site has a relatively flat topographic gradient. Therefore, the project would not result in on- or off-site landslides and no impact would occur.

Lateral Spreading. Based on a preliminary evaluation of on site subsurface conditions and general site topography, lateral spreading is not a considered a potential hazard on the project site. However, in areas where project components are planned adjacent to existing channels, there could be potential lateral spreading issues that may require further evaluation in future design phases. Additional geotechnical investigation would be required in order to assess the risk of lateral spreading to occur on the project site. The potential impact associated with lateral spreading is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with lateral spreading to a level less than significant.

Land Subsidence. The project site is not located in an area of known ground subsidence or within any delineated zones of subsidence due to groundwater pumping or oil extraction. However, according to the City of Calipatria's 2035 General Plan, natural subsidence occurs in the Salton Trough. Therefore, the potential for subsidence exists at the project site (Appendix G of this EIR). Additional geotechnical investigation would be required in order to assess the risk of subsidence to occur on the project site. The potential impact associated with subsidence is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with subsidence to a level less than significant.

Liquefaction. As described above, the project site has not been mapped for liquefaction potential by CGS. Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the project site (Appendix G of this EIR). Additional geotechnical investigation would be required in order to assess the risk of liquefaction on the project site. Therefore, the potential impact on liquefaction is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with liquefaction to a level less than significant.

Collapsible Soils. It is unknown whether collapsible soils are present on the project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the project site is possible. As such, the potential for collapsible soils exists at the project site. Additional geotechnical investigation would be required in order to assess the risk of collapsible soils to occur on the project site. The potential impact associated with collapsible soils is considered a significant impact**.** Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated with collapsible soils to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with lateral spreading, subsidence, liquefaction, and collapsible soils would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

Impact 3.7-7 Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

As stated above, expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures. Based on the available data, the onsite near-surface soil deposits primarily consist of granular soils (clayey sand and silty sands) and fine-grained soils (fat clay, lean clay, and silts). Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils. Clays are expected to be found at the project site. Therefore, the potential for expansive soils exists at the project site. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures and electrical connections producing shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material. These conditions could be worsened if structural facilities are constructed directly on expansive soil materials. This potential impact would be significant as structures could be damaged by these types of soils.

In addition, fine grained and potentially corrosive soils are expected to be encountered at the project site. Corrosive soils can damage underground utilities, including pipelines and cables, or weaken roadway structures. Generally, fine grained soils like clays are more likely to be corrosive. A site-specific geotechnical investigation would be required at the project site to determine the extent and effect of problematic soils. Implementation of Mitigation Measure GEO-1, which requires the preparation of a design-level geotechnical report, would reduce potential impacts associated with expansive and corrosive soils to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measure GEO-1 are required.

Significance after Mitigation

With implementation of Mitigation Measure GEO-1, potential impacts associated with expansive and corrosive soils would be reduced to a level less than significant with the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

PC ORIGINAL PKG

Impact 3.7-8 Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project applicant is proposing the use of a standard on-site septic tank and leach field for the treatment and disposal of on-site generated sanitary wastewater. This would occur only at the O&M building. Site specific studies will be required to determine that County Environmental Health standards are met in regard to soil percolation rates and separation of leach fields from groundwater.

Notwithstanding these design requirements, potential equipment failures or wastewater loading rates in excess of the design capacity of the treatment and disposal system could lead to water quality degradation. This potential impact is considered significant. Implementation of Mitigation Measure GEO-2 would reduce the impact associated with on-site water treatment and disposal to a level less than significant.

Mitigation Measure(s)

GEO-2 **Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements.** The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial Land Use Ordinance. Prior to construction, and again prior to operation, the project applicant will obtain all necessary permits and/or approvals from the Imperial County Public Health Department, Division of Environmental Health. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's Anti-Degradation Policy.

Significance after Mitigation

With implementation of Mitigation Measure GEO-2, potential impacts related to infiltration of wastewater into the soil column and water quality degradation would be reduced to a less than significant level through compliance with County performance standards.

Impact 3.7-9 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is in the Salton Basin near the shoreline of ancient Lake Cahuilla. The lake covered much of the Imperial Valley and created an extensive lacustrine environment. Lake Cahuilla experienced several fill recession episodes before it finally dried up about 300 years ago. In 1905, the Colorado River overflowed into the Salton Basin creating the present-day Salton Sea. As previously mentioned above, the project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla. Sediments from this formation have yielded fossilized remains of continental vertebrates, invertebrates, and plants at numerous previously recorded fossil sites in the Imperial Valley. Therefore, the project site is considered paleontologically sensitive.

Although unlikely, project construction has the potential to unearth and/or potentially destroy previously undiscovered paleontological resources. Surficial sediments that have been disturbed by agricultural activities or other human-made disturbances have low paleontological resource sensitivity

and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments would be considered a potentially significant impact. However, implementation of Mitigation Measure GEO-3 and GEO-4 would reduce the potential impact on paleontological resources to a level less than significant.

Mitigation Measure(s)

GEO-3 **Paleontological Resources Monitoring.** Prior to commencement of any grading activity in areas of high paleontological sensitivity, the project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

GEO-4 **Paleontological Resources Worker Awareness Program.** Prior to any ground disturbance, the qualified paleontologist shall conduct initial Paleontological Resources Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and be performed periodically for new personnel coming on to the project as needed. The WEAP training can be performed by video or audio presentation following the initial WEAP presentation. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the ICPDS.

PC ORIGINAL PKG

Significance after Mitigation

Implementation of Mitigation Measure GEO-3 and GEO-4 would reduce the potential impact on paleontological resources to a level less than significant. Mitigation Measure GEO-3 requires a qualified paleontological monitor to be present during excavation activities associated with project construction. The paleontological monitor will be equipped to salvage fossils as they are unearthed and are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Mitigation Measure GEO-4 requires all construction personnel to attend and complete a WEAP training, which will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance.

3.7.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Decommissioning and restoration of the project site at the end of its use as a solar facility would involve the removal of structures and restoration to prior (pre-solar project) conditions. No geologic or soil impacts associated with the restoration activities would be anticipated, and, therefore, no impact is identified.

No impact is anticipated from restoration activities as the ground disturbance and associated impacts on paleontological resources will have occurred during the construction phase of the project.

Residual

With implementation of Mitigation Measure GEO-1, impacts related to strong seismic ground shaking, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, and corrosive soils would be reduced to a level less than significant. With implementation of Mitigation Measure GEO-1 and Mitigation Measure HYD-1 in Section 3.10 Hydrology/Water Quality, potential impacts from erosion during construction activities would be reduced to a level less than significant. With the implementation of Mitigation Measure GEO-2, impacts resulting from new on-site wastewater treatment and disposal systems would be reduced to a less than significant level. Implementation of Mitigation Measure GEO-3 and GEO-4 would reduce the potential impact on paleontological resources to a level less than significant. The project would not result in residual significant and unmitigable impacts related to geology and soil resources.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.8 Greenhouse Gas Emissions

This section includes an overview of existing greenhouse gas (GHG) emissions within the project area and identifies applicable federal, state, and local policies related to global climate change. The impact assessment provides an evaluation of potential adverse effects with regards to GHG emissions based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. Information contained in this section is summarized from the *Air Quality and Greenhouse Gas Emissions Technical Report* prepared by HDR Engineering, Inc. This report is included in Appendix D of this EIR.

3.8.1 Existing Conditions

Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the GHGs.

Water Vapor. Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher, leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere.

Carbon Dioxide. The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, each of these activities has increased in scale and distribution Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm).The International Panel on Climate Change (IPCC) indicates that concentrations were 379 ppm in 2005, an increase of more than 30 percent. Left unchecked, the IPCC projects that concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. This could result in an average global temperature rise of at least two degrees Celsius or 3.6 degrees Fahrenheit.

Methane. CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO_2. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO_2, N_2O, and CFCs). CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is also commonly used as an aerosol spray propellant.

Chlorofluorocarbons. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons. Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons. Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride. Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO_2. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols. Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

PC ORIGINAL PKG

Greenhouse Gas Emissions Inventory

CARB compiles GHG inventories for the State of California. The most updated inventory is referred to as the 2023 edition, which reports the State's GHG emissions inventory from calendar year 2021. Based on the 2021 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 381.3 $MMTCO_2e$ including emissions resulting from imported electrical power (Appendix D of this EIR). According to CARB, as of 2016, statewide GHG emissions dropped below the 2020 GHG Limit (431 $MMTCO_2e$) and have remained below the limit since that time, due in part to the state's GHG reduction programs (such as the RPS, Low Carbon Fuel Standard (LCFS), vehicle efficiency standards, and declining caps under the Cap and Trade Program). Table 3.8-1 identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2021 (i.e., the most recent year in which data are available from CARB) (Appendix D of this EIR). As shown in Table 3.8-1, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 38 percent in 2021.

Table 3.8-1. State of California Greenhouse Gas Emissions

Category	Total 1990 Emissions ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2021 Emissions ($MMTCO_2e$)	Percent of Total 2021 Emissions
Transportation	150.7	35%	145.6	38%
Electric Power	110.6	26%	62.4	16%
Commercial	14.4	3%	12.2	4%
Residential	29.7	7%	24.8	7%
Industrial	103.0	24%	73.9	19%
Recycling and Waste [a]	–	–	8.4	2%
High-GWP/Non-Specified [b]	1.3	<1%	21.3	6%
Agriculture/Forestry	23.6	6%	30.9	8%
Forestry Sinks [c]	-6.7		--	--
Net Total (IPCC AR4) [d]	**431**	**100%**	**381.3**	**100%**

Source: Appendix D of this EIR

[a] Included in other categories for the 1990 emissions inventory.

[b] High-GWP gases are not specifically called out in the 1990 emissions inventory.

[c] Revised methodology under development (not reported for 2021).

[d] CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California.

PC ORIGINAL PKG

The California Natural Resources Agency's Fourth Climate Change Assessment (Fourth Assessment) produced updated climate projections that provide state-of-the-art understanding of different possible climate futures for California. The science is highly certain that California (and the world) will continue to warm and experience greater impacts from climate change in the future. While the IPCC and the National Climate Assessment have released descriptions of scientific consensus on climate change for the world and the U.S., respectively, the Fourth Assessment summarizes the current understanding of climate impacts and adaptation options in California (California Natural Resources Agency 2018). Projected changes in California include:

- **Temperatures:** If GHG emissions continue at current rates then California will experience average daily high temperatures that are warmer than the historical average by:
  - 2.7 Fahrenheit (°F) from 2006 to 2039
  - 5.8°F from 2040 to 2069
  - 8.8°F from 2070 to 2100
- **Wildfire:** One Fourth Assessment model suggests large wildfires (greater than 25,000 acres) could become 50 percent more frequent by the end of century if emissions are not reduced. The model produces more years with extremely high areas burned, even compared to the historically destructive wildfires of 2017 and 2018. By the end of the century, California could experience wildfires that burn up to a maximum of 178 percent more acres per year than current averages.
- **Sea-Level Rise:** If emissions continue at current rates, the Fourth Assessment model results indicate that total sea-level rise by 2100 is expected to be 54 inches, almost twice the rise that would occur if GHG emissions are lowered to reduce risk.
- **Snowpack:** By 2050, the average water supply from snowpack is projected to decline to 2/3 from historical levels. If emissions reductions do not occur, water from snowpack could fall to less than 1/3 of historical levels by 2100.
- **Agriculture:** Agricultural production could face climate-related water shortages of up to 16 percent in certain regions. Regardless of whether California receives more or less annual precipitation in the future, the state will be dryer because hotter conditions will increase the loss of soil moisture (California Natural Resources Agency 2018).

3.8.2 Regulatory Setting

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

Federal

At the federal level, there is currently no overarching law related to climate change or the reduction of GHGs. The U.S. EPA is developing regulations under the CAA to be adopted in the near future, pursuant to the U.S. EPA's authority under the CAA. Foremost amongst recent developments have been the settlement agreements between the U.S. EPA, several states, and nongovernmental organizations (NGO) to address GHG emissions from electric generating units and refineries; the U.S. Supreme Court's decision in Massachusetts v. EPA; and U.S. EPA's "Endangerment Finding," "Cause or Contribute Finding," and "Mandatory Reporting Rule." On September 20, 2013, the U.S. EPA issued

PC ORIGINAL PKG

a proposal to limit carbon pollution from new power plants. The U.S. EPA is proposing to set separate standards for natural gas-fired turbines and coal-fired units.

Although periodically debated in Congress, no federal legislation concerning GHG limitations has yet been adopted. In Coalition for Responsible Regulation, Inc., et al. v. EPA, the United States Court of Appeals upheld the U.S. EPA's authority to regulate GHG emissions under CAA. Furthermore, under the authority of the CAA, the EPA is beginning to regulate GHG emissions starting with large stationary sources. In 2010, the U.S. EPA set GHG thresholds to define when permits under the New Source Review Prevention of Significant Deterioration (PSD) standard and Title V Operating Permit programs are required for new and existing industrial facilities. In 2012, U.S. EPA proposed a carbon pollution standard for new power plants.

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy (CAFE) standards were first introduced by Congress in 1975 to help reduce the country's dependence on foreign oil. CAFE standards are regulated by Department of Transportation's National Highway Traffic and Safety Administration (NHTSA). NHTSA sets and enforces the CAFE standards, while the USEPA calculates average fuel economy levels for manufacturers, and also sets related GHG standards. The regulations have become more stringent over time. The regulations at first applied only to passenger cars in 1978, then included light duty trucks up to 6,000 pounds in 1980, and finally increased to all vehicles up to 8,500 pounds the next year. Regulations varied during the 1980s for both cars and trucks before reaching a steady target for cars in 1990 through 2010, with trucks moderately increasing during the period from 20 to 21 miles per gallon (mpg) through 2005, then reaching 23.5 mpg by 2010.

On April 1, 2010, the USEPA and the NHTSA announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States. This rule required passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet fuel economy standards. In 2011, the USEPA and NHTSA issued a final rule for the first national standards to improve fuel efficiency of medium- and heavy-duty trucks and buses.

In 2020, the USEPA and NHTSA, issued the Safer Affordable Fuel Efficient (SAFE) Vehicles Rule which set new CAFE targets and tailpipe CO_2 emissions standards for passenger cars and lights trucks that increase 1.5 percent in stringency each year from model years 2021 through 2026. In 2021, President Biden signed an executive order (EO) directing the government to revise fuel economy standards, with the goal of further reducing emissions. NHTSA finalized the CAFE Standards for model years 2024-2026 in 2022. The final rule establishes standards that would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026 (NHTSA 2022). NHTSA projects the standards will cut greenhouse gases from the atmosphere, reduce air pollution, and reduce the country's dependence on oil (NHTSA 2021).

On July 28, 2023, NHTSA announced a proposal for new CAFE standards for passenger cars and light trucks built in model years 2027-2032, and new fuel efficiency standards for heavy-duty pickup trucks and vans built in model years 2030-2035. If finalized, the proposal would require an industry fleet-wide average of approximately 58 miles per gallon for passenger cars and light trucks in MY 2032, by increasing fuel economy by 2 percent year over year for passenger cars and by 4% year over year for light trucks. For heavy-duty pickup trucks and vans, the proposal would increase fuel efficiency by 10 percent year over year.

State

Executive Order S-3-05 – Statewide Greenhouse Gas Emissions Targets

On June 1, 2005, the Governor issued EO S-3-05 which set the following GHG mission reduction targets:

- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

This EO directed the secretary of the California EPA to oversee the efforts made to reach these targets, and to prepare biannual biennial reports on the progress made toward meeting the targets and on the impacts on California related to global warming. The first such Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years thereafter. This goal was further reinforced with the passage of AB 32 in 2006 and SB 32 in 2016.

Executive Order S-01-07

This order, signed by Governor Schwarzenegger, sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

Executive Order B-30-15

On April 20, 2015, Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. California's emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius, the warming threshold at which there will likely be major climate disruptions such as super droughts and rising sea levels.

Executive Order B-55-18

EO B-55-18, signed on September 10, 2018, established a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The EO requires the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bill 32 – California Global Warming Solutions Act

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlines measures to meet the 2020 GHG reduction goals. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by the end of 2020.

PC ORIGINAL PKG

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2017 Scoping Plan Update, addresses the 2030 target established by Senate Bill (SB) 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by Executive Order (EO) B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Renewable Portfolio Standard

The RPS promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "initial RPS"), the goals have been accelerated and increased by EOs S-14-08, S-21-09, SB 350, and SB 100.

The RPS is included in CARB's Scoping Plan list of GHG reduction measures to reduce energy sector emissions. It is designed to accelerate the transformation of the electricity sector through such means as investment in the energy transmission infrastructure and systems to allow integration of large quantities of intermittent wind and solar generation. Increased use of renewables would decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector.

Senate Bill 350

The RPS program was further accelerated in 2015 with SB 350 which mandated a 50 percent RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65 percent of RPS procurement to be derived from long-term contracts of 10 or more years.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. California must procure 100 percent of its energy from carbon free energy sources by the end of 2045.

Climate Change Scoping Plan

The Scoping Plan released by CARB in 2008 outlined the state's strategy to achieve the AB 32 goals. This Scoping Plan, developed by CARB in coordination with the Climate Action Team, proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by CARB at its meeting in December 2008. According to the Scoping Plan, the 2020 target of 427 million $MTCO_2e$ requires the reduction of 169 million $MTCO_2e$, or approximately 28.3 percent, from the state's projected 2020 BAU emissions level of 596 million $MTCO_2e$.

However, in August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document. This document includes expanded analysis of project alternatives as well as updates the 2020 emission projections in light of the current economic forecasts. Considering the updated 2020 BAU estimate of 507 million $MTCO_2e$, only a 16 percent reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions.

In May 2014, CARB developed; in collaboration with the Climate Action Team, the *First Update to California's Climate Change Scoping Plan* (Update), which shows that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In accordance with the United Nations Framework Convention on Climate Change (UNFCCC), CARB is beginning to transition to the use of the AR4's 100-year GWPs in its climate change programs. CARB has recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 million $MTCO_2e$; therefore, the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 million $MTCO_2e$ in the initial Scoping Plan.

CARB adopted the latest update to the Climate Change Scoping Plan in December 2017. The 2017 Scoping Plan is guided by the EO B-30-15 GHG reduction target of 40 percent below 1990 levels by 2030. The 2017 Scoping Plan builds upon the framework established by the initial Scoping Plan and the First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources (CARB 2017).

The majority of the Scoping Plan's GHG reduction strategies are directed at the two sectors with the largest GHG emissions contributions: transportation and electricity generation. The GHG reduction strategies for these sectors involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities. The reduction strategies employed by CARB are designed to reduce emissions from existing sources as well as future sources.

Senate Bill 97

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs Office of Planning and Research (OPR) to develop draft CEQA Guidelines "for the mitigation of GHG emissions or the effects

of GHG emissions" by July 1, 2009, and directs the Resources Agency to certify and adopt the CEQA Guidelines by January 1, 2010.

On December 30, 2009, the Natural Resources Agency adopted amendments to the CEQA Guidelines in the CCR. The amendments went into effect on March 18, 2010, and are summarized below:

- Climate action plans and other GHG reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the GHG emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. In addition, consideration of several qualitative factors may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. The Guidelines do not set or dictate specific thresholds of significance.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of GHG emissions in Appendix G of the CEQA Guidelines.
- The Guidelines are clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- The Guidelines promote the advantages of analyzing GHG impacts on an institutional, programmatic level, and, therefore, approve tiering of environmental analyses and highlights some benefits of such an approach.
- EIRs must specifically consider a project's energy use and energy efficiency potential, pursuant to Appendix F of the CEQA Guidelines.

Senate Bill 375 – Regional Emissions Targets

SB 375 requires that regions within the state which have a metropolitan planning organization (MPO) must adopt a sustainable communities' strategy as part of their RTPs. The strategy must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that "it will be necessary to achieve significant additional GHG reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 provides that new CEQA provisions be enacted to encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32," and that "current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives."

Regional

Southern California Association of Governments - 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG is the designated MPO for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.

In September 2020, SCAG adopted the 2020-2045 RTP/SCS. The RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the NAAQS as set forth by the federal CAA (see Section 3.4, Air Quality, of this EIR). The following SCAG goal is applicable to the project:

- Reduce greenhouse gas emissions and improve air quality

As a solar generation facility, the proposed project would improve air quality by reducing the use of fossil fuels in energy production.

Imperial Valley Regional Climate Action Plan

The Imperial County Transportation Commission is currently developing a Regional Climate Action Plan (RCAP), which is a strategy for how the region will work toward reducing its GHG emissions in accordance with statewide targets. The Imperial County Transportation Commission is committed to a collaborative and inclusive process and is conducting extensive outreach about the strategies that are to be included within the RCAP. The RCAP encompasses all of Imperial Valley, including Imperial County, and the seven incorporated cities: Calipatria, Calexico, Brawley, El Centro, Holtville, Imperial, and Westmorland. The RCAP is intended to facilitate the reduction of GHG emissions throughout Imperial County in a way that is practical, efficient, and beneficial to the community and enhances Imperial County's desirable characteristics and qualities. The foundation for developing emission reduction and climate adaptation measures will be based on the County's existing work, as detailed in the region's extensive plans and programs. The RCAP has not been finalized or adopted nor has it been qualified in accordance with CEQA Guidelines Section 15183.5 but is included for disclosure purposes.

Local

County of Imperial

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the CEQA Guidelines to provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts. Formal CEQA thresholds for lead agencies must always be established through a public hearing process. Imperial County has not established formal quantitative or qualitative thresholds through a public rulemaking process, but CEQA permits the lead agency to establish a project-specific threshold of significance if backed by substantial evidence, until such time as a formal threshold is approved.

PC ORIGINAL PKG

3.8.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to GHG emissions are considered significant if any of the following occur:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs

As discussed in Section 15064.4 of the CEQA Guidelines, the determination of the significance of GHG emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

1. Quantify greenhouse gas emissions resulting from a project; and/or
2. Rely on a qualitative analysis or performance based standards.

A lead agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

South Coast Air Quality Management District Significance Threshold

The ICAPCD has not adopted a GHG significance threshold. As previously described, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). Thus, in the absence of any

GHG emissions significance thresholds, the County has relied upon the SCAQMD quantitative thresholds, as discussed below.

In December 2008, the SCAQMD adopted a 10,000 $MTCO_2e$ per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards applicable to this project, the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is the most relevant GHG significance threshold and is used as a benchmark for the proposed project. It should be noted that the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold (Appendix D of this EIR).

A project is considered to have a significant impact and cumulatively considerable impact if it exceeds the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year.

Methodology

The project-related direct and indirect emissions of GHGs were estimated using the similar methods for quantification of criteria air pollutants, as described in Section 3.4 Air Quality. Emissions were estimated using existing conditions, project construction and operations information, as well as a combination of emission factors from various sources. Where GHG emission quantification was required, emissions were modeled using the CalEEMod, version 2022. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects.

Impact Analysis

Impact 3.8-1 Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and operation of the project would result in a relatively small amount of GHG emissions. The project would generate GHG emissions during construction and routine operational activities at the Project site.

Construction. During construction, GHG emissions would be generated from the operation of off-road equipment, haul-truck trips, and on-road worker vehicle trips. Table 3.8-2 shows the project's unmitigated and mitigated construction-related GHG emissions. During the approximate 24-month construction period, the proposed project would generate an estimated 3,470 $MTCO_2e$, or approximately 116 $MTCO_2e$ annually amortized over a 30-year period. Therefore, the proposed project's construction emissions are less than the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year and this is considered a less than significant impact.

PC ORIGINAL PKG

Table 3.8-2. Annual Construction GHG Emissions ($MTCO_2e$ per year)

Year/Description	GHG Emissions
2026	2,666
2027	691
2050	2,016
Project Total	3,357
Amortized Construction Emissions	**112**

Source: Appendix D of this EIR

Operation. Once the project is constructed and operational, the proposed project would have minimal amounts of emissions generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. It is assumed the project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects. This would thereby reduce the project's on-site staff to below the anticipated 4 to 10 full-time employees. Additionally, there are no expected sources of stationary emission sources (i.e. emergency generators). Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and operational GHG emissions would be less than significant.

As shown in Table 3.8-2, the estimated total GHG emissions for the project would not exceed the SCAQMD threshold of 10,000 MT CO_2e per year. Projects below this significance criterion would have a minimal contribution to global emission and are considered to have less than significant impacts. Therefore, construction and operational GHG impacts associated with the project would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.8-2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

As discussed in Impact 3.8-1, the proposed project would generate a relatively small amount of GHG emissions. The project would generate an incremental contribution to and a cumulative increase in GHG emissions, however, the proposed project-generated GHG emissions would not exceed the SCAQMD significance threshold, which was prepared with the purpose of complying with statewide GHG-reduction efforts. Below is a discussion of the proposed project's consistency with the 2022 Scoping Plan Update, the 2020-2045 RTP/SCS, and Imperial Valley Climate Action Plan.

2022 Scoping Plan Update

The 2022 Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions.

Many of the measures and programs included in the 2022 Scoping Plan would result in the reduction of project-related GHG emissions, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (low-carbon fuel standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy). Although the project would introduce GHGs into the

environment, once construction is complete, the project would be a producer of renewable energy, which generates substantially less GHG emissions compared with the more common types of fossil-fueled energy generation facilities. It is anticipated the project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The contribution of renewable resource energy production to meet the goals of the Renewable Portfolio Standard (Scoping Plan Measure E-3) and would result in a net cumulative reduction of GHG emissions, a key environmental benefit (Scoping Plan Measure E-3, Renewable Portfolio Standard, of the Climate Change Scoping Plan requires that all investor-owned utility companies generate 60 percent of their energy demand from renewable sources by year 2030). Therefore, the short-term minor generation of GHG emissions during construction, which is necessary to create a new, low-GHG-emitting power-generating facility, as well as the negligible amount generated during ongoing maintenance operations, would be more than offset by GHG emission reductions associated with solar-generated energy during operation. As such, the project is consistent with measures in the 2022 Scoping Plan.

2020-2045 RTP/SCS

At the regional level, the 2020–2045 RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs. Typically, a project would be consistent with the RTP/SCS if the project does not exceed the underlying growth. assumptions within the RTP/SCS. As previously discussed, the project would include 4 to 10 new employees and would be consistent with the growth projections for the air quality management plan. Therefore, the project would not conflict with implementation of the strategies identified in the 2020 RTP/SCS to reduce GHG emissions.

Imperial Valley Regional Climate Action Plan

As previously mentioned, the RCAP has not been adopted nor been qualified in accordance with CEQA Guidelines. However, the project would be consistent with Strategy E-2: Increase Renewable and Zero-Carbon Energy Generation, and Strategy E-3: Develop Clean Energy Jobs within the RCAP, as it is a solar project and would generate 4 to 10 new jobs. Therefore, the project would not conflict with the RCAP.

Given the project's consistency analysis with applicable GHG plans, policies and regulations adopted for the purpose of reducing GHG emissions and emissions below the significance threshold, impacts would be less than significant. While the project would emit some GHG emissions during construction and a very small amount during operations, the contribution of renewable resource energy production to meet the goals of the RPS (Scoping Plan Measure E-3) would result in a net cumulative reduction of GHG emissions, a key environmental benefit. Scoping Plan Measure E-3 of the Climate Change Scoping Plan requires that all investor-owned utility companies generate 60 percent of their energy demand from renewable sources by the year 2030. Therefore, the short-term minor generation of GHG emissions during construction which is necessary to create a new, low-GHG emitting power-generating facility, as well as the negligible amount generated during ongoing maintenance operations, would be more than offset by GHG emission reductions associated with solar-generated energy during operation.

Furthermore, increasing sources of solar energy is one of the measures identified under the Scoping Plan to reduce statewide GHG emissions. The proposed project would reduce GHG emissions in a manner consistent with SB 32 and other California GHG-reducing legislation by creating a new source of solar power to replace the current use of fossil-fuel power and reduce GHG emissions associated with power generation and use. Implementation of the proposed project would result in a less than significant impact associated with the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHG.

PC ORIGINAL PKG

Mitigation Measure(s)

No mitigation measures are required.

3.8.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

Similar to construction activities, decommissioning and restoration would result in GHG emissions below allowable thresholds. Construction activities during decommissioning and restoration would adhere to Mitigation Measures AQ-1 and AQ-2 outlined in Section 3.4, Air Quality of this EIR, further reducing GHG emissions. Therefore, the impact is considered less than significant.

Residual

The proposed project's GHG emissions would result in a less than significant impact. Project operation, subject to the provision of CUPs, would generally be consistent with statewide GHG emission goals and policies including SB 32. Project consistency with applicable plans, policies, and regulations adopted to reduce GHG emissions would ensure that the project would not result in any residual significant and unavoidable impacts with regards to global climate change.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.9 Hazards and Hazardous Materials

This section addresses potential hazards and hazardous materials for construction and operational impacts. Information contained in this section is summarized from the *Phase I Environmental Site Assessment* prepared by HDR. This report is included as Appendix H of this EIR.

3.9.1 Existing Conditions

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Phase I ESA

The Phase I ESA prepared for the project site was used to assess the potential hazards and hazardous materials found on-site or adjacent to the project site. The Phase I ESA included a records review, site reconnaissance, and interviews, which are summarized below.

Records Review

A review of historic aerial photographs, historic topographic maps, historic Sanborn Fire Insurance maps, governmental regulatory databases, and other regulatory and agency databases was performed to evaluate potential adverse environmental conditions resulting from previous ownership and uses of the project site.

Historical aerial photographs were reviewed from the EDR Aerial Photo Decade Package for the following years: 1937, 1949, 1953, 1976, 1985, 1996, 2002, 2006, 2009, 2012, 2016, and 2020. In 1937, the project site and adjacent properties were used for agricultural practices or were undeveloped floodplains/sloughs, alluvial fans/terraces, and arid shrublands. In 1953, the floodplain/slough areas located in the north-central portion of the project site and on adjacent properties were starting to be converted to agricultural land. The 1976 aerial photograph shows the project site and surrounding properties as being similar to the current agricultural use. Additionally, the irrigation canals in the north-central and eastern portions of the project site had been modified. In 2002, the property on the western boundary of the project site that burned down was no longer visible. The 2016 aerial photograph shows solar developments in alignment with the existing solar facilities. No substantial changes were noted in the 1949, 1984, 1996, 2006, 2009, 2012, and 2020 aerial photographs.

EDR was contracted by HDR to complete a database search of federal, state, local, and tribal environmental records for the project site. The database search was performed for the project site by

EDR on September 30, 2024. The databases searched included federal, state, local, tribal, and EDR proprietary databases for listings located within the project site, and an additional 1-mile search buffer zone. A complete copy of the EDR environmental database report and detailed maps are included in the Phase I ESA (Appendix H of this EIR).

The environmental database search identified 13 mapped listings for 8 sites within the project site, and 11 listings within the 1-mile search buffer. The listings within the project site and many of the listings within the search buffer were determined to be incorrectly mapped and are actually outside of the project site vicinity based on further review. The majority of these database listings were for the generation of regulated and/or hazardous wastes. Only one site, Jerry Preece Jr. Farms, located west of the project site at 2396 W Vaughn Road had any reported violations associated with waste/chemical storage and disposal, including violations for open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. Five violations remain open for this site, which is located northeast of the Big Rock 2 Cluster West site. A review of the violations indicates that conditions noted are generally localized to this property and are unlikely to impact the project site. Therefore, this is not considered a recognized environmental condition (REC).

Site Reconnaissance

A site reconnaissance was performed on October 22, 2024. The reconnaissance consisted of visual observation of surficial conditions at the project site and observation of adjoining properties to the extent that they were visible from public areas. Due to the size of the property, HDR was unable to inspect the entirety of the property. However, due to the agricultural and undeveloped nature of the property, this limitation does not represent a significant data gap. The following is a summary of observations made by HDR during the site reconnaissance.

All the plots observed appeared to be fallow or actively cultivated. Features observed throughout the plots included unlined or concrete-lined canals with water control gates, sprinklers, unpaved roads, an electrical pump, two approximately 1,600-gallon ASTs labelled “Green Touch” (likely an agrichemical), a 275-gallon tote, and piles of hay. An electrical pump and storage containers were observed on the southeastern portion of the project site. Although the exact contents of the ASTs and storage tote could not be specified, due to the lack of spills or leakage observed in the vicinity of the containers and the use of the project site for agricultural purposes, the presence of the ASTs did not represent an environmental concern.

Other features observed within the project site included asphalt-paved roads, creeks, and a few structures. A residence was noted on the southwest side of the intersection of Jessup Road and Campbell Road, and a metal shed was present on the northwest side of the intersection. Nothing was stored along the exterior areas of the shed. Access to the interior of the shed or residence was not provided. It was noted that the metal shed was built above a concrete foundation.

Utilities and PCBs

HDR noted transmission lines, pole-mounted transformers, and signs indicating the presence of underground utilities owned by AT&T. The pole-mounted transformers were located near the metal shed and the electrical pump. The installation date of the transformers is unknown; therefore, the transformers could contain PCBs due to their age. However, no evidence of leaks, spills, or corrosion was observed in the vicinity of the transformers. Based on their good condition, the pole-mounted transformers were not an environmental concern.

PC ORIGINAL PKG

Vapor Intrusion

The potential for vapor intrusion was evaluated for the project site. Based on the current and historical use of the project area, and the lack of VOC sources in the immediate vicinity, vapor intrusion is not considered to be of concern for the project site.

Per-and Polyfluoroalkyl Substances

Potential sources of Per-and Polyfluoroalkyl Substances (PFAS) were evaluated for the project site. Federal and state PFAS databases were reviewed for PFAS-related sites/sources within the project site search buffer. No listings were identified. However, the following PFAS sources could be associated with the project site given known or common practices with agricultural properties:

- Potential application of municipal biosolids in agricultural fields.
- Use of insecticides (pesticides) and herbicides.

Previous incident records of spills or potential over application within the project site or adjacent properties have all been closed. The use of pesticides and herbicides on the project site is not considered a REC.

Interviews

Interviews were conducted with 8 out of 9 landowners of the project site. The responding landowners indicated that the properties have only been used for agricultural purposes under their ownership and there were no environmental concerns identified in the surveys completed. However, one of the landowners indicated that there was a homestead that burned down 20 years ago on their property, but site cleanup details were not provided. Based on historical aerials, it appears the homestead was located on the northwest corner of APN 051-290-019 (Big Rock 2 Cluster West site). Burned debris may have been buried in-place, which may contain asbestos containing materials or other hazardous building materials. The risk of encountering this debris does not meet the definition of a REC but is considered a Business Environmental Risk.

Proximity to Schools

The project site is located within 0.25 mile of the former Westside Elementary School (2295 West Vaughn Road), located approximately 200 feet from the closest boundary of the Big Rock 2 Cluster North site. However, according to the California Department of Education's California School Directory, Westside Elementary School closed on June 30, 2012 (California Department of Education 2017).

Proximity to Airports

The project site is not located within 2 miles of a public airport or a public use airport. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site.

Fire Hazard

The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low (County of Imperial 2022).

3.9.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over 5 years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. The Comprehensive Environmental Response, Compensation, and Liability Act established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified.

Emergency Planning Community Right-to-Know Act of 1986 (42 United States Code 11001 et seq.)

The Emergency Planning Community Right-to-Know Act was included under the Superfund Amendments and Reauthorization Act (SARA) law and is commonly referred to as SARA Title III. Emergency Planning Community Right-to-Know was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the disaster in Bhopal, India, in which more than 2,000 people suffered death or serious injury from the accidental release of methyl isocyanate. To reduce the likelihood of such a disaster in the U.S., Congress imposed requirements on both states and regulated facilities.

Emergency Planning Community Right-to-Know establishes requirements for federal, state, and local governments, Indian Tribes, and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. SARA Title III requires states and local emergency planning groups to develop community emergency response plans for protection from a list of Extremely Hazardous Substances (40 CFR 355). The Emergency Planning Community Right-to-Know provisions help increase the public’s knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. In California, SARA Title III is implemented through the California Accidental Release Prevention.

Federal Insecticide, Fungicide, and Rodenticide Act

The objective of Federal Insecticide, Fungicide, and Rodenticide Act is to provide federal control of pesticide distribution, sale, and use. All pesticides used in the U.S. must be registered (licensed) by the EPA. Registration assures that pesticides would be properly labeled and that, if used in accordance with specifications, they would not cause unreasonable harm to the environment. Use of each registered pesticide must be consistent with use directions contained on the label or labeling.

PC ORIGINAL PKG

Federal Water Pollution Control Act (Clean Water Act)

The objective of the Federal Water Pollution Control Act, commonly referred to as the CWA, is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. The oil SPCC Program of the CWA specifically seeks to prevent oil discharges from reaching waters of the U.S. or adjoining shorelines. Further, farms are subject to the SPCC rule if they:

- Store, transfer, use, or consume oil or oil products
- Could reasonably be expected to discharge oil to waters of the U.S. or adjoining shorelines. Farms that meet these criteria are subject to the SPCC rule if they meet at least one of the following capacity thresholds:
    - Aboveground oil storage capacity greater than 1,320 gallons
    - Completely buried oil storage capacity greater than 42,000 gallons

However, the following are exemptions to the SPCC rule:

- Completely buried storage tanks subject to all the technical requirements of the underground storage tank regulations
- Containers with a storage capacity less than 55 gallons of oil
- Wastewater treatment facilities
- Permanently closed containers
- Motive power containers (e.g., automotive or truck fuel tanks)

Hazardous Materials Transport Act – Code of Federal Regulations

The Hazardous Materials Transportation Act was published in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any “particular quantity or form” of a material that “may pose an unreasonable risk to health and safety or property.”

Occupational Safety and Health Administration

Occupational Safety and Health Administration’s (OSHA) mission is to ensure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA standards are listed in 29 CFR Part 1910.

The OHSA Process Safety Management of Highly Hazardous Chemicals (29 CFR Part 110.119) is intended to prevent or minimize the consequences of a catastrophic release of toxic, reactive, flammable, or explosive highly hazardous chemicals by regulating their use, storage, manufacturing, and handling. The standard intends to accomplish its goal by requiring a comprehensive management program integrating technologies, procedures, and management practices.

Resource Conservation and Recovery Act

The goal of the Resource Conservation and Recovery Act, a federal statute passed in 1976, is the protection of human health and the environment, the reduction of waste, the conservation of energy and natural resources, and the elimination of the generation of hazardous waste as expeditiously as possible. The Hazardous and Solid Waste Amendments of 1984 significantly expanded the scope of RCRA by adding new corrective action requirements, land disposal restrictions, and technical requirements. The corresponding regulations in 40 CFR 260-299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste.

State

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources

The Division of Oil, Gas, and Geothermal Resources was formed in 1915 to address the needs of the state, local governments, and industry by regulating statewide oil and gas activities with uniform laws and regulations. The Division supervises the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells, preventing damage to: (1) life, health, property, and natural resources; (2) underground and surface waters suitable for irrigation or domestic use; and (3) oil, gas, and geothermal reservoirs. The Division's programs include: well permitting and testing; safety inspections; oversight of production and injection projects; environmental lease inspections; idle-well testing; inspecting oilfield tanks, pipelines, and sumps; hazardous and orphan well plugging and abandonment contracts; and subsidence monitoring.

California Department of Toxic Substances Control

DTSC regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff are responsible for ensuring that companies and individuals handle, transport, store, treat, dispose of, and clean-up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment.

On January 1, 2003, the Registered Environmental Assessor program joined DTSC. The program certifies environmental experts and specialists as being qualified to perform a number of environmental assessment activities. Those activities include private site management, Phase I ESAs, risk assessment, and more.

California Division of Occupational Safety and Health

The California Division of Occupational Safety and Health protects workers and the public from safety hazards through its programs and provides consultative assistance to employers. California Division of Occupational Safety and Health issues permits, provides employee training workshops, conducts inspections of facilities, investigates health and safety complaints, and develops and enforces employer health and safety policies and procedures.

PC ORIGINAL PKG

California Environmental Protection Agency

California Environmental Protection Agency and the SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act
- Porter-Cologne Water Quality Control Act

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law.

California Emergency Response Plan

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is managed by the State Office of Emergency Services (OES), which coordinates the responses of other agencies including Cal-EPA, the California Highway Patrol, CDFW, RWQCB, Imperial County Sheriff's Department, ICFD, and the City of Imperial Police Department.

Local

Imperial County General Plan

The Seismic and Public Safety Element identifies goals and policies that will minimize the risks associated with natural and human-made hazards, and specify the land use planning procedures that should be implemented to avoid hazardous situations. The purpose of the Seismic and Public Safety Element is to reduce the loss of life, injury, and property damage that might result from disaster or accident. In addition, the Element specifies land use planning procedures that should be implemented to avoid hazardous situations. The policies listed in the Seismic and Public Safety Element are not applicable to the proposed project, as they address human occupancy development. The proposed project is a solar and BESS project and does not propose residential uses.

Imperial County Public Health Department

DTSC was appointed the Certified Unified Program Agency (CUPA) for Imperial County in January 2005. The Unified Program is the consolidation of 6 state environmental programs into one program under the authority of a CUPA. The CUPA inspects businesses or facilities that handle or store hazardous materials, generate hazardous waste, own or operate ASTs or USTs, and comply with the California Accidental Release Prevention Program. The CUPA Program is instrumental in

accomplishing this goal through education, community and industry outreach, inspections and enforcement.

Office of Emergency Services

As part of the ICFD, the County OES is mandated by the California Emergency Services Act (Chapter 7, Division 1, Title 2 of Government Code) to serve as the liaison between the State and all the local government in the County. The OES provides centralized emergency management during major disasters, and coordinates emergency operations between various local jurisdictions within the County. The OES has developed several plans, consistent with federal and state policy guidance, to provide the County and participating local jurisdictions and agencies a framework for conducting emergency planning, response, and recovery operations, and handling of hazardous substances.

3.9.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering Project impacts related to hazards and hazardous materials, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, Project impacts related to hazards and hazardous materials are considered significant if any of the following occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment
- For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the Project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description to result in significant impacts related to hazards and hazardous materials on or within the 1-mile buffer

PC ORIGINAL PKG

zone of the project site. This analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

A Phase I ESA has been prepared for the project site. The information obtained from the Phase I ESA was reviewed and summarized to present the existing conditions, in addition to identifying potential environmental impacts, based on the significance criteria presented above. Impacts associated with hazards and hazardous materials that could result from project construction and operational activities were evaluated qualitatively based on site conditions; expected construction practices; materials, locations, duration of project construction, and related activities. The conceptual site plan for the project was also used to evaluate potential impacts.

Impact Analysis

Impact 3.9-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Although considered minimal, it is anticipated that the project will generate the following materials during construction, operation, and long-term maintenance: insulating oil (used for electrical equipment), lubricating oil (used for maintenance vehicles), various solvents/detergents (equipment cleaning), and gasoline (used for maintenance vehicles). These materials have the potential to be released into the environment as a result of natural hazard (i.e., earthquake) related events, or because of human error. However, all materials contained on site will be stored in appropriate containers (not to exceed a 55-gallon drum) protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact. In addition, if the on-site storage of hazardous materials necessitate, at any time during construction and/or operations and long-term maintenance, quantities in excess of 55-gallons, a hazardous material management program (HMMP) would be required. The HMMP developed for the project will include, at a minimum, procedures for:

- Hazardous materials handling, use and storage
- Emergency response
- Spill control and prevention
- Employee training
- Record keeping and reporting

Additionally, hazardous material storage and management will be conducted in accordance with requirements set forth by the ICFD, Imperial County OES, DTSC, and CUPA for storage and handling of hazardous materials. Further, construction activities would occur according to OSHA regulatory requirements; therefore, it is not anticipated that the construction activities for the proposed Project would release hazardous emissions or result in the handling of hazardous or acutely hazardous materials, substances, or waste. This could include the release of hazardous emissions, materials, substances, or wastes during operational activities. With the implementation of an HMMP and adherence to requirements set forth by the ICFD, Imperial County OES, DTSC, OSHA regulatory requirements and CUPA would reduce the impact to a level of less than significant.

Battery Energy Storage System

In conjunction with the construction of the solar facility, a battery energy storage system will be constructed to store the energy generated by the solar panels. Transportation of hazardous materials relating to the battery system includes electrolyte and graphite and would occur during construction, operation (if replacement of batteries is needed) and decommissioning (removal of the batteries). All of these various materials would be transported and handled in compliance with DTSC regulations. Therefore, likelihood of an accidental release during transport or residual contamination following accidental release is not anticipated.

Lithium-ion batteries used in the storage system contain cobalt oxide, manganese dioxide, nickel oxide, carbon, electrolyte, and polyvinylidene fluoride. Of these chemicals, only electrolyte should be considered hazardous, inflammable and could react dangerously when mixed with water. The U.S. Department of Transportation (DOT) regulates transport of lithium-ion batteries under the DOT's Hazardous Materials Regulations (HMR; 49 C.F.R., Parts 171-180). The HMR apply to any material DOT determines is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Lithium-ion batteries must conform to all applicable HMR requirements when offered for transportation or transported by air, highway, rail, or water (DOT 2020). Additionally, carbon (as graphite) is flammable and could pose a fire hazard. Fire protection is achieved through project design features, such as monitoring, diagnostics and a fire suppression system. The project would be required to comply with state laws and county ordinance restrictions, which regulate and control hazardous materials handled on site.

Construction wastes would be disposed of in accordance with local, state, and federal regulations, and recycling will be used to the greatest extent possible. In this context, with adherence to requirements set forth by the ICFD, Imperial County OES, DTSC, OSHA regulatory requirements and CUPA, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The project site has been used for agricultural production with irrigation canals since at least 1915. Typical agricultural practices in the Imperial Valley consist of aerial and ground application of pesticides and the application of chemical fertilizers to both ground and irrigation water. However, the Federal Insecticide, Fungicide, and Rodenticide Act provides federal control of pesticide distribution, sale, and use. Pesticides used in the United States must be registered by the EPA to assure that pesticides are properly labeled and that they will not cause unreasonable harm to the environment. The construction phase, operations and long-term maintenance of the facility would not result in additional application of pesticides or fertilizers.

As stated above, construction of the proposed project will involve the use of limited use of hazardous materials, such as fuels and greases to fuel and service construction equipment, and during operation regular and routine maintenance of the proposed project may result in the potential to handle hazardous materials. However, the hazardous materials handled on-site would be limited to

PC ORIGINAL PKG

small amounts of everyday use cleaners and common chemicals used for maintenance. The applicant will be required to comply with State laws and County Ordinance restrictions, which regulate and control hazardous materials handled on-site. Therefore, a less than significant impact has been identified for this issue area.

Hazardous Materials

The environmental database search identified 13 mapped listings (for 8 sites) within the project site, and 11 listings within the 1-mile search buffer. The listings within the project site and many of the listings within the search buffer were determined to be incorrectly mapped outside the project site vicinity based on further review. The majority of these database listings were for the generation of regulated and/or hazardous wastes. Only one site, Jerry Preece Jr. Farms, located west of the project site at 2396 W Vaughn Road had any reported violations associated with waste/chemical storage and disposal, including violations for open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. Five violations remain open for the Jerry Preece Jr. Farms site, which is located northeast of the Big Rock 2 Cluster West site. A review of the violations indicates that conditions noted are generally localized to the Jerry Preece Jr. Farms site and are unlikely to impact the project site. Therefore, this is not considered a REC.

One of the landowners indicated that there was a homestead that burned down 20 years ago on their property (northwest corner of APN 051-290-019 (Big Rock 2 Cluster West site)), but site cleanup details were not provided. Burned debris may have been buried in-place, which may contain asbestos containing materials or other hazardous building materials. However, the risk of encountering this debris does not meet the definition of a REC. This is considered a less than significant impact.

Battery Energy Storage System

Protection would be provided as part of the project design by housing the battery units in enclosed structures to provide containment should a fire break out or for potential spills. Any potential fire risk that the traditional lithium-ion cells have will most likely be caused by over-charging or through short circuit due to age. This risk will be mitigated through monitoring and a fire suppression system that includes water and or a suppression agent (eg FM-200, Novatech) with smoke detectors, control panel, alarm, piping and nozzles. The fire protection system will be designed by a certified fire protection engineer and installed by a fire protection system contractor licensed in California and in accordance with all relevant building and fire codes in effect in the County at the time of building permit submission. Fire protection systems for battery systems would be designed in accordance with California Fire Code and would take into consideration the recommendations of the National Fire Protection Association (NFPA) 855.

The fire protection plan is anticipated to include a combination of prevention, suppression, and isolation methods and materials. The general approach to fire mitigation at the project site would be prevention of an incident, followed by attempts to isolate and control the incident to the immediately affected equipment, then to suppress any fire with a clean agent so as to reduce damage to uninvolved equipment. Fire suppression agents such as Novec 1230 or FM 2000, or water may be used as a suppressant. In addition, fire prevention methods would be implemented to reduce potential fire risk, including voltage, current, and temperature alarms. Energy storage equipment would comply with Underwriters Laboratory (UL)-95401 and test methods associated with UL-9540A. For lithium-ion batteries storage, a system would be used that would contain the fire event

PC ORIGINAL PKG

and encourage suppression through cooling, isolation, and containment. Suppressing a lithium-ion (secondary) battery is best accomplished by cooling the burning material.

To mitigate potential hazards, redundant separate methods of failure detection would be implemented. These would include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off gas detection would be implemented, as applicable. These are in addition to other potential protective measures such as ventilation, overcurrent protection, battery controls maintaining batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Remote alarms would be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan would be implemented. In this context, impacts would be considered less than significant for this impact area.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-3 Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The project site is located within 0.25 mile of the former Westside Elementary School (2295 West Vaughn Road), located approximately 200 feet from the closest boundary of the Big Rock 2 Cluster North site. However, according to the California Department of Education's California School Directory, Westside Elementary School closed on June 30, 2012 (California Department of Education 2017). Therefore, the proposed project would not pose a risk to nearby schools and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-4 Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

As previously discussed above, the environmental database search identified 13 mapped listings for 8 sites within the project site, and 11 listings within the 1-mile search buffer. However, the listings within the project site and many of the listings within the search buffer were determined to be incorrectly mapped and are actually outside of the project site based on further review. Therefore, implementation of the proposed project would result in no impact related to the project site being located on a listed hazardous materials site.

Mitigation Measure(s)

No mitigation measures are required.

PC ORIGINAL PKG

Impact 3.9-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not located within 2 miles of a public airport or a public use airport. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site. Therefore, implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area and no impact would occur. No impact is identified for this issue area.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-6 Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Imperial County Operational Area Emergency Operations Plan (Imperial County OES 2016) does not identify specific emergency roadway routes as part of their emergency operations plan (EOP). The City of Calexico General Plan, Section 8.0 Safety Element, identifies the major evacuation routes as SR 111, SR 98, and I-8. The project is not expected to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The applicant for the proposed project will be required, through the Conditions of Approval, to prepare a road improvement plan for the proposed project that will include emergency access points and safe vehicular travel. Additionally, local building codes would be followed to minimize flood, seismic, and fire hazard. Therefore, the proposed project would result in a less than significant impact associated with the possible impediment to emergency response plans or emergency evacuation plans.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.9-7 Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan (County of Imperial 2022), the potential for a major fire in the unincorporated areas of the County is generally low.

Proposed project facilities would be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health, and safety requirements (e.g., CPUC safety standards). A Fire Management Plan will be prepared in accordance with Fire Department requirements for project construction activities as well as long-term operations, including establishing appropriate emergency access to the project site for first responders, and identifying project-specific onsite fire protection or suppression systems that comply with Imperial County requirements. The project will incorporate many fire safety features to be described in detail in the Fire Management

Plan, including access gates and service roads along the perimeter of the project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.), PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems.

Because the proposed project is not located in proximity to an area susceptible to wildland fires, implementation of the proposed Project would result in a less than significant impact related to the possible risk to people or structures caused by wildland fires.

Mitigation Measure(s)

No mitigation measures are required.

3.9.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

During decommissioning and restoration of the project site, the applicant or its successor in interest would be responsible for the removal, recycling, and/or disposal of all solar arrays, inverters, battery storage system, transformers and other structures on the project site. The project applicant anticipates using the best available recycling measures at the time of decommissioning. Any potentially hazardous materials located on the site would be disposed of, and/or remediated prior to construction of the project. At the end of a lithium-ion module's useful life (typically estimated to be 10 to 20+ years) and final project decommissioning, the batteries would be decommissioned and recycled per manufacturer guidelines. Certain manufacturers allow for the batteries to be returned to the manufacturing facility or a third-party recycling facility where the batteries are disassembled, and certain materials are recovered from the battery for reuse.

The operation of the solar facility would not generate hazardous wastes and therefore, implementation of applicable regulations and mitigation measures identified for construction and operations would ensure restoration of the project site to pre-project conditions during the decommissioning process in a manner that would be less than significant. Furthermore, decommissioning/restoration activities would not result in a potential impact associated with Airport Land Use Consistency Plan (ALUCP) consistency (structures would be removed and the site would remain in an undeveloped condition), wildfires (fire protection measures), or impediment to an emergency plan (the undeveloped condition as restored, would not conflict with emergency plans).

Residual

Adherence to federal, state and local regulations will ensure that impacts related to the transportation of hazardous materials and potential fires would be reduced to levels less than significant. Based on these circumstances, the proposed project would not result in residual significant and unmitigable impacts related to hazards and hazardous materials.

PC ORIGINAL PKG

3.10 Hydrology/Water Quality

This section provides a description of existing water resources within the project area and pertinent local, state, and federal plans and policies. Each subsection includes descriptions of existing hydrology/drainage, existing flooding hazards, and the environmental impacts on hydrology and water quality resulting from implementation of the proposed project, and mitigation measures where appropriate. The impact assessment provides an evaluation of potential adverse effects to water quality based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. The information for this section is summarized from the *Aquatic Resources Delineation Report* and the *Water Supply Assessment* prepared by Dudek *(*Appendix E2 and J of this EIR, respectively).

3.10.1 Existing Conditions

The project site is located in the Imperial Valley Planning Area of the Colorado River Basin. The Colorado River Basin Region covers approximately 13 million acres (20,000 square miles) in the southeastern portion of California. It includes all of Imperial County and portions of San Bernardino, Riverside, and San Diego Counties. The Colorado River Basin Region is divided into seven major planning areas on the basis of different economic and hydrologic characteristics (California RWQCB 2019). The Imperial Valley is characterized as a closed basin and, therefore, all runoff generated within the watershed discharges into the Salton Sea (California RWQCB 2019).

As shown in Figure 3.10-1. the project site is contained within the Salton Sea Subbasin Hydrologic Unit Code (HUC 18100204). Within this watershed, the proposed project site overlaps with the Salt Creek Slough Subwatershed (HUC 181002040807) and the Upper New River Subwatershed (HUC 181002040902) within the New River Watershed (HUC 181002040902). The New River Watershed comprises approximately 328 square miles (209,920 acres) and contains the New River, which flows north from the United States/Mexico border, south of the site. The river flows approximately 66 miles across the Imperial Valley to its terminus in the Salton Sea. The Upper New River Subwatershed comprises approximately 7 square miles (4,480 acres) within the New River Watershed (Appendix E2 of this EIR).

The western portion of the project site overlaps with the Salt Creek Slough Subwatershed, a catchment area of 34 square miles (21,760 acres) that sits within the larger Coyote Wash Watershed, which directs intermittent flows eastward from the Jacumba Mountains and has an area of 340 square miles (217,600 acres) (Appendix E2 of this EIR).

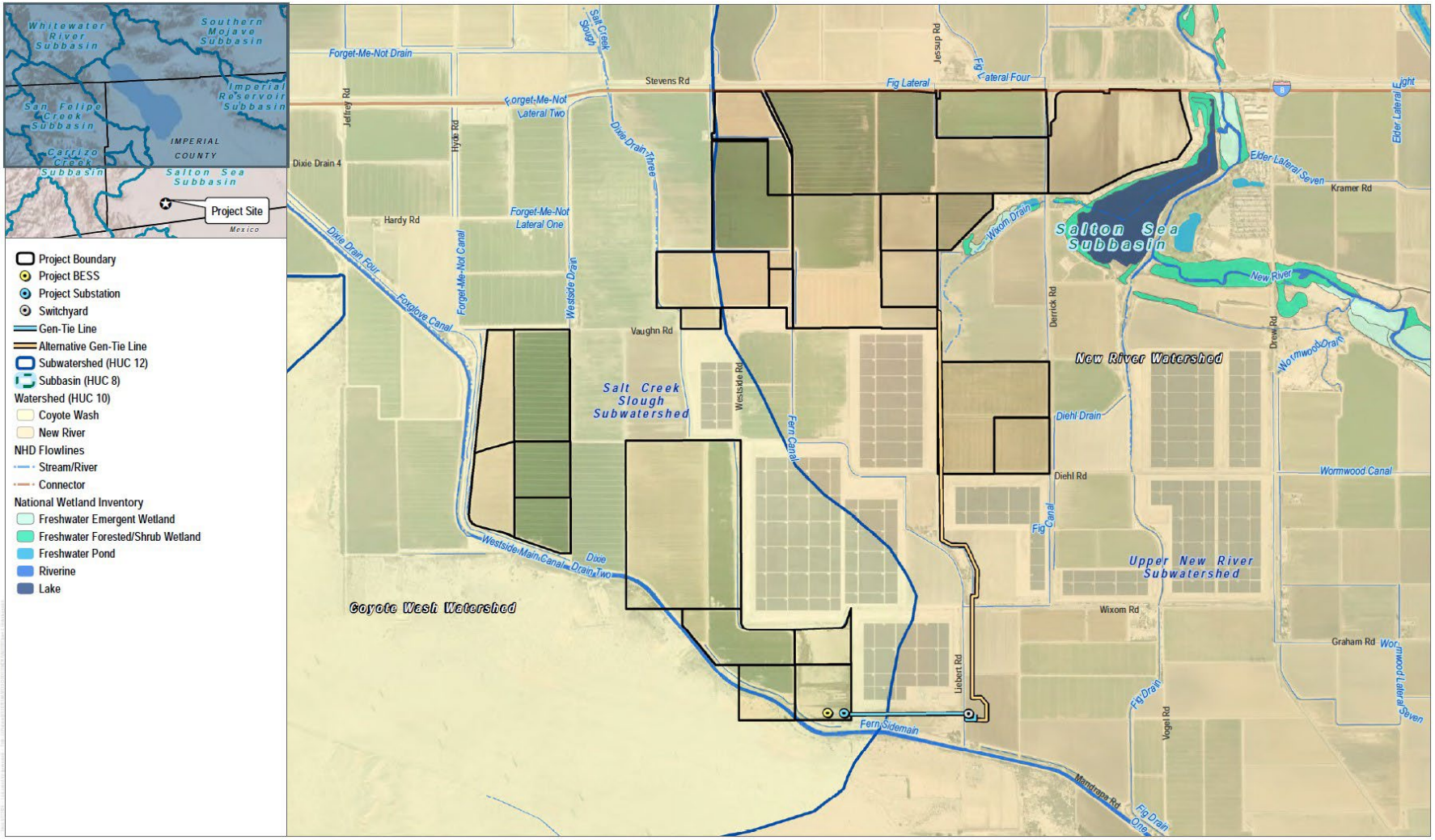
Localized Drainage Conditions

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site. Lateral canals and ditches that intersect the project site include: Fern Side Main, Fig Canal, Fern Canal, Fern Lateral 2, Fern Lateral 3, Foxglove Canal, and Foxglove Lateral 1 (Figure 5 of Appendix J of this EIR).

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.10-1. Watershed



Source: Appendix E2 of this EIR

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Flooding

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM) (Map Numbers 06025C1700C and 06025C2050C) (FEMA 2008), the project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. However, the northeastern portion of the project site is adjacent to the New River, which is within the 100-year floodplain, and subject to a 1 percent chance of annual flood risk (FEMA 2008).

Surface Water Quality

The surface waters of the Imperial Valley depend primarily on the inflow of irrigation water from the Colorado River via the All-American Canal. Excessive salinity concentrations have long been one of the major water quality problems of the Colorado River, a municipal and industrial water source to millions of people, and a source of irrigation water for approximately 700,000 acres of farmland. The heavy salt load in the Colorado River results from both natural and human activities. Land use and water resources are unequivocally linked. A variety of natural and human factors can affect the quality and use of streams, lakes, and rivers. Surface waters may be impacted from a variety of point and non-point discharges. Examples of point sources may include wastewater treatment plants, industrial discharges, or any other type of discharge from a specific location (commonly a large-diameter pipe) into a stream or water body. In contrast, non-point source pollutant sources are generally more diffuse in nature and connected to a cumulative contribution of multiple smaller sources. There are no comprehensive water quality monitoring stations located within in the project site, and water quality data are limited.

Common non-point source contaminants within the project area may include, but are not limited to: sediment, nutrients (phosphorous and nitrogen), trace metals (e.g., lead, zinc, copper, nickel, iron, cadmium, and mercury), oil and grease, bacteria (e.g., coliform), viruses, pesticides and herbicides, organic matter, and solid debris/litter. Vehicles account for most of the heavy metals, fuel and fuel additives (e.g., benzene), motor oil, lubricants, coolants, rubber, battery acid, and other substances. Nutrients result from excessive fertilizing of agricultural areas, while pesticides and herbicides are widely used in agricultural fields and roadway shoulders for keeping right-of-way (ROW) areas clear of vegetation and pests. Surface waters mostly drain towards the Salton Sea. The New and Alamo Rivers convey agricultural irrigation drainage, surface runoff, and some treated municipal waste from the Imperial Valley. The flow in the New River also contains agricultural drainage, treated and untreated sewage, and industrial waste discharges from Mexicali, Mexico (California RWQCB 2019).

Based on the 2020-2022 305(b)/303(d) Integrated Report prepared by the Colorado River Basin RWQCB, the water features in the project vicinity include the Imperial Valley Drains, New River, and the Salton Sea (California RWQCB 2022). Specific impairments listed for each of these water bodies (or Category 5) are identified below:

- Imperial Valley Drains: Impaired for Ammonia, chlordane, chlorpyrifos, dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyltrichloroethane (DDT), dieldrin, disulfoton, imidacloprid, Polychlorinated biphenyls (PCBs), sedimentation/siltation, selenium, toxaphene, and toxicity.

- New River: Impaired for ammonia, bifenthrin, chlordane, chloride, chlorpyrifos, cyhalothrin, lambda, cypermethrin, dichlorodiphenyldichloroethane (DDD), DDE, DDT, diazinon, dieldrin, disulfoton, hexachlorobenzene/HCB, imidacloprid, indicator bacteria, malathion, mercury, naphthalene, nutrients, organic enrichment/low dissolved oxygen, PCBs, pyrethroids, sediment, selenium, toxaphene, toxicity, and trash.
- Salton Sea: Impaired for ammonia, arsenic, chloride, chlorpyrifos, DDE, DDT, enterococcus, low dissolved oxygen, nutrients, salinity, and toxicity (California RWQCB 2022).

Groundwater Hydrology

The project site overlies the Imperial Valley Groundwater Basin (Basin), which is designated by the Department of Water Resources (DWR) as a very low priority basin with respect to the Sustainable Groundwater Management Act. Accordingly, groundwater is not managed under a Groundwater Sustainability Plan. Groundwater usage is regulated by Imperial County's Groundwater Ordinance contained in Title 9, Division 22, of the Land Use Ordinance, Section 92201.01. The Basin is located in the southeastern part of California and extends from the Salton Sea south to the international border with Mexico. The Basin covers approximately 1,200,000 acres, or 1,870 square miles (Appendix J of this EIR).

Groundwater level data in the Basin are sparse, with the highest density and quality of measurements located in the eastern portion of the Basin where groundwater levels have historically been impacted by recharge, and subsequent lining, of the All-American canal. Near the project site, groundwater levels are monitored at two wells: 16S11E27F01S (located approximately 6 miles northwest of the project site) and 16S11E23B01S (located approximately 5 miles northwest of the project site).

Well 16S11E27F01S is completed to a depth of 134.5 feet below ground surface. Groundwater at this well is encountered at a depth of approximately 100 feet below ground surface. Groundwater levels measured at this well have declined by about 3 feet over the past 50 years. Well 16S11E23B01S is completed to a depth of 114.7 feet below ground surface. Groundwater at this well is encountered at a depth of approximately 50 feet below ground surface. Historical groundwater level measurements indicate that groundwater levels at this well experienced a period of decline in the later 1980s to early 1990s. During this time, groundwater levels declined by approximately 10 feet. Since the mid- to late-1990s, groundwater levels have declined by approximately 2 feet (Appendix J of this EIR).

Groundwater level measurements at wells 16S11E27F01S and 16S11E23B01S indicate that groundwater levels, which are a proxy for the volume of groundwater in storage, within the vicinity of the project site have historically been, and are currently, stable. Because groundwater development opportunities in the Basin are limited, groundwater storage and levels in the vicinity of the project site are not expected to experience large changes from current conditions.

Groundwater in the Basin is generally of poor quality and unsuitable for most domestic and irrigation uses. The primary groundwater quality concern is total dissolved solids. Additional constituents that occur at concentrations that are higher than recommended for drinking water include nitrate, fluoride, sulfate, boron, and selenium (Appendix J of this EIR).

PC ORIGINAL PKG

Precipitation

The project area is characterized by a typical desert climate with dry, warm winters, and hot, dry summers. The project area receives an average of 2.56 inches of precipitation annually (Appendix E2 of this EIR).

3.10.2 Regulatory Setting

Federal

Clean Water Act

The U.S. EPA is the lead federal agency responsible for managing water quality. The CWA of 1972 is the primary federal law that governs and authorizes the U.S. EPA and the states to implement activities to control water quality. The various elements of the CWA that address water quality and that are applicable to the project are discussed below. Wetland protection elements administered by the USACE under Section 404 of the CWA, including permits for the discharge of dredged and/or fill material into waters of the United States, are discussed in Section 3.5, Biological Resources.

Under federal law, the U.S. EPA has published water quality regulations under Volume 40 of the CFR. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the U.S. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question; and (2) criteria that protect the designated uses. Section 304(a) requires the U.S.EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. The U.S. EPA is the federal agency with primary authority for implementing regulations adopted under the CWA. The U.S. EPA has delegated the State of California the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act), described below.

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the U.S. must obtain a water quality certification from the SWRCB in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate.

CWA Section 402 establishes the National Pollution Discharge Elimination System (NPDES) permit program to control point source discharges from industrial, municipal, and other facilities if their discharges go directly to surface waters. The 1987 amendments to the CWA created a new section of the CWA devoted to regulating storm water or nonpoint source discharges (Section 402[p]). The U.S. EPA has granted California primacy in administering and enforcing the provisions of the CWA and the NPDES program through the SWRCB. The SWRCB is responsible for issuing both general and individual permits for discharges from certain activities. At the local and regional levels, general and individual permits are administered by RWQCBs.

Clean Water Act Section 303(d) Impaired Waters List

CWA Section 303(d) requires states to develop lists of water bodies that will not attain water quality standards after implementation of minimum required levels of treatment by point-source dischargers.

PC ORIGINAL PKG

Section 303(d) requires states to develop a total maximum daily load (TMDL) for each of the listed pollutants and water bodies. A TMDL is the amount of loading that the water body can receive and still be in compliance with applicable water quality objectives and applied beneficial uses. TMDLs can also act as a planning framework for reducing loadings of a specific pollutant from various sources to achieve compliance with water quality objectives. TMDLs prepared by the state must include an allocation of allowable loadings to point and nonpoint sources, with consideration of background loadings and a margin of safety. The TMDL must also include an analysis that shows links between loading reductions and the attainment of water quality objectives.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations that limit development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRM) that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection covered by the FIRM is established by FEMA, with the minimum level of flood protection for new development determined to be the 1-in-100 (0.01) annual exceedance probability) (i.e., the 100-year flood event).

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act, also known as the California Water Code, is California's statutory authority for the protection of water quality. Under this act, the state must adopt water quality policies, plans, and objectives that protect the state's waters. The act sets forth the obligations of the State Water Resources Control Board (SWRCB) and RWQCBs pertaining to the adoption of Water Quality Control Plans and establishment of water quality objectives. Unlike the CWA, which regulates only surface water, the Porter-Cologne Act regulates both surface water and groundwater.

Water Quality Control Plan for the Colorado River Basin

The Water Quality Control Plan for the Colorado River Basin (or Basin Plan) prepared by the Colorado River RWQCB (Region 7) identifies beneficial uses of surface waters within the Colorado River Basin region, establishes quantitative and qualitative water quality objectives for protection of beneficial uses, and establishes policies to guide the implementation of these water quality objectives.

Water bodies that have beneficial uses that may be affected by construction activity and post-construction activity include the Imperial Valley Drains, New River, and the Salton Sea. Table 3.10-1 identifies the designated beneficial uses established for the project site's receiving waters. The following are definitions of the applicable beneficial uses:

- Aquaculture (AQUA) – Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
- Freshwater Replenishment (FRSH) – Uses of water for natural or artificial maintenance of surface water quantity or quality.

PC ORIGINAL PKG

- Industrial Service Supply (IND) – Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.
- Water Contact Recreation (REC I) – Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, and use of natural hot springs.
- Non-contact Water Recreation (REC II) – Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
- Warm Freshwater Habitat (WARM) – Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- Wildlife Habitat (WILD) – Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- Preservation of Rare, Threatened, or Endangered Species (RARE) – Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Table 3.10-1. Beneficial Uses of Receiving Waters

Beneficial Uses	Imperial Valley Drains	New River	Salton Sea
AQUA	--	--	X
FRSH	X	X	--
IND	--	P	P
REC I	X	X	X
REC II	X	X	X
WARM	X	X	X
WILD	X	X	X
RARE	X	X	X

Source: SWRCB 2021

PC ORIGINAL PKG

Table 3.10-1. Beneficial Uses of Receiving Waters

Beneficial Uses	Imperial Valley Drains	New River	Salton Sea

AQUA=aquaculture; FRSH=freshwater replenishment; IND=industrial service supply; P=Potential Uses; RARE=Preservation of Rare, Threatened, or Endangered Species; REC 1= water contact recreation; REC II=non-contact water recreation; WARM=Warm Freshwater Habitat; WILD=Wildlife Habitat; X=existing beneficial uses

National Pollution Discharge Elimination System General Industrial and Construction Permits

The NPDES General Industrial Permit requirements apply to the discharge of stormwater associated with industrial sites. The permit requires implementation of management measures that will achieve the performance standard of the best available technology economically achievable and best conventional pollutant control technology. Under the statute, operators of new facilities must implement industrial BMPs in the projects' SWPPP and perform monitoring of stormwater discharges and unauthorized non–stormwater discharges.

Construction activities are regulated under the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) which covers stormwater runoff requirements for projects where the total amount of ground disturbance during construction exceeds 1 acre. Coverage under a General Construction Permit requires the preparation of a SWPPP and submittal of a Notice of Intent (NOI) to comply with the General Construction Permit. The SWPPP includes a description of BMPs to minimize the discharge of pollutants from the sites during construction. Typical BMPs include temporary soil stabilization measures (e.g., mulching and seeding), storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or stormwater, and using filtering mechanisms at drop inlets to prevent contaminants from entering storm drains. Typical post-construction management practices include street sweeping and cleaning stormwater drain inlet structures. The NOI includes site-specific information and the certification of compliance with the terms of the General Construction Permit.

Local

County of Imperial General Plan

The Water Element and the Conservation and Open Space Element of the General Plan contain policies and programs, created to ensure water resources are preserved and protected. Table 3.10-3 identifies the General Plan policies and programs for water quality and flood hazards that are relevant to the project and summarizes the project's consistency with the General Plan. While this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

PC ORIGINAL PKG

Table 3.10-2. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Conservation and Open Space Element		
Goal 6: The County will conserve, protect, and enhance water resources in the County.	Consistent	The proposed project would protect water quality during construction through compliance with Imperial County design and detention requirements and the NPDES General Construction Permit, as well as preparation and implementation of project-specific SWPPP, which will incorporate the requirements referenced in the State Regulatory Framework, design features, and BMPs.
Objective 6.3: Protect and improve water quality and quantity for all water bodies in Imperial County.	Consistent	The proposed project would protect water quality during construction through compliance with the NPDES General Construction Permit, SWPPP, and BMPs. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The proposed project will be designed to include site design, source control, and treatment control BMPs. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution.
Program: Structural development normally shall be prohibited in the designated floodways. Only structures which comply with specific development standards should be permitted in the floodplain.	Consistent	The project does not contain a residential component nor would it place housing or other structures within a 100-year flood hazard area.
Water Element		
Policy: Adoption and implementation of ordinances, policies, and guidelines which assure the safety of County ground and surface waters from toxic or hazardous materials and/or wastes.	Consistent	The project would preserve ground and surface water quality from hazardous materials and wastes during construction, operation and decommissioning activities. The proposed project would protect water quality during construction through compliance with the NPDES General Construction Permit and SWPPP, which will incorporate the requirements referenced in the State Regulatory Framework and BMPs. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The proposed project will be designed to include site design, source control, and treatment control BMPs. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. It is anticipated that project decommissioning activities would be subject to similar, or more stringent ground and surface water regulations than those currently required.

PC ORIGINAL PKG

Table 3.10-2. Project Consistency with Applicable General Plan Policies

General Plan Policies	Consistency with General Plan	Analysis
Program: The County of Imperial shall make every reasonable effort to limit or preclude the contamination or degradation of all groundwater and surface water resources in the County.	Consistent	Mitigation measures will require that the project applicant prepare a site-specific drainage plan and water quality management plan to minimize adverse effects to local water resources.
Program: All development proposals brought before the County of Imperial shall be reviewed for potential adverse effects on water quality and quantity and shall be required to implement appropriate mitigation measures for any significant impacts.	Consistent	See response for Water Element Policy above.

Source: County of Imperial 2016; County of Imperial 1997

County of Imperial Land Use Ordinance, Title 9

The County's Ordinance Code provides specific direction for the protection of water resources. Applicable ordinance requirements are contained in Division 10, Building, Sewer and Grading Regulations, and summarized below.

Chapter 10 – Grading Regulations. Section 91010.02 of the Ordinance Code outlines conditions required for issuance of a Grading Permit. These specific conditions include:

1. If the proposed grading, excavation or earthwork construction is of irrigatable land, said grading will not cause said land to be unfit for agricultural use.
2. The depth of the grading, excavation or earthwork construction will not preclude the use of drain tiles in irrigated lands.
3. The grading, excavation or earthwork construction will not extend below the water table of the immediate area.
4. Where the transition between the grading plane and adjacent ground has a slope less than the ratio of 1.5 feet on the horizontal plane to 1 foot on the vertical plane, the plans and specifications will provide for adequate safety precautions.

Imperial County Engineering Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County

Based on the guidance contained in the County's *Engineering Guidelines Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County* (2008), the following drainage requirements would be applicable to the project.

III A. GENERAL REQUIREMENTS

1. All drainage design and requirements are recommended to be in accordance with the IID "Draft" Hydrology Manual or other recognized source with approval by the County Engineer and based on full development of upstream tributary basins. Another source is the Caltrans I-D-F curves for the Imperial Valley.

PC ORIGINAL PKG

3. Permanent drainage facilities and ROW, including access, shall be provided from development to point of satisfactory disposal.

4. Retention volume on retention or detention basins should have a total volume capacity for a three (3) inch minimum precipitation covering the entire site with no C reduction factors. Volume can be considered by a combination of basin size and volume considered within parking and/or landscaping areas.

   There is no guarantee that a detention basin outletting to an IID facility or other storm drain system will not back up should the facility be full and unable to accept the project runoff. This provides the safety factor from flooding by ensuring each development can handle a minimum 3-inch precipitation over the project site.

8. The developer shall submit a drainage study and specifications for improvements of all drainage easements, culverts, drainage structures, and drainage channels to the Department of Public Works for approval. Unless specifically waived herein, required plans and specifications shall provide a drainage system capable of handling and disposing of all surface waters originating within the subdivision and all surface waters that may flow onto the subdivision from adjacent lands. Said drainage system shall include any easements and structures required by the Department of Public Works or the affected Utility Agency to properly handle the drainage on-site and off-site. The report should detail any vegetation and trash/debris removal, as well as address any standing water.

9. Hydrology and hydraulic calculations for determining the storm system design shall be provided to the satisfaction of the Director, Department of Public Works. When appropriate, water surface profiles and adequate field survey cross-section data may also be required.

11. The County is implementing a storm water quality program as required by the SWRCB, which may modify or add to the requirements and guidelines presented elsewhere in this document. This can include ongoing monitoring of water quality of storm drain runoff, implementation of BMPs to reduce storm water quality impacts downstream or along adjacent properties. Attention is directed to the need to reduce any potential of vectors, mosquitoes, or standing water.

12. A Drainage Report is required for all developments in the County. It shall include a project description, project setting including discussions of existing and proposed conditions, any drainage issues related to the site, summary of the findings or conclusions, off-site hydrology, onsite hydrology, hydraulic calculations and a hydrology map.

Imperial Irrigation District

The IID is an irrigation district organized under the California Irrigation District Law, codified in Section 20500 et seq. of the California Water Code. Critical functions of IID include diversion and delivery of Colorado River water to the Imperial Valley, operation and maintenance of the drainage canals and facilities, including those in the project area, and generation and distribution of electricity. Several policy documents govern IID operations and are summarized below:

- The Law of the River and historical Colorado River decisions, agreements and contracts
- The Quantification Settlement Agreement and Transfer Agreements

PC ORIGINAL PKG

- The Definite Plan, now referred to as the Systems Conservation Plan, which defines the rigorous agricultural water conservation practices being implemented by growers and IID to meet the Quantification Settlement Agreement commitments
- The Equitable Distribution Plan, which defines how IID will prevent overruns and stay within the cap on the Colorado River water rights
- Existing IID standards and guidelines for evaluation of new development and define IID's role as a responsible agency and wholesaler of water

Integrated Water Resources Management Plan

In relation to the project, IID maintains regulation over the drainage of water into their drains, including the design requirements of stormwater retention basins. IID requires that retention basins be sized to handle an entire rainfall event in case the IID system is at capacity. Additionally, IID requires that outlets to IID facilities be no larger than 12 inches in diameter and must contain a backflow prevention device (IID 2012).

3.10.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to hydrology/water quality are considered significant if any of the following occur:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater water quality
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
    - Impede or redirect flood flows
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

PC ORIGINAL PKG

Methodology

The drainage design will be conducted in accordance with the County of Imperial's design criteria, which establishes that 100 percent of the 100-year storm (3 inches of rain) will be stored on-site and released into the IID drainage system using existing drainage connections.

Impact Analysis

Impact 3.10-1 Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater water quality?

Construction

Construction of the proposed project includes site preparation, foundation construction, erection of major equipment and structures, installation of electrical systems, control systems, and startup/testing. In addition, the construction of transmission lines, utility pole pads, conductors, and associated structures will be required.

During the construction phase, sedimentation and erosion can occur because of tracking from earthmoving equipment, erosion and subsequent runoff of soil, or improperly designed stockpiles. The utilization of proper erosion and sediment control BMPs is critical in preventing discharge to surface waters/drains. The project would employ proper SWPPP practices to minimize any discharges in order to meet the Best Available Technology/Best Conventional Technology standard set forth in the Construction General Permit.

The project has the potential to affect surface water quality. Many different types of hazardous compounds will be used during the construction phase, with proper application, management, and containment being of high importance. Poorly managed construction materials can lead to the possibility for exposure of potential contaminants to precipitation. When this occurs, these visible and/or non-visible constituents become entrained in storm water runoff. If they are not intercepted or are left uncontrolled, the polluted runoff would otherwise freely sheet flow from the project to the IID Imperial Valley Drains and could result in the accumulation of these pollutants in the receiving waters. This is considered a potentially significant impact. With the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a level less than significant.

Prior to construction and grading activities, the project applicant is required to file an NOI with the SWRCB to comply with the General NPDES Construction Permit and prepare a SWPPP, which addresses the measures that would be included during construction or the project to minimize and control construction and post-construction runoff to the "maximum extent practicable." In addition, NPDES permits require the implementation of BMPs that achieve a level of pollution control to the maximum extent practical. With implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a level less than significant through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction. In addition, given that site decommissioning would result in similar activities as identified for construction, these impacts could also occur in the future during site restoration activities.

PC ORIGINAL PKG

Operation

As runoff flows over developed surfaces, water can entrain a variety of potential pollutants including, but not limited to, oil and grease, pesticides, trace metals, and nutrients. These pollutants can become suspended in runoff and carried to receiving waters. These effects are commonly referred to as non-point source water quality impacts.

Long-term operation of the solar facility poses a limited threat to surface water quality after the completion of construction. The project would be subject to the County's Grading Regulations as specified in Section 91010.02 of the Ordinance Code. However, since the project site is located in unincorporated Imperial County and not subject to a Municipal Separate Storm Sewer System or NPDES General Industrial Permit, there is no regulatory mechanism in place to address post-construction water quality concerns. Based on this consideration, the project has the potential to result in both direct and indirect water quality impacts that could be significant. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's final drainage plan. Implementation of the project-specific source control and treatment BMPs into the final drainage plan would result in a decreased potential for storm water pollution.

While source control and treatment control BMPs would be finalized during preparation of the final drainage plan, the following are examples of BMPs that could be utilized to reduce the potential for storm water pollution.

Source Control BMPs. Source control BMPs (both structural and non-structural) means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Table 3.10-3 identifies examples of source control BMPs that could be implemented into the proposed project.

Treatment Control BMPs. Treatment control BMPs include both short-term and long-term drainage solutions to ensure the proper sequencing of drainage facilities and treatment of runoff generated from project impervious surfaces prior to off-site discharge.

Table 3.10-3. Source Control Best Management Practices

Design Concept		Description
1	Design Trash Storage Areas to Reduce Pollution Introduction	Design outdoor trash storage areas so that run-on from adjoining areas cannot enter. Screen or wall trash enclosures to prevent the off-site transport of trash.
2	Activity Restrictions	Restrict activities that have the potential to create adverse impacts on water quality.
3	Non-storm Water Discharges	Provide educational materials on illegal dumping and spill response to employees.
4	Outdoor Loading and Unloading	Handle materials in a manner that prevents any storm water pollution.
5	Spill Prevention, Control, and Cleanup	Require a Spill Prevention, Control, and Countermeasure Plan, and a Hazardous Materials Business Plan in accordance with Federal and State requirements.
6	Education	Provide employees with materials for storm water pollution prevention in the form of brochures and other information in a format approved by the County of Imperial.

PC ORIGINAL PKG

Table 3.10-3. Source Control Best Management Practices

Design Concept		Description
7	Integrated Pest Management	Reduce the need for pesticide use on site by: • Keeping pests out of buildings using barriers, screens, and caulking • Eliminating pests through squashing, trapping, washing or pruning • Relying on natural enemies to eat pests • Using pesticides correctly as a last line of defense
8	Vehicle and Equipment Fueling, Cleaning, and Repair	Service all vehicles off site whenever possible. If servicing is required on site, it must be conducted in an area isolated from storm drain inlets or drainage ditch inlets. The area must be bermed and precluded from run-on. Any spillage must be fully contained and captured and disposed of per County of Imperial Hazardous Waste requirements.
9	Waste Handling and Disposal	Dispose of materials in accordance with Imperial County Hazardous Material Management guidelines. Under no circumstances shall any waste or hazardous materials be stored outside without secondary containment.

Mitigation Measure(s)

HYD-1 **Prepare SWPPP and Implement BMPs Prior to Construction and Site Restoration.** The project applicant or its contractor shall prepare a SWPPP specific to the project and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the appropriate agency prior to commencement of work and shall be made conditions of the contract with the contractor selected to build and decommission the project. The SWPPP shall incorporate control measures in the following categories:

- Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching)
- Sediment control practices (e.g., temporary sediment basins, fiber rolls)
- Temporary and post-construction on- and off-site runoff controls
- Special considerations and BMPs for water crossings and drainages
- Monitoring protocols for discharge(s) and receiving waters, with emphasis place on the following water quality objectives: dissolved oxygen, floating material, oil and grease, potential of hydrogen (pH), and turbidity
- Waste management, handling, and disposal control practices
- Corrective action and spill contingency measures
- Agency and responsible party contact information

PC ORIGINAL PKG

- Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP

The SWPPP shall be prepared by a Qualified SWPPP Practitioner and/or Qualified SWPPP Developer with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. BMPs for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.

HYD-2 **Incorporate Post-Construction Runoff BMPs into Project Drainage Plan.** The project Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. Infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary. The Drainage Plan shall be submitted to the County of Imperial Department of Public Works for review and approval.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a less than significant level through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction.

With the implementation of Mitigation Measure HYD-2, potential water quality impacts resulting from post-construction discharges during operation for the project would be reduced to a less than significant level. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's drainage plan. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution.

Impact 3.10-2 ***Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

The proposed project would not require the construction of a groundwater well and/or the direct use of groundwater for construction or operation. As described in Chapter 2 Project Description, water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. For this reason, the project

PC ORIGINAL PKG

would not carry the potential to create drawdown effects that could otherwise adversely affect adjacent wells.

Further, groundwater recharge in the area will not be significantly affected as the majority of the project site will feature a pervious landscape in both the existing and proposed conditions. Any runoff from solar panel washing would evaporate or percolate through the ground, as a majority of the surfaces in the solar field would remain pervious. The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. No significant impacts on groundwater supply or recharge would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.10-3 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Result in substantial erosion or siltation on- or off-site?

Construction

Project construction activities, specifically grading and excavation, have the potential to temporarily alter the existing drainage pattern of the project site such that soil erosion occurs. However, to the extent feasible, site preparation would be planned and designed to minimize the amount of earth movement. Compaction of the soil to support building and traffic loads as well as the PV module supports may be required and is dependent on final engineering design. During construction, erosion would be controlled in accordance with County standards which include preparation, review, and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (ICAPCD Rule 801); and compliance with the NPDES General Construction Permit. Additionally, with implementation of Mitigation Measure HYD-1, which requires the preparation of a project-specific SWPPP and construction BMPs, project construction would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial on- or off-site erosion or siltation. This is considered a less than significant impact after mitigation has been incorporated.

Operation

After construction is complete, all existing roads would be left in a condition equal to or better than their pre-construction condition. All other areas disturbed by construction activities would be recontoured and decompacted. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that erosion increases when compared to existing conditions. The project site would remain largely pervious over the operational life of the project. Additionally, the project would implement site design BMPs, as outlined in Table 3.10-3, which would reduce soil disturbance during operation. The proposed project would result in less than significant impacts associated with the alteration of drainage patterns resulting in substantial erosion or siltation on- or off-site.

PC ORIGINAL PKG

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-1 are required.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-1, potential impacts associated with the alteration of drainage patterns resulting in substantial erosion or siltation on- or off-site would be reduced to a level less than significant through compliance with County standards, implementation of a Dust Control Plan (ICAPCD Rule 801), and compliance with the NPDES General Construction Permit and project-specific SWPPP.

Impact 3.10-4 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Construction

Project implementation would not substantially alter the existing drainage pattern of the site or area. The majority of the project site would continue to sheet flow through the pervious native soils. The project will be designed to meet County of Imperial storage requirements (100 percent of the 100-year storm (3 inches of rain)) (refer to the County's *Engineering Guidelines Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans within Imperial County* (2008) for storm water runoff, which will result in an impoundment of runoff in excess of the anticipated volume of runoff to be generated by the 100-year storm event. Additionally, implementation of Mitigation Measure HYD-2 requires that the project's Drainage Plan adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems. As such, infiltration basins will be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from project impervious surfaces as necessary.

Operation

Additionally, after construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that flooding (on- or off-site) increases when compared to existing conditions. Lastly, the project site would remain largely impervious over the operational life of the project. Therefore, the proposed project would result in no significant impacts associated with the alteration of drainage patterns resulting in on- or off-site flooding.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-2 are required.

PC ORIGINAL PKG

Significance after Mitigation

With the implementation of Mitigation Measure HYD-2, impacts on existing drainage patterns as a result of potentially substantial increases to runoff would be reduced to a level less than significant. Implementation of Mitigation Measure HYD-2 would require the project's Drainage Plan to adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the on- and off-site discharge of stormwater to existing drainage systems.

Impact 3.10-5 ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

Project implementation would not substantially alter the existing drainage pattern of the site or area. During construction, erosion and associated pollutants would be controlled in accordance with County standards which include preparation, review and approval of a grading plan by the County Engineer; implementation of a Dust Control Plan (ICAPCD Rule 801); and compliance with the NPDES General Construction Permit and project-specific SWPPP, as outlined in Mitigation Measure HYD-1 (see Impact 3.10-1 for additional details).

Operation

After construction is complete, all existing roads would be left in a condition equal to or better than their preconstruction condition. All other areas disturbed by construction activities would be recontoured and decompacted. The proposed project is not anticipated to generate a significant increase in the amount of runoff water when compared to existing conditions. As such, daily operations and routine maintenance (such as occasional PV panel washing) are not anticipated to alter the existing drainage pattern such that runoff increases would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The project site would remain largely impervious over the operational life of the project. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious. The proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This is considered a less than significant impact.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-1 are required.

Significance after Mitigation

With the implementation of Mitigation Measure HYD-1, impacts on the existing drainage pattern by the project that could result in substantial or polluted runoff would be reduced to a level less than significant through compliance with County standards, implementation of a Dust Control Plan

PC ORIGINAL PKG

(ICAPCD Rule 801), and compliance with the NPDES General Construction Permit and project-specific SWPPP.

Impact 3.10-6 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

Impede or redirect flood flows?

Project implementation would not substantially alter the existing drainage pattern of the site or area. The proposed project is not anticipated to generate a significant increase in the amount of runoff water from water use involving solar panel washing. Water will continue to percolate through the ground, as a majority of the surfaces on the Project site will remain pervious.

According to the FEMA's FIRM (Map Numbers 06025C1700C and 06025C2050C) (FEMA 2008), the project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. Although the northeastern portion of the project site is adjacent to the New River, which is within the 100-year floodplain, and subject to a 1 percent chance of annual flood risk, no structures would be placed within this zone. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows, and impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.10-7 In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is not located near any large bodies of water. The Salton Sea is located over 20 miles north of the project site. Because of the distance, the Salton Sea does not pose a danger of inundation from seiche or tsunami as related to the project site. Furthermore, the project site is over 100 miles inland from the Pacific Ocean. In addition, the project site is relatively flat. Therefore, there is no potential for the project site to be inundated by seiches or tsunamis. No impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.10-8 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As described under Impact 3.10-1 above, with the implementation of Mitigation Measure HYD-1, impacts on surface water quality as attributable to the project would be reduced to a less than significant level through the inclusion of focused BMPs for the protection of surface water resources. Implementation of Mitigation Measure HYD-2 would require the project to incorporate post-construction BMPs into the project's Drainage Plan. The use of source control, site design, and treatment BMPs would result in a decrease potential for storm water pollution. Additionally, the project would not require the direct use of groundwater. Therefore, the proposed project would not

PC ORIGINAL PKG

pose a significant threat to local surface water features or shallow groundwater resources, and, as such would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Implementation of Mitigation Measures HYD-1 and HYD-2 would reduce impacts to a level less than significant.

Mitigation Measure(s)

No additional mitigation measures beyond Mitigation Measures HYD-1 and HYD-2 are required.

Significance after Mitigation

With the implementation of Mitigation Measures HYD-1 and HYD-2, the potential water quality impacts resulting during construction and operation of the project would be reduced to a level less than significant.

3.10.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

Decommissioning and restoration activities would result in similar impacts on hydrology and water quality as would occur during construction of the proposed project. The primary water quality issue associated with decommissioning/restoration would be potential impacts on surface water quality, as the decommissioning activities would be similar to construction activities, and would be considered a significant impact. However, during decommissioning, soil erosion would be controlled in accordance with NPDES General Construction Permit(s) and project-specific SWPPP. Compliance with requirements and best available control technologies in place at the time of decommissioning are anticipated to be similar to, or more stringent than, those currently required. Compliance with all applicable water quality regulations would reduce the project's impacts during decommissioning to a level less than significant. Impacts on other water resource issues, including alteration of drainage patterns, contributing to off-site flooding, impacts on groundwater recharge and supply, would be less than significant. There would be no impact associated with inundation from flooding or mudflows.

Residual

With implementation of the mitigation measures listed above, implementation of the project would not result in any residual significant impacts related to increased risk of flooding from stormwater runoff, from water quality effects from long-term urban runoff, or from short-term alteration of drainages and associated surface water quality and sedimentation. With the implementation of the required mitigation measures during construction and decommissioning of the project, water quality impacts would be minimized to a less than significant level. Based on these circumstances, the project would not result in any residential significant and unmitigable adverse impacts on surface water hydrology and water quality.

This page is intentionally blank.

PC ORIGINAL PKG

3.11 Land Use/Planning

This section provides information regarding current land use, land use designations, and land use policies within and in the vicinity of the project site. Section 15125(d) of the CEQA Guidelines states that "[t]he EIR shall discuss any inconsistencies between the project and applicable general plans and regional plans." This section fulfills this requirement for the project. In this context, this section reviews the land use assumptions, designations, and policies of the County General Plan and other applicable federal, state, and local requirements, which governs land use within the project area and evaluates the project's potential to conflict with policies adopted for the purpose of avoiding or mitigating significant environmental effects. Where appropriate, mitigation is applied and the resulting level of impact identified.

3.11.1 Existing Conditions

The project site is located on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project is located south of Interstate 8, approximately one mile southwest of the townsite of Seeley, and approximately six miles north of the United States International Border with Mexico.

The project site consists primarily of agricultural fields and unpaved roads, and all the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the project site and surrounding area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the project. These include a segment of the New River adjacent to the northeast corner of the project, and the IID Westside Main Canal which is located along the west and southern edges of the project site.

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course to the east of the project. The I-8 and Union Pacific Railroad transportation corridors are located to the north of the project. To the south of the project site, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

The project applicant is seeking approval of four separate CUPs associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility, which together define the project site. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East: CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

PC ORIGINAL PKG

The entire project site comprises 1,849 acres of privately-owned land, comprising 24 assessor parcels. Table 3.11-1 identifies the individual APNs associated with the project site with their respective acreage, and zoning.

Table 3.11-1. Project Assessor Parcel Numbers, Acreages, and Zoning

Name	APN	Zoning	Acreage
Big Rock 2 Cluster North (CUP #24-0006)	051-270-020	A-2-R	101.8
	051-270-028	A-2	52.3
	051-270-036	A-2	67.4
	051-270-041	A-2-R	279.0
	051-280-054	A-2	149.5
	051-300-011	A-2	79.6
	051-300-016	A-2	10.8
	051-300-026	A-2	13.4
	051-300-035	A-3	40.3
	051-300-037	A-3	28.9
	051-300-032 (northern portion)	A-2	85.5
	Subtotal		***910.0***
	Laurel 2 North CUP #21-0014 (Expires December 2024)		
	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
	051-300-036 (to be re-entitled)	A-3-RE	40.3
	Subtotal Big Rock Cluster North		***1,030***
Big Rock 2 Cluster South (CUP 24-007)	051-330-003	A-3	246.5
	051-350-004	A-3	57.4
	051-350-006	A-3	26.3
	051-350-007	A-3	40.0
	051-350-008	A-3	40.0
	Subtotal Big Rock Cluster North		***410.0***

PC ORIGINAL PKG

Big Rock 2 Cluster East (CUP 24-008)	051-310-027	A-2-R-RE	120.0
	051-310-028	A-2-R-RE	39.9
	Subtotal Big Rock Cluster East		***160.0***
Big Rock 2 Cluster West (CUP 24-009)	051-290-018	A-2-R	79.8
	051-290-019	A-3	48.7
	051-320-005	A-3	45.0
	051-320-006	A-3	39.9
	051-320-007	A-3	35.3
	Subtotal Big Rock Cluster West		***249.0***
TOTAL ACREAGE			**1,849**

Notes:
APN=Assessor Parcel Number; A-2=General Agriculture; A-2-R=General Agriculture/Rural; A-3=Heavy Agriculture; RE=Renewable Energy

Big Rock 2 Cluster North

The Big Rock 2 Cluster North site is located on 13 parcels comprising approximately 1,030 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster North site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster North site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster North site are zoned A-2 (General Agriculture), A-2-RE (General Agriculture with a RE Overlay Zone), A-2-R (General Agriculture Rural), A-3 (Heavy Agriculture), and A-3-RE (Heavy Agriculture with a RE Overlay Zone).

Big Rock 2 Cluster South

The Big Rock 2 Cluster South site is located on five parcels comprising approximately 410 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster South site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster South site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster South site are zoned A-3 (Heavy Agriculture).

Big Rock 2 Cluster East

The Big Rock 2 Cluster East site is located on two parcels comprising approximately 160 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster East site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster East site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster East site are zoned A-2-R-RE (General Agriculture Rural with RE Overlay Zone).

Big Rock 2 Cluster West

The Big Rock 2 Cluster West site is located on five parcels comprising approximately 249 acres. Table 3.11-1 identifies the individual APNs associated with the Big Rock 2 Cluster West site with their respective acreage and zoning. As shown in Figure 3.11-1, the Big Rock 2 Cluster West site is designated as Agriculture under the County's General Plan. As shown in Table 3.11-1 and Figure 3.11-2, the parcels associated with the Big Rock 2 Cluster West site are zoned A-2-R (General Agriculture Rural) and A-3 (Heavy Agriculture).

Renewable Energy Overlay Zone

As discussed in Chapter 2, the County adopted the Renewable Energy and Transmission Element, which includes a RE Zone (RE Overlay Map). The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining portions of the project site into the RE Overlay Zone. No land use amendment is requested, and the underlying "Agriculture" General Plan designation would remain.

Residential Communities

There are no established residential neighborhoods immediately adjacent to the project site. One residence is located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. The following are off-site rural residences located in the vicinity of the project site:

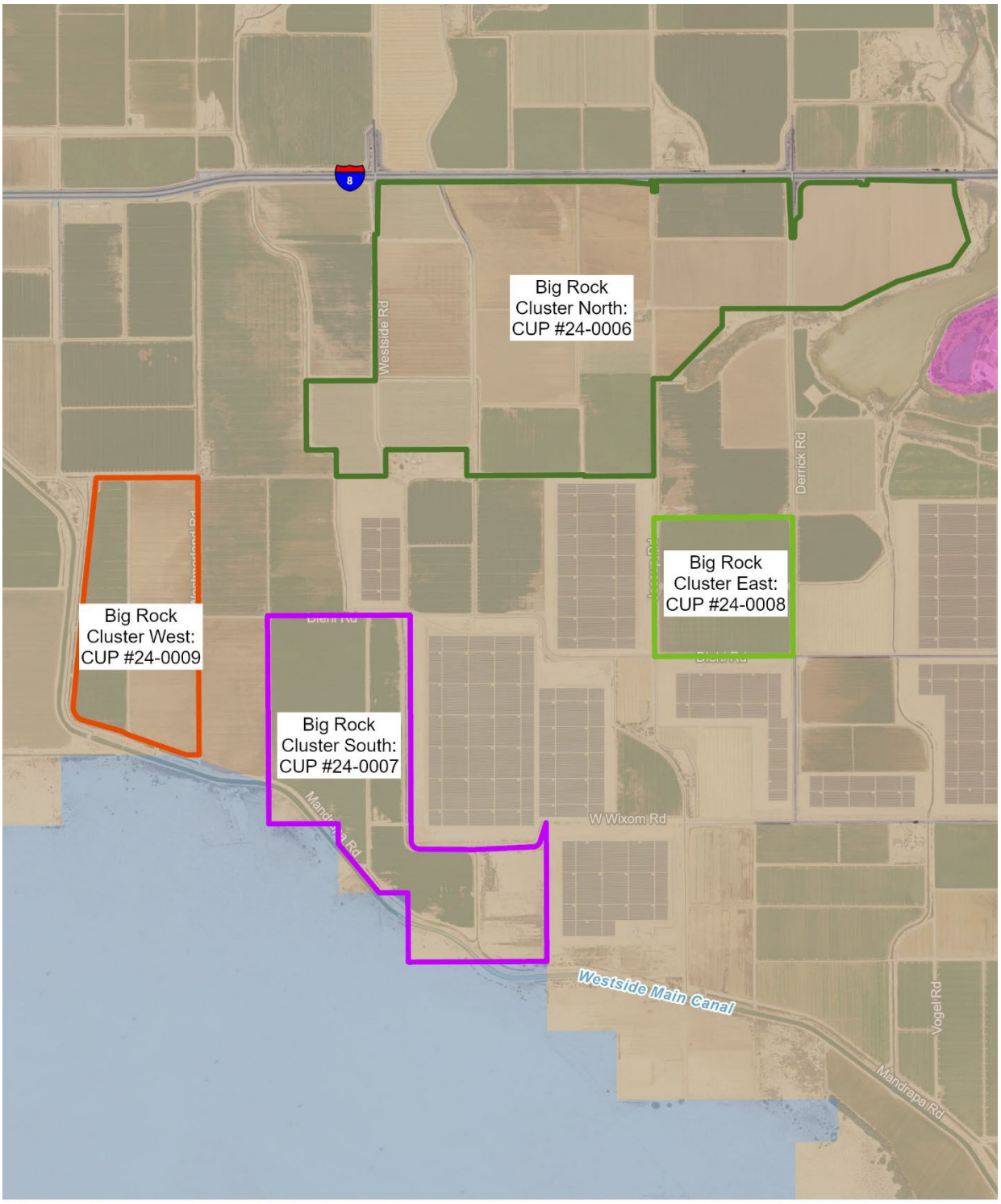
- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

Nearby Airports

There are no public airports or public use airports located within two miles of the project site. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site.

PC ORIGINAL PKG

Figure 3.11-1. General Plan Land Use Designations

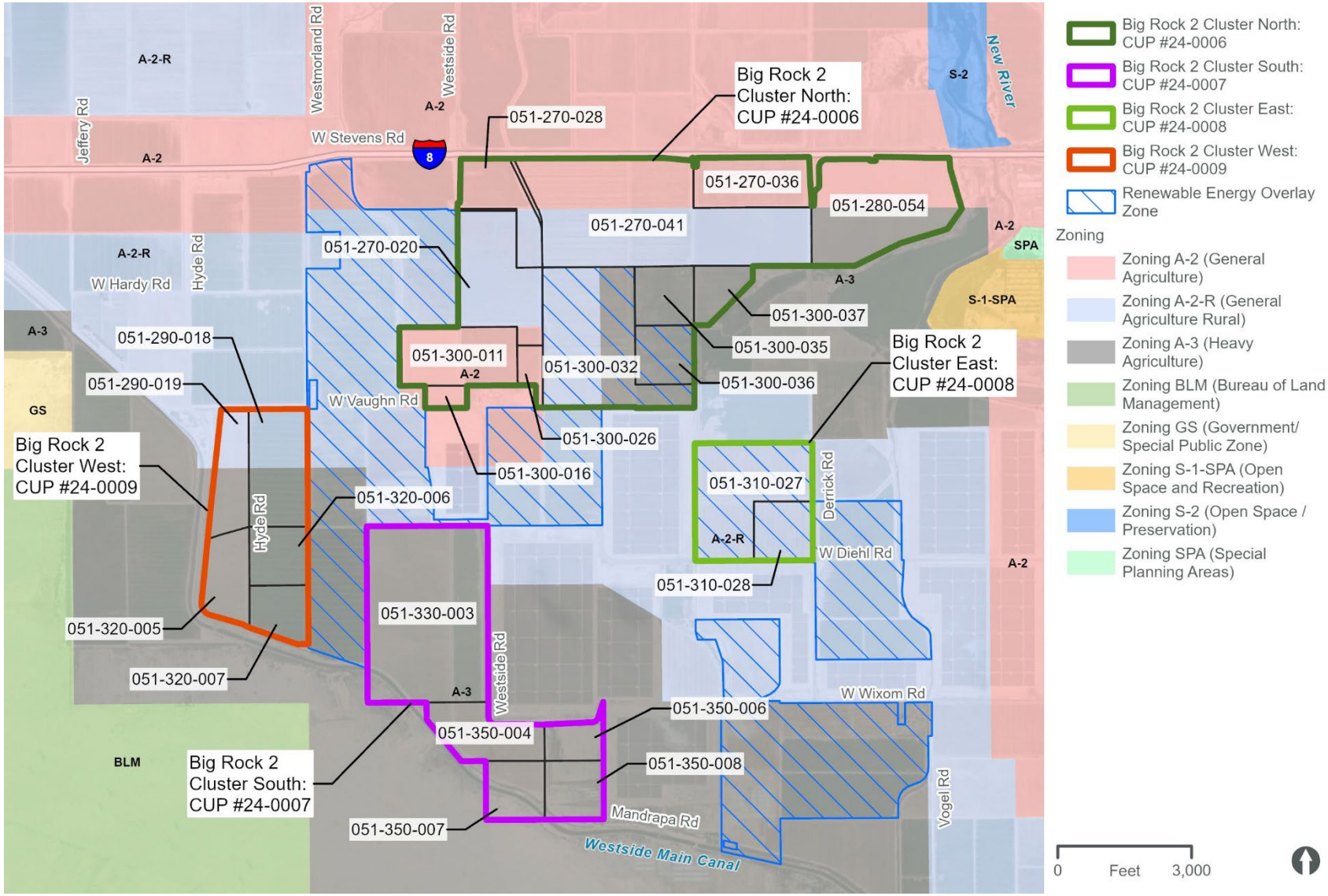


PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 3.11-2. Zoning Designations



This page is intentionally blank.

PC ORIGINAL PKG

3.11.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

State

State Planning and Zoning Laws

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning.

The general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year period or more.

The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific zone district, are required to be consistent with the general plan and any applicable specific plans.

Regional

Southern California Association of Governments – 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

SCAG is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.

On September 3,2020, SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal). The 2020-2045 RTP/SCS (Connect SoCal) includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following goals from the 2020-2045 RTP/SCS (Connect SoCal) are considered applicable to the proposed project:

- Goal 5: Reduce GHG emissions and improve air quality
- Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats

Local

County of Imperial General Plan

The purpose of the County's General Plan (as amended through 2008) is to direct growth, particularly urban development, to areas where public infrastructure exists or can be provided, where public health and safety hazards are limited, and where impacts on the County's abundant natural, cultural, and economic resources can be avoided. The following 10 elements comprise the County's General Plan: Land Use; Housing; Circulation and Scenic Highways; Noise; Seismic and Public Safety; Conservation and Open Space; Agricultural; Renewable Energy and Transmission Element; Water; and Parks and Recreation. Together, these elements satisfy the seven mandatory general plan elements as established in the California Government Code. Goals, objectives, and implementing policies and actions programs have been established for each of the elements.

Imperial County received funding from the CEC's Renewable Energy and Conservation Planning Grant to amend and update the County's General Plan in order to facilitate future development of renewable energy projects. The Geothermal/Alternative Energy and Transmission Element was last updated in 2006. Since then, there have been numerous renewable projects proposed, approved and constructed within Imperial County as a result of California's move to reduce greenhouse gas emissions, develop alternative fuel sources and implement its Renewable Portfolio Standard. The County has recently prepared an update to the Geothermal/Alternative Energy and Transmission Element of its General Plan, called the Renewable Energy and Transmission Element. This Element is designed to provide guidance and approaches with respect to the future siting of renewable energy projects and electrical transmission lines in the County. The County adopted this element in 2016.

The RE and Transmission Element includes a RE Zone (RE Overlay Map). The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of RE projects, with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of RE facilities while minimizing the impact to other established uses. As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone.

An analysis of the project's consistency with the General Plan goals and objectives relevant to the project is provided in Table 3.11-2. While this EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Planning Commission and Board of Supervisors retain final authority for the determination of the project's consistency with the General Plan.

PC ORIGINAL PKG

Table 3.11-2. Project Consistency with Applicable General Plan Policies

Applicable Policies	Consistency Determination	Analysis
Land Use Element		
Public Facilities, Objective 8.7. Ensure the development, improvement, timing, and location of community sewer, water, and drainage facilities will meet the needs of existing communities and new developing areas.	Consistent	The project includes the necessary supporting infrastructure and would not require new community-based infrastructure. The project would be required to construct supporting drainage consistent with County requirements and mitigation measures prescribed in Section 3.10, Hydrology/Water Quality, of the EIR. Once the project is operational, water would be required for solar panel washing, fire protection, and domestic use (within the O&M building only). The project site is within the IID's boundary and therefore, would receive water service from the IID. Water demand for the proposed project is expected to be less than current water demands to support irrigated agriculture.
Public Facilities, Objective 8.8. Ensure that the siting of future facilities for the transmission of electricity, gas, and telecommunications is compatible with the environment and County regulation.	Consistent	The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. The County's General Plan and Land Use Ordinance allows that for renewable energy projects proposed on land classified in a non-RE Overlay zone, that the land on which the project is located may be included/classified in the RE Overlay Zone if the renewable energy project: 1) would be located adjacent to an existing RE Overlay Zone; 2) is not located in a sensitive area; 3) is located in proximity to renewable energy infrastructure; and, 4) and would not result in any significant environmental impacts. As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the remaining project parcels into the RE Overlay Zone. With the approval of the General Plan Amendment, CUPs, and zone change the proposed project can be implemented.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Public Facilities, Objective 8.9. Require necessary public utility rights-of-way when appropriate.	Consistent	The project would include the dedication of necessary ROW to facilitate the placement of electrical distribution and transmission infrastructure.
Protection of Environmental Resources, Objective 9.6. Incorporate the strategies of the Imperial County AQAP in land use planning decisions and as amended.	Consistent	Dust suppression will be implemented in accordance with a dust control plan approved by the ICAPCD. Section 3.4, Air Quality, discusses the project's consistency with the AQAP in more detail.
Circulation and Scenic Highways Element		
Safe, Convenient, and Efficient Transportation System, Objective 1.1. Maintain and improve the existing road and highway network, while providing for future expansion and improvement based on travel demand and the development of alternative travel modes.	Consistent	The project would include limited operational vehicle trips and would not be expected to reduce the current level of service at affected intersections, roadway segments, and highways. The project does not propose any forms for residential or commercial development and therefore would not require new forms of alternative transportation to minimize impacts on existing roadways.
Safe, Convenient, and Efficient Transportation System, Objective 1.2. Require a traffic analysis for any new development which may have a significant impact on County roads.	Consistent	As described in Section 3.13, Transportation, a traffic study was prepared for the project and demonstrated that project operations would have a less than significant impact on the circulation network.
Noise Element		
Noise Environment. Objective 1.3. Control noise levels at the source where feasible.	Consistent	Where construction-related and operational noise would occur in close proximity to noise sensitive land uses (e.g. less than 500 feet), the County would condition the project to maintain conformance with County noise standards.
Project/Land Use Planning. Goal 2: Review Proposed Actions for noise impacts and require design which will provide acceptable indoor and outdoor noise environments.	Consistent	The project would be required to comply with the County's noise standards during both construction and operation.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Conservation and Open Space Element		
Conservation of Environmental Resources for Future Generations Goal 1: Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value.	Consistent	The project site would be converted from agricultural land to a solar energy facility. The proposed project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, it would also replace existing sources of non-renewable energy. The power generated by the proposed project would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts (i.e., air quality and GHG emissions). The proposed project would ensure future generations have access to a broad array of renewable energy sources, providing the public with alternative choices to fossil fuels.
Conservation of Biological Resources. Goal 2: The County will integrate programmatic strategies for the conservation of critical habitats to manage their integrity, function, productivity, and long-term viability.	Consistent	A biological resources survey was conducted for the project site. As discussed in Section 3.5, Biological Resources, there are potentially sensitive biological resources located within the project site. However, with the implementation of mitigation identified in Section 3.5, Biological Resources, these impacts would be reduced to a level less than significant.
Preservation of Cultural Resources. Objective 3.1: Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.	Consistent	A cultural resource inventory report was prepared for the project site. As discussed in Section 3.6, Cultural Resources, the proposed project has the potential to encounter undocumented archaeological resources and human remains. Mitigation Measures CUL-1 through CUL-3 have been identified to reduce potential impacts to a level less than significant.
Conservation of Water Resources. Objective 6.1: Ensure the use and protection of all the rivers, waterways, and groundwater sources in the County for use by future generations.	Consistent	As discussed in Section 3.10, Hydrology/Water Quality, the project applicant will prepare a site-specific drainage plan and water quality management plan to minimize adverse effects to local water resources; as well as coordinate with the IID for water consumption during construction and operation of the project.
Protection of Air Quality and Addressing Climate Change. Goal 7: The County shall actively seek to improve the quality of air in the region.	Consistent	The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from a fossil fuel burning facility. Therefore, the proposed project is consistent with this goal.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Protection of Air Quality and Addressing Climate Change. Objective 7.1: Ensure that all project and facilities comply with current Federal, State and local requirements for attainment of air quality objectives.	Consistent	The proposed project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Further, the proposed project would comply with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Air Quality Measures (Mitigation Measure AQ-2). Therefore, the proposed project is consistent with this objective.
Protection of Air Quality and Addressing Climate Change. Objective 7.2: Develop management strategies to mitigate fugitive dust. Cooperate with all federal and state agencies in the effort to attain air quality objectives.	Consistent	The project applicant would cooperate with all federal and State agencies in the effort to attain air quality objectives through compliance with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Air Quality Measures (Mitigation Measure AQ-2). Therefore, the proposed project is consistent with this objective.
Protection of Open Space and Recreational Opportunities. Objective 8.2: Focus all new renewable energy development within adopted Renewable Energy Overlay Zones.	Consistent	As shown in Figure 3.11-2, the majority of the project site is located outside of the RE Overlay Zone. The project applicant is requesting a General Plan Amendment and Zone Change to include/classify the remaining project parcels into the RE Overlay Zone. With the approval of the General Plan Amendment, Zone Change, and four CUPs, the proposed project can be implemented.
Renewable Energy and Transmission Element		
Objective 1.4: Analyze potential impacts on agricultural, natural, and cultural resources, as appropriate.	Consistent	This EIR has been prepared to meet the requirements of CEQA for purposes of evaluating the potential environmental impacts associated with the proposed project, which includes analysis on applicable environmental topics that analyze impacts on agricultural, natural, and cultural resources.
Objective 1.5: Require appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities.	Consistent	Please refer to Section 3.3, Agricultural Resources, for a description of existing agricultural resources within the project site and a discussion of potential impacts attributable to the project. A biological technical report has been prepared for the project, which is summarized in Section 3.5, Biological Resources, along with potential impacts attributable to the project. With incorporation of mitigation identified in Sections 3.3, Agricultural Resources and 3.5, Biological Resources, less than significant impacts would result.
Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.	Consistent	Water use during construction would be used primarily for dust control, and obtained from local IID irrigation canals or laterals in conformance with IID construction water acquisition requirements. The project applicant will also coordinate with IID to purchase water needed for maintenance activities (i.e. PV module washing) to ensure efficient use of water resources.

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Objective 1.7: Assure that development of renewable energy facilities and transmission lines comply with Imperial County Air Pollution Control District's regulations and mitigation measures.	Consistent	Because of the minimal grading of the site during construction and limited travel over the site during operations, local vegetation is anticipated to remain largely intact which will assist in dust suppression. Furthermore, dust suppression will be implemented including the use of water and soil binders during construction. Section 3.4, Air Quality, discusses the project's consistency with the ICAPCD in more detail.
Objective 2.1: To the extent practicable, maximize utilization of IID's transmission capacity in existing easements or rights-of-way. Encourage the location of all major transmission lines within designated corridors easements, and rights-of-way.	Consistent	The project involves the construction and operation of new renewable energy infrastructure that would interconnect with existing and approved IID transmission infrastructure thereby maximizing the use of existing facilities.
Seismic and Public Safety Element		
Land Use Planning and Public Safety. Goal 1: Include public health and safety considerations in land use planning.	Consistent	Division 5 of the County Land Use Ordinance has established procedures and standards for development within earthquake fault zones. Per County regulations, construction of buildings intended for human occupancy which are located across the trace of an active fault are prohibited. An exception exists when such buildings located near the fault or within a designated Special Studies Zone are demonstrated through a geotechnical analysis and report not to expose a person to undue hazard created by the construction. Since the project site is located in a seismically active area, the project is required to be designed in accordance with the CBC. With implementation of the mitigation requirements outlined in the impact analysis, the risks associated with seismic hazards would be minimized. A preliminary geotechnical report has been prepared for the proposed project. The preliminary geotechnical report has been referenced in this environmental document. Additionally, a design-level geotechnical investigation would be conducted to evaluate the potential for site specific hazards associated with seismic activity.
Land Use Planning and Public Safety. Objective 1.1: Ensure that data on geological hazards is incorporated into the land use review process, and future development process.		
Land Use Planning and Public Safety. Objective 1.3: Regulate development adjacent to or near all mineral deposits and geothermal operations.		
Land Use Planning and Public Safety. Objective 1.4: Require, where possessing the authority, that avoidable seismic risks be avoided; and that measures, commensurate with risks, be taken to reduce injury, loss of life, destruction of property, and disruption of service.		
Land Use Planning and Public Safety. Objective 1.7: Require developers to provide information related to geologic and seismic hazards when siting a proposed project.		
Emergency Preparedness. Goal 2: Minimize potential hazards to public health, safety, and welfare and prevent the loss of life and damage to health and property resulting from both natural and human-related phenomena.		
Emergency Preparedness. Objective 2.2: Reduce risk and damage due to seismic hazards by appropriate regulation.		

PC ORIGINAL PKG

Applicable Policies	Consistency Determination	Analysis
Emergency Preparedness. Objective 2.5: Minimize injury, loss of life, and damage to property by implementing all state codes where applicable.		
Emergency Preparedness. Objective 2.8: Prevent and reduce death, injuries, property damage, and economic and social dislocation resulting from natural hazards including flooding, land subsidence, earthquakes, other geologic phenomena, levee or dam failure, urban and wildland fires and building collapse by appropriate planning and emergency measures.		
Water Element		
Protection of Water Resources from Hazardous Materials. Program: The County of Imperial shall make every reasonable effort to limit or preclude the contamination or degradation of all groundwater and surface water resources in the County.	Consistent	Mitigation measures will require that the applicant of the proposed project prepare a site-specific drainage plan and water quality management plan to minimize adverse effects to local water resources.
Protection of Water Resources from Hazardous Materials. Program: All development proposals brought before the County of Imperial shall be reviewed for potential adverse effects on water quality and quantity, and shall be required to implement appropriate mitigation measures for any significant impacts.	Consistent	See previous response for Water Element above.
Housing Element		
Not Applicable. The proposed project is a solar energy and BESS project and does not include the development of housing.		

Source: ICPDS 2008
AQAP = air quality attainment plan; CUP = conditional use permit; EIR = environmental impact report; GV = growth visioning; ICAPCD = Imperial County Air Pollution Control District; IID = Imperial Irrigation District; MW = megawatt; RE = renewable energy' ROW = right-of-way;

County of Imperial Land Use Ordinance

The County's Land Use Ordinance provides the physical land use planning criteria for development within the jurisdiction of the County. The Land Use Ordinance identifies the permitted and conditional uses within a zoning designation. Uses identified as conditionally permitted require a CUP, which is subject to the discretionary approval of the County Board of Supervisors per a recommendation by the County Planning Commission.

A-2 Zoning. As shown in Table 3.11-1 and Figure 3.11-2, portions of the project site are zoned A-2, A-2-RE, A-2-R, and A-2-R-RE. Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator,*

PC ORIGINAL PKG

as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.

- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Height Limit in A-2 Zone. Section 90508.07 of the Land Use Ordinance limits the height of all non-residential structures and specifically states in Section 90508.07(c) that, "Non-Residential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height, and as may be required by the ALUC plan."

A-3 Zoning. As shown in Table 3.11-1 and Figure 3.11-2, portions of the project site are zoned A-3 and A-3-RE. Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

Height Limit in A-3 Zone. Section 90509.07 of the Land Use Ordinance limits the height of all non-residential structures and specifically states in Section 90509.07(c) that, "Non-Residential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height, and as may be required by the ALUC plan."

RE Resources. According to Title 9, Division 17 of the Land Use Ordinance, the purpose of the RE Resources regulations are to "facilitate the beneficial use of renewable energy resources for the general welfare of the people of Imperial County and the State of California; to protect renewable energy resources from wasteful or detrimental uses; and to protect people, property, and the environment from detriments that might result from the improper use of renewable energy resources" (County of Imperial 2017).

Title 9, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved CUP. Uses that are conditionally permitted require a CUP subject to the discretionary approval of the County Board of Supervisors (Board) per a recommendation by the County Planning Commission.

Imperial County Airport Land Use Compatibility Plan

The Imperial County Airport Land Use Compatibility Plan (ALUCP) provides the criteria and policies used by the Imperial County Airport Land Use Commission to assess compatibility between the principal airports in Imperial County and proposed land use development in the areas surrounding the airports. The ALUCP emphasizes review of local general and specific plans, zoning ordinances, and other land use documents covering broad geographic areas.

There are no public airports or public use airports located within two miles of the project site. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site. According to Figure 3G (Compatibility Map – Naval Air Facility El Centro) of the ALUCP, no portion of the project site is located within the Naval Air Facility El Centro land use compatibility zones (County of Imperial 1996).

3.11.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to land use and planning, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to land use and planning are considered significant if any of the following occur:

- Physically divide an established community
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

Impact Analysis

Impact 3.11-1 Would the project physically divide an established community?

The project site is located in a sparsely populated portion of Imperial County. There is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. There are two off-site rural residences located within 500 feet of the project site:

- One residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- One residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)

However, there are no established residential neighborhoods immediately adjacent to the project site. Therefore, implementation of the proposed project would not divide an established community and no impact would occur.

PC ORIGINAL PKG

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.11-2 Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project's consistency with applicable land us plans, policies, and regulations is evaluated below.

SCAG 2020-2045 RTP/SCS (Connect SoCal)

As noted above, the 2020-2045 RTP/SCS (Connect SoCal) (SCAG 2020) identifies two goals which include reducing GHG emissions to improve air quality (Goal 5), and to promote conservation of natural and agricultural lands (Goal 10).

The 2020-2045 RTP/SCS (Connect SoCal), identifies strategies to support the goal of reducing regional GHG and improve air quality. Strategies include leveraging technological innovations including incorporating solar energy, hydrogen fuel cell power storage, and power generation. Once in operation, the proposed Project would contribute to SCAG's goal in reducing GHG emissions and improving air quality.

The 2020-2045 RTP/SCS (Connect SoCal) also discusses the decline of agricultural land as an issue for the economy. As discussed in Section 3.3, Agricultural Resources, the project site is designated as Farmland of Statewide Importance and Prime Farmland.

The project would temporarily convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. However, as a condition of project approval (CUP condition), the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to its pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. Therefore, no impacts due to a conflict with the 2020-2045 RTP/SCS (Connect SoCal) would occur.

County of Imperial General Plan

The County's General Plan applies to the solar energy facility, BESS, gen-tie line, and supporting infrastructure associated with the project. An analysis of the project's consistency with the General Plan goals and objectives relevant to the project is provided in Table 3.11-2. As shown in Table 3.11-2, the proposed project would generally be consistent with the goals and objectives of the General Plan, with the exception of the RE and Transmission Element.

The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone, and as stated in the Renewable Energy and Transmission Element:

CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. An amendment to the overlay zone would only be approved by the County Board of Supervisors if a future renewable energy project met one of the following two conditions:

1) Adjacent to the Existing RE Overlay Zone: An amendment may be made to allow for development of a future renewable energy project located adjacent to the existing RE Overlay Zone if the project:
    - Is not located in a sensitive area
    - Would not result in any significant impacts
2) "Island Overlay": An amendment may be made to allow for development of a future renewable energy project that is not located adjacent to the existing RE Overlay Zone if the project:
    - Is located adjacent (sharing a common boundary) to an existing transmission source
    - Consists of the expansion of an existing renewable energy operation
    - Would not result in any significant environmental impacts.

As shown in Table 3.11-1 and Figure 3.11-2, APNs 051-300-032 and 051-300-036 (associated with the Big Rock 2 Cluster North site), and APNs 051-310-027 and 051-310-028 (associated with the Big Rock 2 Cluster East site) are located within the RE Overlay Zone. However, the majority of the project site is located outside of the RE Overlay Zone. Therefore, the project applicant is seeking a zone change to include/classify the remaining project parcels into the RE Overlay Zone (A-2-RE, A-2-R-RE, and A-3-RE) and approval of all four CUPs by the County to allow for the construction and operation of the proposed solar energy facility with an integrated BESS. The project site is located adjacent to an existing RE Overlay Zone; therefore, the project would meet the criteria identified for the "Adjacent to the Existing RE Overlay Zone" to obtain approval of an amendment to the RE Overlay Zone. Table 3.11-3 provides an analysis of the project's consistency with the "Adjacent to the Existing RE Overlay Zone" criteria.

With approval of the General Plan Amendment and Zone Change, the project applicant will be able to request for approval of all four CUPs to allow the construction and operation of the proposed solar facility with integrated BESS.

PC ORIGINAL PKG

Table 3.11-3. Project Consistency with "Adjacent to the Existing RE Overlay Zone" Criteria

Criteria	Criteria Met?
Is not located in a sensitive area?	The project site is not in a recognized species corridor or habitat linkage. However, portions of the project site are designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. The project would temporarily convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. However, as a condition of project approval (CUP condition), the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan. The reclamation plan includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers, and other structures on the project site, as well as restoration of the site to its pre-project condition. Therefore, the proposed project would not permanently convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses. Furthermore, the project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have already been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar became operational in September 2013 and is located on multiple APNs that are adjacent to the project site. The project would be an expansion of existing renewable energy operation in the area.
Would not result in any significant environmental impacts?	As detailed in Sections 3.2 through 3.16 of this EIR, no unavoidable or unmitigable significant impacts were identified. Where significant impacts have been identified, mitigation measures are proposed, that when implemented, would reduce the impact level to less than significant. Therefore, the proposed project would not result in a residual significant impact.

EIR = environmental impact report; MW = megawatt; RE = renewable energy

PC ORIGINAL PKG

County of Imperial Land Use Ordinance

Development of the solar energy facility, BESS, and supporting infrastructure is subject to the County's zoning ordinance. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*
- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc. (subject to requirements of this zone and Division 24; Section 92401 "Communications Facilities Ordinance" et al).*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

The proposed project may involve construction of transmission towers up to 200 feet in height. Per §90508.07 (within A-2 zone) and §90509.07 (within A-3 zone) "nonresidential structures and commercial communication towers shall not exceed one hundred twenty (120) feet in height ..." The proposed project would require a height variance(s) for any transmission structures that exceed this height limit. Therefore, with approval of the four CUPs and variance(s), the proposed project would

PC ORIGINAL PKG

not conflict with the County's zoning ordinance. Therefore, the proposed project would not conflict with the County's zoning ordinance and impacts would be less than significant.

Imperial County Airport Land Use Compatibility Plan

As previously discussed above, the Naval Air Facility in El Centro is located approximately three miles northeast of the project site. According to Figure 3G (Compatibility Map – Naval Air Facility El Centro) of the ALUCP, no portion of the project site is located within the Naval Air Facility El Centro land use compatibility zones (County of Imperial 1996). Therefore, the proposed project would not conflict with the Imperial County ALUCP and no impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

3.11.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

No impacts on land use and planning are anticipated to occur during decommissioning and restoration of the project site. Decommissioning and restoration would not physically divide an established community or conflict with any applicable land use plan, policy, or regulation. Through the project's decommissioning and subsequent restoration to pre-project conditions, the uses of the project site (agricultural) would remain consistent with the General Plan and zoning designations of the site, which allow agricultural uses. Therefore, no impact is identified and no mitigation is required.

Residual

With mitigation as prescribed in other sections of this EIR, issues related to the conversion of Important Farmland to non-agricultural use would be mitigated and reduced to a less than significant level. Similarly, with the implementation of the four CUPs and reclamation plan to address post-project decommissioning, the project would generally be consistent with applicable federal, state, regional, and local plans and policies. Based on these circumstances, the project would not result in any residual significant and unmitigable land use impacts.

This page is intentionally blank.

PC ORIGINAL PKG

3.12 Noise and Vibration

This section identifies the ambient noise environment for the project area and describes applicable federal, state, and local regulations, potential project-related noise and vibration impacts, and recommended mitigation measures to avoid or reduce potential impacts of the proposed project.

3.12.1 Existing Conditions

Noise is defined as unwanted sound. Pressure waves traveling through air exert a force registered by the human ear as sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level), which is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. Consequently, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz and above 5,000 hertz to imitate the human ear's decreased sensitivity to low and extremely high frequencies. This emulation of the human ear's frequency sensitivity is referred to as A-weighting and is expressed in units of dBA. Frequency A weighting follows an international standard method of frequency de-emphasis and is typically applied to community noise measurements. In practice, the specific sound level from a source is measured using a meter incorporating an electrical filter corresponding to the A-weighting curve. All noise levels reported are A-weighted unless otherwise stated.

Noise Exposure and Community Noise

Community noise varies continuously over a period of time with respect to the sound sources contributing to the community noise environment. Community noise is primarily the product of many distant noise sources that constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. Community noise is constantly changing throughout the day because of short duration single event noise sources, such as aircraft flyovers, vehicle passbys, and sirens. These successive additions of sound to the community noise environment vary the community noise level from instant to instant. This requires the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below (Caltrans 1998):

- L_{eq}: the equivalent level (L_{eq}), s used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The L_{eq} is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- L_{max}: the instantaneous maximum noise level (L_{max}) for a specified period of time.
- L_{dn}: 24-hour day and night (L_{dn}) A-weighed noise exposure level, which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10 p.m. and 7 a.m. is weighted (penalized) by adding 10 dB to take into account the greater annoyance of nighttime noises. Similar to L_{dn}, community noise equivalent Level (CNEL) adds a 5 dBA "penalty" for the evening hours

between 7 p.m. and 10 p.m. in addition to a 10 dBA penalty between the hours of 10 p.m. and 7 a.m.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

1. Subjective effects of annoyance, nuisance, dissatisfaction
2. Interference with activities such as speech, sleep, learning
3. Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial settings can experience noise in the last category. A satisfactory method for measuring the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction does not exist. However, a wide variation in individual thresholds of annoyance does exist, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted; i.e., the "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans 1998):

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived
- Outside of the laboratory, a 3 dBA change is considered a perceivable difference
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected
- A 10 dBA change is subjectively heard as approximately a doubling in loudness and can cause adverse response

These relationships occur in part because of the logarithmic nature of sound and the dB system. The human ear perceives sound in a nonlinear fashion hence the dB scale was developed. Because the dB scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather they combine logarithmically. For example, if two identical noise sources produce noise levels of 50 dB, the combined sound level would be 53 dB, not 100 dB. Because of this sound characteristic, if there are two noise emission sources, one producing a noise level greater than 9 dB than the other, the contribution of the quieter noise source is negligible and the sum of the noise sources is that of the louder noise source.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites.

Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans 1998).

Existing Ambient Noise

The project site is comprised of 24 assessor parcels that are designated as A-2 (General Agriculture), A-2-R (General Agricultural Rural), A-2-R-RE (General Agricultural Rural - Renewable Energy Overlay), A-2-RE (General Agriculture - Renewable Energy Overlay), A-3 (Heavy Agriculture), and A-3-RE (Heavy Agriculture - Renewable Energy Overlay).

The project site is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy development, specifically for PV solar and BESS projects that have been approved by Imperial County. Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the project site.

The predominant sources of noise in the project area includes vehicular traffic on local roads and highways and agricultural operations. Activities involving the use of heavy-duty equipment such as front-end loaders, forklifts, and diesel-powered trucks are common noise sources typically associated with agricultural uses. Noise typically associated with agricultural operations, including the use of heavy-duty equipment, can reach maximum levels of approximately 85 dBA at 50 feet (Caltrans 1998). With the soft surfaces characterizing the agricultural landscape, these noise levels attenuate to ~60 dBA at distances over 800 feet. Based on field observations of the project site, the existing noise environment is generally influenced by the noise produced from the following sources:

- Vehicle traffic along roadways including Derrick Road, Drew Road, Westside Road, Diehl Road, and I-8
- Agricultural operations throughout the project area including the operation of heavy equipment and vehicles

Based on the availability of a previously prepared noise study in conjunction with the approved Campo Verde Solar Project (SCH No. 2011111049) and the proximity of the measurements to the project site, the previously-acquired noise measurements are considered to be representative of existing conditions and appropriate for use in this EIR. Based on this circumstance, these measurements were used to characterize ambient noise conditions for the project site.

Noise measurements were taken at two monitoring locations at the Campo Verde Solar Project site. Monitoring Location 1 was located roughly 30 feet from Westside Road near the intersection of West Vaughn Road. Monitoring Location 2 was taken in the eastern portion of the Campo Verde Solar Project site approximately 30 feet from Drew Road at the intersection of West Diehl Road. The noise measurements were monitored for a time period of 15 minutes each. According to the Campo Verde Solar Project Final EIR (SCH No. 2011111049), the ambient L_{eq} noise levels measured in the area of the project during the late morning and mid-day were found to be between 50-55 dBA L_{eq} on the western portion of the site and 90 percent (L90) the noise levels were 36-38 dBA. The existing noise levels in the project area consisted primarily of low traffic volumes along Drew Road and Westside Road and background noise from existing agricultural operations in the distances both on and adjacent to the site. The existing noise levels were found to be below County thresholds for all sensitive land uses.

Sensitive Receptors

Although noise pollution can affect all segments of the population, certain groups and land uses are considered more sensitive to ambient noise levels than others, sensitivity being a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups.

Residential land uses are also generally more sensitive to noise than commercial and industrial land uses. There are no established residential neighborhoods immediately adjacent to the project site. The nearest residence is located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby residences include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

Based on a review of GoogleEarth aerial imagery, the Westside Elementary School (2295 West Vaughn Road) is located approximately 200 feet from the closest boundary of the Big Rock 2 Cluster North site. However, according to the California Department of Education's California School Directory, Westside Elementary School closed on June 30, 2012 (California Department of Education 2017).

Proximity to Airports

The project site is not located within 2 miles of a public airport or a public use airport. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site.

Groundborne Vibration

Groundborne vibration consists of rapidly fluctuating motions or waves, which are also measured in dB. Construction activities, train operations, and street traffic are some of the most common external sources of vibration that can be perceptible inside structures. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. High frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances.

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases. While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures

PC ORIGINAL PKG

hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise.

Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 hertz), or when the structure and the source of vibration are connected by foundations or utilities, such as sewer and water pipes. To assess a project's vibration impacts, the Caltrans 2013 vibration impact assessment, entitled the "Transportation and Construction-Induced Vibration Guidance Manual," was utilized. The guidance manual uses peak particle velocity (PPV) to quantify vibration amplitude. PPV is defined as the maximum instantaneous peak of the vibratory motion (Caltrans 2013). As a point of reference, a strongly perceived transient source is 0.90 PPV at 25 feet, and 0.10 PPV at 25 feet for an intermittent source. Table 3.12-1 identifies acceptable vibration limits for transportation and construction projects based on guidelines prepared by Caltrans.

Table 3.12-1. California Department of Transportation Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inch/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013

Notes:

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV=peak particle velocity

3.12.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

No federal regulations govern offsite (community) noise. The Occupational Safety and Health Act of 1970 specifies measures designed to protect workers against the effects of noise exposure and lists permissible noise level exposure as a function of the amount of time to which a worker is exposed. Occupational Safety and Health Administration (OSHA) regulations also dictate hearing conservation program requirements and workspace noise monitoring requirements. OSHA requirements limit worker noise exposure to 90 dBA over an 8-hour work shift. Furthermore, if 8-hour worker noise

PC ORIGINAL PKG

exposure at a work site exceeds 85 dBA, the area must be posted as a noise hazard zone; and a hearing conservation program would be required.

United States Fish and Wildlife Service (USFWS) has established a level of 60 dBA equivalent continuous noise level (L_{eq}) as the maximum permissible noise level to which certain riparian bird species may be subjected during the mating and nesting seasons.

State

The state has also established noise insulation standards for new multi-family residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (CCR, Title 24). The noise insulation standards set forth an interior standard of Ldn 45 dB for any habitable room. They also require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than Ldn 60 dB. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

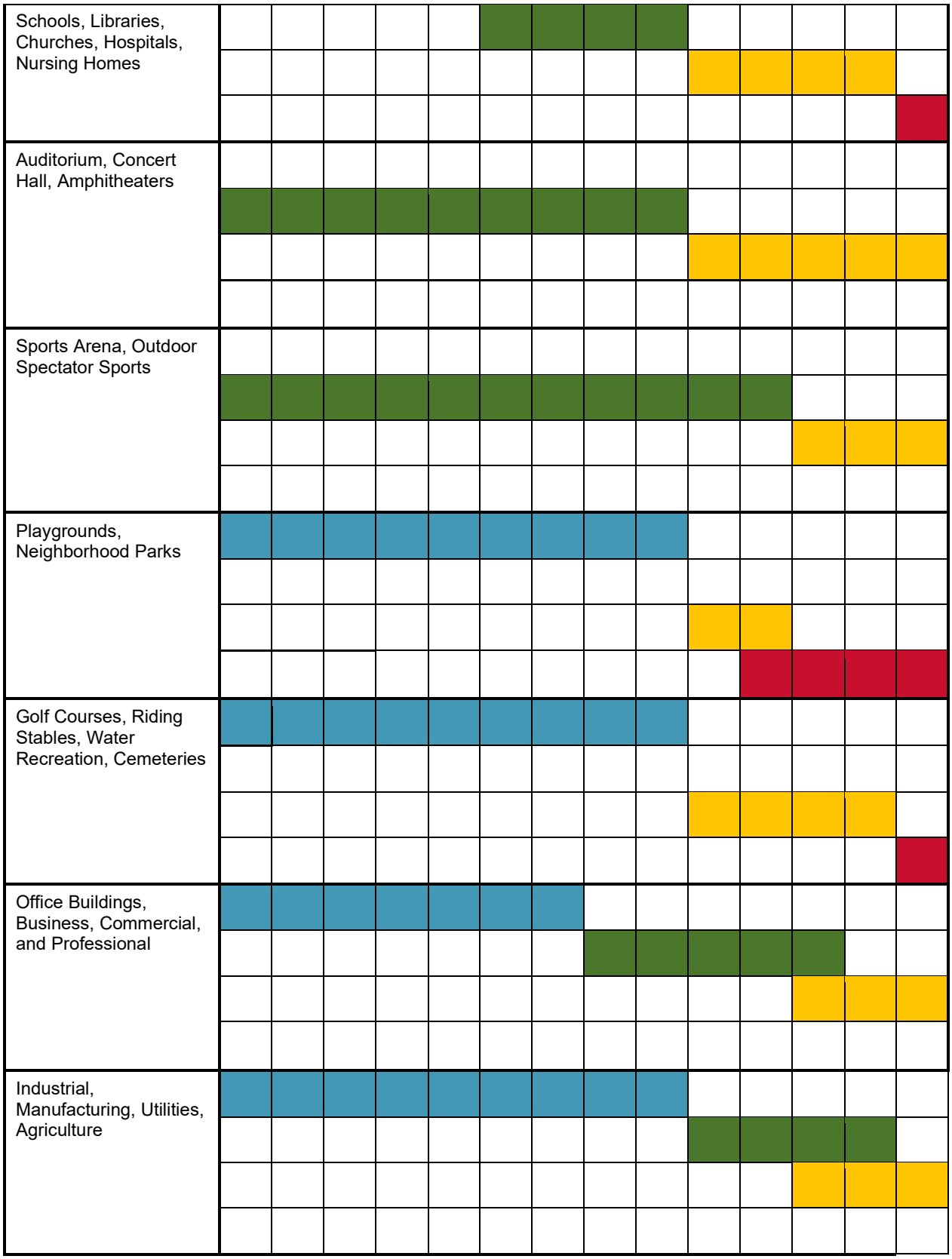
The State of California General Plan Guidelines, published by the OPR in 1998, also provides guidance for the acceptability of projects within specific CNEL/Ldn contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The County of Imperial has utilized the adjustment factors provided and has modified the state's Land Use Compatibility standards for the purpose of implementing the Noise Element of its General Plan.

Table 3.12-2 summarizes the acceptable and unacceptable community noise exposure limits for various land use categories as currently defined by the State of California. These community noise exposure limits are also incorporated into the County of Imperial General Plan Noise Element.

Table 3.12-2. Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure – L_{dn} or CNEL (dBA)						
	50	55	60	65	70	75	80
Residential							
Transient Lodging – Motel, Hotel							

PC ORIGINAL PKG



PC ORIGINAL PKG

	Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
	Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable	New construction or development should generally not be undertaken.

Source: California Office of Planning and Research 1998
Notes:
CNEL=community noise equivalent level; dBA=a-weighted decibel; L_{dn}=day-night average sound level

Local

Imperial County General Plan Noise Element

The County of Imperial General Plan Noise Element identifies and defines existing and future environmental noise levels from sources of noise within or adjacent to the County of Imperial; establishes goals and objectives to address noise impacts, and provides Implementation Programs to implement adopted goals and objectives. Table 3.12-3 summarizes the project's consistency with the applicable General Plan noise policies.

Noise Impact Zones. The County identifies Noise Impact Zones for sensitive receptors likely to be exposed to significant noise (greater than 60 dB CNEL or 75 dB L_{eq}) from roadways, railroads, airports, and agricultural activities. The purpose of the Noise Impact Zone is to define areas and properties where an acoustical analysis of a Project is required to demonstrate project compliance with land use compatibility requirements and other applicable environmental noise standards. Any property within 1,500 feet of an interstate highway or 1,100 feet of a State highway is within a Noise Impact Zone, as is any property within 0.25 mile (1,320 feet) of existing farmland that is in an agricultural zone.

An acoustical analysis is required for any action that would be located, all or in part, in a Noise Impact Zone. According to the Noise Element, if the future noise levels from the action are within the normally acceptable noise level guideline but result in an increase of 5 dBA CNEL or greater, the action would have a potentially significant noise impact and mitigation measures must be considered. If the future noise level after the action is completed is greater than the normally acceptable noise level, a noise increase of 3 dBA CNEL or greater should be considered a potentially significant noise impact; and mitigation measures must be considered.

Land use compatibility defines the acceptability of a land use in a specified noise environment. Noise/Land Use Compatibility Guidelines are provided in the Noise Element to evaluate potential noise impacts and provide criteria for environmental impact findings and conditions for project approval. An

acoustical analysis is required to demonstrate conformance of a project with Noise/Land Use Compatibility Guidelines. These guidelines categorize noise levels at residential land uses as "normally acceptable" up to 60 dBA day-night average sound level (L_{dn}) or CNEL and as "conditionally acceptable" up to 70 dBA L_{dn} or CNEL.

Table 3.12-3. Consistency with Applicable General Plan Noise Policies

General Plan Policies	Consistency with General Plan	Analysis
1. Acoustical Analysis of proposed projects. The County shall require the analysis of proposed discretionary projects, which may generate excessive noise, or which may be impacted by existing excessive noise levels.	Consistent	Under existing conditions, the ambient noise environment is characterized as relatively quiet with peak noise levels influenced by vehicular traffic and off-site agricultural operations. Given that the project is not characterized as a sensitive land use, project facilities would be unaffected by existing noise levels. The project facilities would be constructed within areas zoned for agricultural use with noise levels up to 70 dBA identified as normally acceptable. Project operations are expected to produce noise levels that would not exceed County standards and, hence impacts are expected to be less than significant. This EIR provides an analysis of the potential short- and long-term noise impacts of the project. As discussed, short-term and long-term noise levels were found to be less than significant
2. Noise/Land Use Compatibility. Where acoustical analysis of a proposed project is required, the County shall identify and evaluate potential noise/land use conflicts that could result from the implementation of the project. Projects which may result in noise levels that exceed the "Normally Acceptable" criteria of the Noise/Land Use Compatibility Guidelines shall include mitigation measures to eliminate or reduce the adverse noise impacts to an acceptable level.	Consistent	Noise levels associated with project operations are unlikely to exceed noise limits for the A-2, A-2-R, and A-3 zones. See Section 3.11.3 for additional discussion.
4. Interior Noise Environment. Where acoustical analysis of a proposed project is required, the County shall identify and evaluate projects to ensure compliance to the California (Title 24) interior noise standards and the additional requirements of this Element.	Consistent	As described under General Plan Noise Policy 1, short-term and long-term noise impacts would be minimized through the implementation of the prescribed mitigation. Noise levels associated with project operations would be unlikely to exceed noise limits for the A-2, A-2-R, and A-3 zones.

PC ORIGINAL PKG

5. New Noise Generating projects. The County shall identify and evaluate projects which have the potential to generate noise in excess of the Property Line Noise Limits. An acoustical analysis must be submitted which demonstrates the project's compliance.	Consistent	As described under General Plan Noise Policy 1, short-term and long-term noise impacts would be minimized through the implementation of the prescribed mitigation. Noise levels associated with project operations would be unlikely to exceed noise limits for the A-2, A-2-R, and A-3 zones.
6. Projects Which Generate Off-site Traffic Noise. The acoustical analysis shall identify and evaluate projects which will generate traffic and increase noise levels on off-site roadways. If the project site has the potential to cause a significant noise impact on sensitive receptors along those roadways, the acoustical analysis report shall consider noise reduction measures to reduce the impact to a level less than significant.	Consistent	As described in Chapter 3, the project would involve a minimal number of operational related vehicle trips and therefore, is unlikely to produce any increase in traffic noise levels on local roadways.

Source: County of Imperial 2015c
Notes:
dBA=a=weighted decibel; EIR=environmental impact report

Construction Noise Standards

Construction noise standards included in the Noise Element restrict construction equipment noise levels to 75 dBA L_{eq} when averaged over an eight-hour period and measured at the nearest sensitive receptor. This standard assumes a construction period, relative to an individual sensitive receptor of days or weeks. In cases of extended length construction times, the standard may be tightened so as not to exceed 75 dB L_{eq} when averaged over a one-hour period. In addition, construction equipment operation is limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. Further, no commercial construction operations are permitted on Sunday or holidays.

County of Imperial Noise Ordinance

The County enforces construction and operation noise standards specified in the Noise Element through the Noise Ordinance. Noise-generating sources in Imperial County are regulated under the Imperial County Codified Ordinances, Title 9, Division 7 (Noise Abatement and Control) (Imperial County 2022). The noise standards of the Ordinance limit the hours of construction and the level of noise emitted by the construction, as well as the operational noise levels at various land uses for day, evening, and night. Noise limits are established in Chapter 2 of this ordinance and shown in Table 3.12-4.

PC ORIGINAL PKG

Table 3.12-4. Imperial County Property Line Noise Limits

Zone	Time	Average Hourly Sound (L_{eq})
Residential Zones	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
Multi-Residential Zones	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
Commercial Zones	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
Light Industrial/Industrial Park Zones	Anytime	70
General Industrial Zones	Anytime	75

Source: Imperial County Ordinance § 90702.00

Note: When the noise-generating property and the receiving property have different uses, the more restrictive standard shall apply. When the ambient noise level is equal to or exceeds the Property Line noise standard, the increase of the existing or proposed noise shall not exceed 3 dB Leq.

Property line noise limits apply to noise generation from one property to an adjacent property. The standards imply the existence of a sensitive receptor on the adjacent, or receiving, property. In the absence of a sensitive receptor, an exception or variance to the standards may be appropriate. These standards do not apply to construction noise. These standards are enforced through the County's code enforcement program on the basis of complaints received from persons impacted by excessive noise. The County may act to restrict disturbing, excessive, or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity residing in an area. Noise received at the property line of a residence is limited to 50 dBA L_{eq} in the daytime and 45 dBA L_{eq} at night.

Under Section 90702.00 of the County's Codified Ordinances, sound level limits for industrial noise are set at 75 dBA L_{eq} on or beyond the boundary of the property line at any time. Average hourly noise in residential areas is limited to 50 to 55 dBA from 7:00 a.m. to 10:00 p.m. and to 45 to 50 dBA from 10:00 p.m. to 7:00 a.m.

3.12.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts on noise and vibration, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to noise and vibration are considered significant if any of the following occur:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Generate excessive groundborne vibration or groundborne noise levels

- For a project located in the vicinity of a private airstrip of an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Methodology

Noise generated by the proposed project will consist of: (1) short duration noise resulting from construction activities and (2) noise during normal facility operations. Vibration from the proposed project would only result during construction. Construction activities would take place only during daytime hours. An evaluation was performed of expected noise and vibration and compared to regulatory requirements.

Impact Analysis

Impact 3.12-1 Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

CONSTRUCTION

Construction noise, although temporary, can potentially affect nearby sensitive receptors, such as residences. Construction of the proposed project will require the use of heavy equipment that may be periodically audible at offsite locations. Received noise levels will fluctuate, depending on the construction activity, equipment type, and distance between noise source and receiver. Additionally, noise from construction equipment will vary dependent on the construction phase and the number and type of equipment at a location at any given time. Table 3.12-5 shows typical noise levels produced by various types of construction equipment at a distance of 50 feet. The construction period for the project is approximately 18 to 24 months. Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

The variation in power and usage of the various equipment types creates complexity in characterizing construction noise levels. However, as described in Chapter 2, Project Description, noise generated

PC ORIGINAL PKG

during construction activities would comply with the Imperial County Noise Ordinance (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

In addition, the average distance from the construction activities to these sensitive land uses is approximately 250 feet. Construction noise will attenuate with increased distance from the noise sources. As such, noise levels would not exceed the County's 75 dBA Leq construction noise threshold.

Table 3.12-5. Typical Noise Levels for Construction Equipment

Equipment	Noise Level, Lmax at 50 feet	Composite Noise Level (Leq 1-hour) at 50 feet
Vibratory Post Driver	85	87
Crawler/Tractor/Dozer	82	
Dump, Concrete, Tender Truck	79	
Forklift/Aerial Lift/Boom	81	
Generator/Compressor	81	
Grader/Scraper	85	
Roller/Compactor	80	
Tractor/Loader/Backhoe	79	
Vibratory Plate (handheld)	83	
Flatbed Truck	74	
Water Truck	79	

Source: Federal Highway Administration Roadway Construction Noise Model, FHWA 2006

Traffic noise associated with construction of the proposed project is not anticipated to be a significant source of noise. Traffic noise is not greatly influenced by lower levels of traffic, such as those associated with the proposed project's construction effort. For example, traffic levels would have to double in order for traffic noise on area roadways to increase by 3 dBA. The proposed project's construction traffic on area roadways would increase hourly traffic volumes by much less than double; therefore, the increase in construction related traffic noise would be less than 3 dBA and is not significant.

As such, construction activities would not exceed the Imperial County daytime noise standard for construction activities of 75 dBA Leq at the nearest sensitive receptor and nighttime activities would not result in perceptible noise levels at the nearest sensitive receptors. Therefore, impacts would be less than significant.

PC ORIGINAL PKG

OPERATION

The principal long-term, operational noise impacts resulting from the project would include light duty vehicle traffic for maintenance operations, including solar panel washing, central operations at the O&M building, including stationary mechanical equipment (e.g., heating, ventilation, and air-conditioning for the O&M building). The energy storage component facilities are not considered noise generators but would be equipped with air conditioning systems. The level of noise generated by these combined sources would depend on characteristics of the noise source, number of noise sources clustered together, type and effectiveness of building enclosure, and operational characteristics.

Operation of the O&M building, substation, and electrical distribution facilities would result in a minor increase in the use of motor vehicles, primarily associated with employees traveling to and from these facilities and routine maintenance and inspection activities. These trips for maintenance and inspection would be distributed through the roadway network. Because of the relatively low volume of project-generated traffic (refer to Section 3.14, Transportation), operation of the proposed project would not result in noticeable changes in the traffic noise along area roadways in relation to existing and projected roadway traffic volumes. As a result, long-term increases in traffic noise levels would be less than significant. The project would be required to comply with the County of Imperial Codified Ordinances Division 7 Noise Abatement and Control. This ordinance governs fixed operational noise within the project site. The 1-hour average sound level limit for the A-2, A-2-R, and A-3 zones is 75 dBA and noise levels up to 70 dBA L_{dn} are identified as normally acceptable. The noise generated during these collective operations would be required to comply with the noise standards contained in the County's Noise Ordinance. The noise associated with the O&M building or energy storage area do not represent a significant noise source, and would involve less intensive activities and operation of equipment as compared to existing agricultural operations in the area. Therefore, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.12-2 Would the project generate excessive groundborne vibration or groundborne noise levels?

CONSTRUCTION

Construction would result in temporary ground vibration. Construction activities most likely to cause vibration include heavy construction equipment and drilling. The County does not have adopted limits for determining significance of vibration impacts on structures or persons. Caltrans and the Federal Transit Administration have developed two of the decisive works in the assessment of vibrations from transportation and construction sources (Caltrans 2013; Federal Transit Administration 2006). The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources.

The *Caltrans Transportation and Construction Vibration Guidance Manual* identifies two impact criteria for buildings and humans. Table 3.12-1 describes impact criteria for buildings, and Table 3.12-6 describes impact criteria for humans.

PC ORIGINAL PKG

Table 3.12-6. Caltrans Guideline Vibration Annoyance Potential

Human Response	Maximum PPV (inch/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans 2013

Notes:

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV=peak particle velocity

As impact pile drivers have higher vibration levels than vibratory pile drivers, the potential vibration impact calculations assume that impact pile drivers will be used. Other construction activities are less intensive than pile driving and would have lower PPV than pile driving. Therefore, vibration levels from pile driving are considered worst case for the project construction. Caltrans vibration guidance provides the following equation to calculate PPV at sensitive receptors:

$$\text{PPV Impact Pile Driver} = PPV_{Ref} (25/D)^{n} \times (E_{equip}/E_{Ref})0.5 \text{ (in/sec)}$$

Where:

PPV_{Ref} = 0.65 in/sec for a reference pile driver at 25 feet

D = distance from pile driver to the receiver in feet

n = 1.1 is a value related to the vibration attenuation rate through ground

E_{equip} is rated energy of impact pile driver in ft-lbs

E_{Ref} is 36,000 ft-lb (rated energy of reference pile driver)

Using the referenced formula and an assumed 2,400 ft-lb rated energy for the post driver, the calculated PPV at the nearest structure (assumed to be 250 feet) would be 0.013 PPV, which according to the Caltrans guidance in Table 3.12-6, would not damage buildings and would be barely perceptible.

Construction would result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Construction would result in additional heavy vehicle trips on local roadways accessing the project site. Rubber-tire heavy vehicles traveling on roadways typically will not produce perceptible vibration at adjacent buildings.

Construction activities most likely to cause vibration include heavy construction equipment and site grading operations. Although all heavy, mobile construction equipment has the potential to cause at least some perceptible vibration when operating close to buildings, the vibration is usually short term and is not of sufficient magnitude to cause building damage. Heavy equipment such as dozers, loaders, and drill rig equipment would not be operated close enough to any residences or structures to cause vibration impact. Therefore, impacts would be less than significant.

OPERATION

Operation of the project would not result in vibrations perceptible to nearby receptors. As such, impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.12-3 For a project located in the vicinity of a private airstrip of an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project would not involve the construction of sensitive land uses. The project site is not located within 2 miles of a public airport or a private airstrip. The nearest airport is the Naval Air Facility in El Centro approximately three miles northeast of the project site. Therefore, the proposed project would not expose people to excessive airport noise levels and no impact is identified.

Mitigation Measure(s)

No mitigation measures are required.

3.12.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

At the end of the project's useful life, all equipment and facilities will be properly abandoned and dismantled. The solar facility requires the project applicant to implement a comprehensive reclamation plan that would restore the project site to pre-existing (pre-project) conditions following decommissioning of the project. Adhering to Imperial County standards for construction noise levels would reduce the noise and vibration impacts to below a level of significance.

All abandonment and decommissioning activities would be short-term and any noise from decommissioning equipment (e.g., cranes; excavators) would be similar to the construction impacts discussed above and would not be significant. Noise from energy operations would entirely cease with the discontinuation of geothermal energy generation activities/facilities.

Residual

Adhering to the Imperial County standards for construction noise levels would reduce the noise and vibration impacts to below a level of significance.

PC ORIGINAL PKG

3.13 Public Services

This section includes an evaluation of potential impacts for identified public services that could result from implementation of the proposed project. Public services typically include fire protection, law enforcement, schools, and other public facilities such as parks, libraries, and post offices. Each subsection includes descriptions of existing facilities, service standards, and potential environmental impacts resulting from implementation of the proposed project, and mitigation measures where appropriate. Section 3.16, Utilities/Service Systems, of this EIR evaluates impacts related to water supply, wastewater, and other utilities. The impact assessment provides an evaluation of potential adverse effects to public services based on criteria derived from the CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description.

The IS/NOP prepared for this EIR determined that the project would not result in impacts on schools, parks and other public facilities (libraries and post offices). Therefore, these issue areas will not be discussed further. The IS/NOP is included in Appendix A of this EIR.

3.13.1 Existing Conditions

The project site is located approximately 8 miles southwest of the City of El Centro and approximately one mile southwest of Seeley, a census-designated place, in the unincorporated area of Imperial County. The project site is located within the Imperial County Fire Department/Office of Emergency Services (ICFD/OES) and the Imperial County Sheriff Department's areas of service.

Fire Protection Services

The project site is located within the ICFD/OES area of service. ICFD/OES currently has nine fire stations and six contracting agencies serving the entire 4,500 square miles of unincorporated Imperial County. The nine ICFD stations are located in the communities of Heber, Seeley, Ocotillo, Palo Verde, Niland, Winterhaven, Salton City, and the City of Imperial (ICFD 2019). Each of the county fire stations is staffed with a Captain, Firefighter, and Reserve Firefighter with the only exception being the Palo Verde station that is staffed with a Firefighter and Reserve Firefighter. Every fire station has a Type I engine as its primary apparatus. The City of Imperial and Heber stations also house a Ladder Truck along with the Type I engine. The Seeley and Heber stations also house Type III engines. The ICFD Emergency Units strive to respond immediately after receiving the initial tone for service. The actual response time would be determined by the area of response throughout the vast response area covered.

The closest fire station to the project site is the Seeley station located at 1828 Park Street in Seeley, California. This station is located approximately less than 3 miles northeast of the project site.

Police Protection Services

Imperial County's Sheriff's Department is responsible for police protection services in the unincorporated areas of Imperial County and the City of Holtville. The patrol function is divided between North County Patrol, South County Patrol, East County Operations, and City of Holtville. Deputies assigned to the Patrol Divisions are the "first responders" to a call for law enforcement service. The main patrol station is located in El Centro on Applestill Road. Sheriff substations are located in the communities of Brawley, Niland, Salton City, and Winterhaven with resident deputies located in the unincorporated community of Palo Verde. Under an existing mutual aid agreement,

additional law enforcement services would be provided if and when required by all of the cities within the county, as well as with Border Patrol and the California Highway Patrol. The California Highway Patrol provides traffic regulation enforcement, emergency accident management, and service and assistance on state roadways and other major roadways in the unincorporated portions of Imperial County.

The closest sheriff's station to the project site is the main patrol station in El Centro, located at 328 Applestill Road. This station is approximately 8 miles east of the project site.

3.13.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

State

Fire Codes and Guidelines

The California Fire Code (Title 24, Part 9 of the CCR) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

Local

Imperial County General Plan

The Imperial County General Plan Seismic and Public Safety Element contains goals and objectives that relate to fire protection and law enforcement pertinent to the proposed project. An analysis of the project's consistency with the applicable goals and objectives of the Seismic and Public Safety Element is provided in Table 3.13-1.

Table 3.13-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element

Applicable General Plan Goals/Policies	Consistency Determination	Analysis
Goal 1: Include public health and safety considerations in land use planning.	Consistent	The project's CUP applications and site plan will be reviewed by the Imperial County Fire Department to ensure that the facility complies with state and local fire codes and fire safety features are met. Additionally, the project applicant has included site design measures to reduce the potential for fire hazards

PC ORIGINAL PKG

Table 3.13-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element

Applicable General Plan Goals/Policies	Consistency Determination	Analysis
Objective 1.8: Reduce fire hazards by the design of new developments		including 100,000 gallon on-site fire water tanks for O&M and sufficient turnaround areas to allow clearance for fire trucks per fire department standards.
Goal 2: Minimize potential hazards to public health, safety, and welfare and prevent the loss of life and damage to health and property resulting from both natural and human-related phenomena.	Consistent	See response above for a discussion on how the project would implement all state and local fire codes and provide site design measures to reduce the potential for fire hazards. With regards to public safety and security, the project would include 7 to 10 foot tall perimeter security fencing. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the project.
Objective 2.5: Minimize injury, loss of life, and damage to property by implementing all state codes where applicable.		

Source: ICPDS 1997

CUP = conditional use permit

Imperial County Office of Emergency Services – Multi-Hazard Mitigation Plan

The ICFD is the local Office of Emergency services in Imperial County. Imperial County has developed the multi-jurisdictional hazard mitigation plan (MHMP) to create a safer community. The purpose of the MHMP is to significantly reduce deaths, injuries, and other disaster losses caused by natural and human-caused hazards in Imperial County. The MHMP describes past and current hazard mitigation activities and outlines goals, strategies, and actions for reducing future disaster losses. The Imperial County MHMP is the representation of the County's commitment to reduce risks from natural and other hazards and serves as a guide for decision-makers as they commit resources to reducing the effects of natural and other hazards. The jurisdictions included in the MHMP include the cities of Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial, and Westmoreland, the IID and the Imperial County Office of Education. The MHMP complies with all federal, state, and local laws guiding disaster management.

PC ORIGINAL PKG

Imperial County Emergency Operations Plan

The Imperial County Emergency Operations Plan (EOP) provides guidance and procedures for the County to prepare for and respond to emergencies. The EOP designates the Sheriff's Department as having jurisdiction in an emergency involving evacuation within the unincorporated areas of the county and within contract cities.

3.13.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to public services, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to public services are considered significant if the project would result in the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities

As mentioned previously, it was determined through the preparation of an IS/NOP that the project would not result in impacts on schools, parks, or other public facilities. Therefore, those issue areas will not be discussed further and are included in Chapter 6, Effects Found Not Significant, of this EIR.

Methodology

Evaluation of potential fire and police service impacts of the proposed project was based on consultation with the ICFD, Sheriff's Department and review of other development projects in the area.

Impact Analysis

Impact 3.13-1 Would the project result in the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan (County of Imperial 1997), the potential for a major fire in the unincorporated areas of the County is generally low.

PC ORIGINAL PKG

Points of ingress/egress would be accessed via locked gates that can be opened by any emergency responders. Although the proposed project would be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health, and safety requirements, the project applicant will be required to consult with the Fire Department to address any fire safety and service concerns (i.e, BESS) so that adequate service is maintained. While the proposed project may result in a minor increase in demand for fire protection service, the project would not result in an increase in demand that would, in turn, result in a substantial adverse physical impact associated with the provision of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. In addition, the project applicant will be required to prepare a Fire Management Plan in accordance with ICFD requirements for project construction activities as well as long-term operations, including establishing appropriate emergency access to the project site for first responders, and identifying project-specific on-site fire protection or suppression systems that comply with Imperial County requirements. Additional fire safety features to be described in detail in the Fire Management Plan, include the following:

- Access gates and service roads along the perimeter of the project designed to meet or exceed fire code specifications (e.g., road width, turnarounds, etc.).
- PV modules and ancillary equipment constructed of fire-resistant materials, non-flammable ground cover and perimeter barriers (as required) around electrical equipment, and both portable and fixed fire suppression systems.
- Portable fire extinguishers would be provided at various locations throughout the project site.
- Fixed fire suppressions systems would be employed throughout the project site based on equipment manufacturer specifications and coordination with the Fire Department.
- On-site water tank(s), built-in thermal, chemical and/or mechanical monitoring systems, and built-in fire suppression systems.
- Best practices including vegetation management and landscape maintenance to help maintain fire-safe operating facilities.

Based on these considerations, the project would not result in a need for fire facility expansion and a less than significant impact would occur.

Imperial County requires payment of impact fees for new development projects. Fire Impact Fees are imposed pursuant to Ordinance 1418 §2 (2006), which was drafted in accordance with the County's TischlerBise Impact Fee Study. The ordinance has provisions for non-residential industrial projects based on square footage. The project applicant will be required to pay the fire protection services' impact fees. These fees would be included in the Conditions of Approval for the CUPs. No new fire stations or facilities would be required to serve the project. Impacts would therefore be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.13-2 Would the project result in the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

The project does not include a residential component; therefore, it would not result in a substantial addition of residents to the Sheriff Department's service area. Although the potential is low, the proposed project may attract vandals or other security risks and the increase in construction-related traffic could increase demand on law enforcement services. Site security fencing would be installed around the perimeter of the project site at the commencement of construction and site access would be limited to authorized site workers. Points of ingress/egress would be accessed via locked gates. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the project. While the proposed project may result in a temporary increase in demand for law enforcement service, the project would not result in an increase in demand that would, in turn, result in a substantial adverse physical impact associated with the provision of new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. As conditions of approval of the project, the project applicant will be required to participate in the Imperial County Public Benefit Program for the life of the CUPs and shall at all times be a party to a public benefit agreement in a form acceptable to County Counsel in order to pay for all costs, benefits, and fees associated with the approved project, and the applicant will be required to reimburse the Sheriff's Department for any investigations regarding theft on the project site and related law enforcement. Approval of this public benefit agreement will be by the Board of Supervisors prior to the issuance of the first building permit. These potential impacts are less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.13.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

At the end of the project's useful life, all equipment and facilities will be properly dismantled. Decommissioning and restoration of the project site would occur and would not result in an increased need for fire and police protection services. Decommissioning of the project would occur through implementation of a required Reclamation Plan. These activities would be in the form of disassembling project components and then restoring the site to pre-project conditions, both of which would not create an increase in demand for police or fire service beyond the level required for proposed operations. Therefore, no impact is identified and no mitigation is required for this phase.

PC ORIGINAL PKG

Residual

With payment of the development impact fees for fire and police protection services, project impacts would be less than significant. No mitigation is required, and no residual significant and unmitigated impacts would result.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.14 Transportation

This section addresses the proposed project's impacts on traffic and the surrounding roadway network associated with construction and operation of the proposed project. The following discussion describes the existing conditions in the surrounding area, the existing regulations regarding transportation, and an analysis of the potential impacts of the proposed project. Information in this section is summarized from the *Transportation Impact Analysis* (TIA) prepared by Dudek. This report is included in Appendix I of this EIR.

The TIA prepared for the project includes both a CEQA and Non-CEQA assessment for the project, as described below.

CEQA Assessment – Vehicle Miles Traveled (VMT) Analysis

On September 27, 2013, Governor Brown signed SB 743, with the purpose of streamlining the CEQA review process for several categories of development projects, including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of level of service (LOS) in CEQA documents.

In November 2017, pursuant to SB 743, the Office of Planning and Research released the draft revised CEQA Guidelines, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, to provide guidance on VMT analysis (2018). In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their jurisdictions. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]). Subsequently in December 2018, the CEQA Guidelines were updated to add new Section 15064.3, Determining the Significance of Transportation Impacts, that describes considerations for evaluating a project's transportation impacts using the VMT methodology, formally replacing the LOS metric. This new methodology is required under CEQA beginning July 1, 2020.

The VMT screening and analysis in the TIA are based on the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA (2018).

Non-CEQA Assessment – LOS or Traffic Analysis

The County's new transportation guidelines that are currently under preparation could trigger an update to the Transportation/Circulation Element and the threshold of LOS C for street segments and intersections. However, LOS is no longer used as metric for determining transportation impacts under CEQA, but is used for determining traffic effects under the County's General Plan. Therefore, the LOS has been reported in the TIA for informational purposes, and the threshold of LOS C has been used to determine if any roadway improvements, or transportation demand management measures would be implemented by the project.

The County of Imperial has vehicle LOS standards in its Circulation and Scenic Highways Element that the County currently strives to maintain through various projects designed to improve local infrastructure. The LOS standards apply to any new development which may have a significant impact on County roads. The LOS analysis has been prepared to evaluate the short-term impacts of the project's construction on the County's roadway network.

3.14.1 Existing Conditions

Existing Circulation Network

The following is a description of the nearby roadway network:

Interstate 8 (I-8) is the primary east-west route through Imperial County between San Diego, California and Yuma, Arizona. In the vicinity of the project, I-8 provides two travel lanes in each direction with grade separation at all intersections. It serves as an interregional route for people and goods movement and provides access to desert recreational activities.

Evan Hewes Highway (S80) is an east-west two-lane undivided roadway. Bike lanes or bus stops are not provided, and the posted speed limit is 40 miles per hour (mph). Curbside parking is prohibited along both sides of the roadway.

County Route S29 – Drew Road is a north-south two-lane undivided roadway with a 24-foot paved width and unpaved shoulders from Evan Hewes Highway south to SR-98. Drew Road provides access to I-8 near the project. Bike lanes or bus stops are not provided along Drew Road. The posted speed limit is 55 mph. A portion of Drew Road from the Townsite of Seeley to Diehl Road is designated as a Class II bike route.

Dunaway Road is a north-south two-lane undivided roadway with a 20-foot paved width and unpaved shoulders from I-8 to Evan Hewes Highway. The posted speed limit is 55 mph. Dunaway Road does not have any sidewalks or bike routes.

The project site is served by numerous local two-lane rural roads, which are classified as Minor Collector – Local Collector roads in the County's Circulation and Scenic Highways Element (Imperial County 2008). The east-west roads, Evan Hewes Highway, Diehl Road and Wixom Road would serve as the primary access roads into the project site from north-south roads such as Derrick Road, and Westside Road, which would provide access to some of the project parcels.

Alternative/Public Transportation

Transit, Pedestrian, and Bicycle Transportation

Imperial Valley Transit (IVT) operates a fixed route transit system between, and within, the cities and rural communities in Imperial County. IVT has 12 routes running Monday through Friday, with over 20 buses in operation. The nearest bus service to the site is provided by IVT Route 4 along Evan Hewes Highway. The route operates between El Centro and Seely. The nearest bus stop is at the intersection of Drew Road and Even Hewes Highway, approximately 3 miles north of the Drew Road and Diehl Road intersection.

IVT Access provides curb to curb transportation services upon advance reservation, to functional and mobility disadvantaged persons. IVT Access provides transportation to and from any location in the Imperial Valley service area within a ¾ mile "corridor" and a 30 minute "window" of regular IVT bus services. This service area covers much of the County of Imperial for most of the day Monday through

Sunday. IVT Access also provides its services to the general public (when seating is available). There are also numerous private service providers including taxis, charter buses, and shuttles serving areas within Imperial County.

The project site is in a generally undeveloped area and there are no dedicated pedestrian or bicycle facilities in the vicinity of the project site or along the surrounding street network. The Imperial County Transportation Commission is in the process of developing a Regional Active Transportation Plan (ATP) (February 2022 Final) to help meet the County's goals and vision for providing a transportation system that supports walking, cycling, public transit, and automobiles. Imperial County also recently completed the Imperial County Pedestrian Master Plan (April 2021), however, given the rural nature of the study area, there are no planned improvements in the area.

Project Site Access

Regional access to the project site would be provided by I-8 and SR-98. Primary access to the project site would utilize east-west roads Evan Hewes Highway, Diehl Road and north-south road Westside Road. The east-west road Wixom Road and West Vaughn Road; and the north-south road Derrick Road may provide access to some project parcels.

Existing Traffic Operations

This section details the existing traffic volumes and the existing intersection and roadway segment operations within the traffic study area. The traffic study area for the LOS analysis is generally based on intersections and roadway segments where a majority of project trips would be routed. The traffic study area intersections and roadway segments are listed in Table 3.14-1 and Table 3.14-2, respectively.

Intersection Operations

Table 3.14-1 summarizes the results of the intersection analysis for the AM and PM peak hours for existing conditions. As shown in Table 3.14-1, the study intersections are currently operating at satisfactory levels of service (LOS B or better) under existing conditions.

Table 3.14-1. Existing Weekday Peak Hour Intersection LOS

No.	Intersection	Traffic Control	Existing Conditions			
			AM Peak		PM Peak	
			Delay[1]	LOS	Delay[1]	LOS
1	Drew Road/Evan Hewes Road	AWSC	10.3	B	8.7	A
2	Drew Road/I-8 WB Ramps	TWSC	9.8	A	9.9	A
3	Drew Road/I-8 EB Ramps	TWSC	10.7	B	11.5	B
4	Drew Road/Kramar Road	TWSC	9.2	A	9.1	A
5	Drew Road/Diehl Road	TWSC	8.9	A	8.4	A
6	Drew Road/Wixom Road	TWSC	8.6	A	8.6	A

7	Dunaway Road/I-8 EB Ramps	TWSC	9.0	A	9.2	A
8	Dunaway Road/I-8 WB Ramps	TWSC	8.6	A	8.8	A
9	Dunaway Road/Evan Hewes Highway	TWSC	9.1	A	9.1	A
10	Brown Road/Evan Hewes Highway	AWSC	8.8	A	10.0	B
11	Jeffrey Road/Evan Hewes Highway	TWSC	8.5	A	9.9	A
12	Westside Road/Evan Hewes Highway	TWSC	8.6	A	10.7	B
13	Huff Road/Evan Hewes Highway	TWSC	10.8	B	12.1	B
14	Derrick Road/Evan Hewes Highway	TWSC	11.2	B	11.1	B

Source: Appendix I of this EIR
Notes:
AWSC=all-way stop-controlled; EB=eastbound; LOS=Level of Service; TWSC=two-way stop-controlled; WB=westbound
[1] Delay measured in seconds per vehicle for unsignalized intersection (LOS is reported based on the worst delayed movement of the unsignalized intersection).

Roadway Segment Operations

Table 3.14-2 shows the results of the existing condition LOS analysis for the study area roadway segments. As shown in Table 3.14-2, all the study area roadway segments are operating at satisfactory ADT volume-to-capacity conditions under existing conditions.

Table 3.14-2. Existing ADT Roadway Segment Level of Service

No.	Roadway Segment	Classification (as built)	No. of Lanes	Capacity at LOS E	Existing Conditions		
					ADT[1]	V/C	LOS
1	Drew Road, north of I-8 WB Ramps	Minor Collector (Local Collector)	2	16,200	3,033	0.19	B
2	Drew Road, north of Diehl Road	Minor Collector (Local Collector)	2	16,200	33	0.00	A
3	Drew Road, between Diehl Road and Wixom Road	Minor Collector (Local Collector)	2	16,200	191	0.01	A
4	Drew Road, south of Wixom Road	Minor Collector (Local Collector)	2	16,200	319	0.019	A
5	Dunaway Road, between Evan Hewes Hwy and I-8 WB Ramps	Minor Collector (Local Collector)	2	16,200	751	0.05	A
6	Evan Hewes Hwy, between Brown Road and Dunaway Road	Minor Collector (Local Collector)	2	16,200	609	0.04	A

PC ORIGINAL PKG

7	Evan Hewes Hwy, between Westside Road and Huff Road	Minor Collector (Local Collector)	2	16,200	2,613	0.16	B
8	Evan Hewes Hwy, between Derrick Road and Drew Road	Minor Collector (Local Collector)	2	16,200	3,031	0.19	B

Source: Appendix I of this EIR
Notes: ADT=average daily traffic; LOS=Level of Service; Hwy=highway; V/C=volume-to-capacity; WB=westbound
[1] Volume provided from ADT counts conducted in March and September 2024.

3.14.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

State

California Department of Transportation

Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Specifically, Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System.

As it relates to the proposed project and potential construction access routes within the County, Caltrans District 11 is responsible for maintaining and managing I-8.

Regional

SCAG 2020-2045 RTP/SCS (Connect SoCal)

On September 3, 2020, SCAG adopted the 2020-2045 RTP/SCS (SCAG 2020). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2020-2045 RTP/SCS demonstrates how the region will reduce emissions from transportation sources to comply with SB 375 and meet the NAAQS set forth by the Clean Air Act.

The updated RTP/SCS contains thousands of individual transportation Projects that aim to improve the region's mobility and air quality and revitalize the economy. Since the RTP/SCS's adoption, the county transportation commissions have identified new project priorities and have experienced technical changes that are time-sensitive. Additionally, the new amendments for the plan have outlined minor modifications to Project scopes, costs and/or funding and updates to completion years. The amendments to the RTP/SCS do not change any other policies, programs, or projects in the plan.

Local

County of Imperial Circulation and Scenic Highways Element

The Circulation and Scenic Highways Element identifies the location and extent of transportation routes and facilities. It is intended to meet the transportation needs of local residents and businesses

and as a source for regional coordination. The inclusion of Scenic Highways provides a means of protecting and enhancing scenic resources within highway corridors in Imperial County. The purpose of the Circulation and Scenic Highways Element is to provide a comprehensive document which contains the latest knowledge about the transportation needs of the County and the various modes available to meet these needs. Additionally, the purpose of this Element is to provide a means of protecting and enhancing scenic resources within both rural and urban scenic highway corridors.

Coordination across jurisdictional standards for road classification and design standards was identified as a crucial component to the 2008 update of the Circulation and Scenic Highways Element. The intent of this element is to provide a system of roads and streets that operate at a LOS “C” or better (Imperial County Planning and Development 2008).

County of Imperial Bicycle Master Plan Update: Final Plan

In 2012, the County of Imperial adopted an updated Bicycle Master Plan to serve as the guiding document for the development of an integrated network of bicycle facilities and supporting programs designed to link the unincorporated areas and attractive land uses throughout the County. This document is an update to the previously adopted Countywide Bicycle Master Plan; and was prepared to accomplish the following goals:

1. To promote bicycling as a viable travel choice for users of all abilities in the County
2. To provide a safe and comprehensive regional connected bikeway network
3. To enhance environmental quality, public health, recreation and mobility benefits for the County through increased bicycling

The County of Imperial's General Plan, Circulation and Scenic Highways Element, and Conservation and Open Space Element, provide a solid planning basis for the Bicycle Master Plan. In spite of the fact that there are a limited number of bicycle facilities in Imperial County and no comprehensive bicycle system, there is a growing interest in cycling and numerous cyclists bike on a regular basis for both recreation and commuting to work and school.

3.14.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to transportation are considered significant if any of the following occur:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities
- Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access

Methodology

The assessment evaluates the potential for the project, as described in Chapter 2, Project Description, to result in transportation impacts during the construction and operational phases of the project. As

previously mentioned above, information in this section is summarized from the *Transportation Impact Analysis* (TIA) prepared by Dudek. This report is included in Appendix I of this EIR. The TIA prepared for the project includes both a CEQA (VMT) and Non-CEQA (LOS) assessment for the project.

Impact Analysis

Impact 3.14-1 Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

As previously mentioned above, the County of Imperial's new transportation guidelines that are currently under preparation could trigger an update to the Transportation/Circulation Element and the threshold of LOS C for street segments and intersections. However, LOS is not used as metric for determining transportation impacts under CEQA, but is used for determining traffic effects under the County's General Plan. Therefore, the project's LOS has been analyzed in the TIA and this EIR for informational purposes (Appendix I of this EIR).

Construction

Trip Generation

The construction phase of the project is anticipated to take approximately 18 to 24 months. The work would be completed between 6:00 A.M. and 7:00 P.M., Monday through Saturday, and would require a peak of approximately 500 workers and 8 vendor trucks, per day. Approximately 10 percent of the workers were assumed to carpool. Work shifts could begin prior the AM peak period (generally between 7:00 a.m.– 9:00 a.m.) and end after the PM peak period (generally between 4:00 p.m.– 6:00 p.m.). However, to provide a conservative analysis, approximately 80 percent of workers were assumed to arrive in the morning peak hour, and 80 percent are assumed to exit in the afternoon peak hour. Truck traffic to and from the site was evenly distributed assuming the 8-hour workday. It should be noted that these trips are considered temporary as they would not be generated once construction is completed. The project trips are presented in Table 3.14-3.

To address the effect caused by large over-sized trucks onto the roadway network, a factor called the passenger car equivalent (PCE) was developed and represents the number of passenger cars displaced by each truck in the traffic stream under mixed flow conditions. PCE factors generally range from 1.5 to 3.0 based on the number of axles in the truck. A PCE factor of 2.0 has been utilized to convert vendor truck trips, and a PCE factor of 3.0 has been utilized to convert haul truck trips into equivalent car trips for the project construction trip generation analysis. The peak phase of construction shown in includes worker trips and vendor truck trips only and does not include haul truck trips.

As shown in Table 3.14-3, the peak construction phase would temporarily generate approximately 1,016 total daily trips, 362 AM peak hour trips (361 inbound and 1 outbound), and 361 PM peak hour trips (1 inbound and 360 outbound). With the application of PCE factors to truck trips, the project would generate 1,032 total PCE daily trips, and 362 PCE trips during the AM peak hour (360 inbound and 2 outbound) and 364 PCE trips during the PM peak hour (2 inbound and 362 outbound).

Table 3.14-3. Project Construction Trip Generation Summary

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation								
Workers[1]	500 workers	1000	360	0	360	0	360	360
Vendor Trucks[2]	8 trucks	16	1	1	2	1	1	2
Total		**1,016**	**361**	**1**	**362**	**1**	**361**	**362**
Trip Generation w/ PCE								
Workers (1.0 PCE)	500 workers	1000	360	0	360	0	360	360
Vendor Trucks (2.0 PCE)	8 trucks	32	2	2	4	2	2	4
Total (w/ PCE)		**1,032**	**362**	**2**	**364**	**2**	**362**	**364**

Notes: PCE = Passenger car equivalent
1. 10% of all workers assumed to carpool to the site and 20% of the workers assumed to travel in the off-peak for the purposes of this analysis.
2. Vendor trucks assumed to be spread out evenly across the 8-hour workday.
Source: Appendix I of this EIR

TIA Analysis Scenarios

Intersection and roadway segment LOS analyses were prepared for the weekday AM and PM peak hours at the study area intersection and roadway segments for the following analysis scenarios:

- Existing Conditions: includes an LOS analysis of existing weekday AM and PM peak-hour and daily traffic volumes, for the study area intersections and roadway segments. The existing condition is representative of the year 2024. The LOS analysis for Existing Conditions is provided in Section 3.14.1 above.
- Existing plus Project: This condition includes analysis of LOS under existing conditions with project traffic added to the existing AM and PM peak hour and daily traffic volumes.
- Near Term Conditions: This condition includes analysis of LOS under Near Term conditions within a short-term horizon period of approximately three years where the proposed project would be in its construction phase. Near Term traffic volumes (ADT and AM and PM peak hour) include existing traffic volumes and traffic generated by other approved and pending projects in the study area as well as a background or ambient traffic growth.
- Near Term plus Project: This condition includes analysis of LOS under Near Term conditions with project traffic added to the Near-Term AM and PM peak hour and daily traffic volumes.

PC ORIGINAL PKG

EXISTING PLUS PROJECT TRAFFIC OPERATIONS

Intersections. Table 7 in the TIA (Appendix I of this EIR) summarizes the results of the intersection analysis for the AM and PM peak hours for Existing plus Project conditions. As shown in Table 7 of the TIA, the study area intersections are forecast to operate at LOS C or better under Existing plus Project conditions.

Roadway Segments. Table 8 in TIA (Appendix I of this EIR) shows the results of the Existing plus Project conditions LOS analysis for the study area roadway segments of Drew Road with the project-added traffic. As shown in Table 8 in the TIA, all the study area roadway segments are forecast to operate at LOS B or better conditions under Existing plus Project conditions.

NEAR TERM TRAFFIC OPERATIONS

Intersections. Table 11 in the TIA (Appendix I of this EIR) shows the results of the Near-Term condition LOS analysis for the study area roadway segments. As shown in Table 11 in the TIA, all study area intersections are forecast to operate at LOS C or better under Near Term conditions, with the exception of the following roadway segment:

- Derrick Road/Evan Hewes Highway intersection (LOS E - AM peak hour)

Roadway Segments. Table 12 in the TIA (Appendix I of this EIR) shows the results of Near Term condition LOS analysis for the study area roadway segments. As shown in Table 12 in the TIA, all the study area roadway segments are forecast to operate at satisfactory ADT volume-to-capacity conditions under Near Term conditions.

NEAR TERM PLUS TRAFFIC OPERATIONS

Intersections. As shown in Table 13 of Appendix I of this EIR, with the exception of Drew Road/Haskell Road-Evan Hewes Road intersection (in AM and PM peak hours), Drew Road/I-8 eastbound ramps (in PM peak hour) and Derrick Road/Evan Hewes Highway (in AM and PM peak hours), all other the study intersections are forecast to operate at LOS C or better under Near Term plus Project conditions.

Table 13 in the TIA (Appendix I of this EIR) shows the results of the intersection analysis for the AM and PM peak hours for Near Term plus project conditions. As shown in Table 13, all the study intersections are forecast to operate at LOS C or better under Near Term plus Project conditions, with the exception of the following intersections:

- Drew Road/Haskell Road-Evan Hewes Road intersection (LOS F – AM peak hour; LOS D – PM peak hour)
- Drew Road/I-8 eastbound ramps (LOS F – PM peak hour)
- Derrick Road/Evan Hewes Highway (LOS F – AM and PM peak hours)

Because the traffic impact caused by construction traffic from the proposed project under Near Term plus Project conditions at the study area intersections would be temporary and short-term, no roadway improvements are recommended. However, as a condition of approval under the project's CUP(s), a traffic control plan as part of a Construction Traffic Management Plan (CTMP) would be implemented by the project applicant or contractor at the three intersections that operate at LOS D or worse under the proposed project.

Roadway Segments. Table 14 in the TIA (Appendix I of this EIR) shows the results of the Near-Term condition LOS analysis for the study area roadway segments. As shown in Table 14 in the TIA, all the study area roadway segments are forecast to operate at LOS C or better under Near Term plus Project conditions.

Operation

Once the proposed project is complete, the site will be staffed with 4 to 10 onsite employees. During operations, the proposed project would generate up to 20 trips per day. Based on the low amount of operational trips generated and low existing traffic volumes on area roadways, no substantial transportation impacts are anticipated. This is considered a less than significant impact.

Transit, Bicycle, and Pedestrian Facilities

There is no regular bus service to the general area and project-related construction and operations and maintenance phases would not impact mass transit. The project site is in a generally undeveloped area and there are no dedicated pedestrian or bicycle facilities in the vicinity of the project site or along the surrounding street network. Therefore, the proposed project would have no impact on transit, bicycle, or pedestrian facilities.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.14-2 Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The County of Imperial is in the process of creating transportation guidelines for evaluating potential project-related impacts to VMT. In the interim, the OPR's Technical Advisory and CEQA Guidelines Section 15064.3(b) Criteria for Analyzing Transportation Impacts have been used to evaluate the proposed project. It should be noted that the methodology for VMT screening and analysis used in this report is consistent with requirements for VMT analysis of solar and BESS projects that generate temporary construction trips and nominal operational trips.

CEQA Guidelines Section 15064.3(b) focuses on specific criteria (VMT) for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The CEQA Guidelines are accompanied by an OPR Technical Advisory, which includes specifications for how to estimate and forecast VMT for these subdivisions.

The proposed project is not a land use or transportation project, and therefore neither Section 15064.3(b)(1) nor Section 15064.3(b)(2) of the CEQA Guidelines apply. Instead, the proposed project would be categorized under Section 15064.3(b)(3) qualitative analysis. The following paragraph from the Section 15064.3(b)(3) provides guidance regarding qualitative analysis:

> If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

PC ORIGINAL PKG

Construction

The project construction related vehicle-trip generation (for workers and trucks) is summarized in Table 3.14-3. Per OPR, heavy vehicle traffic is not required to be included in the estimation of a project's VMT. Construction-related trips are temporary and would not generate permanent trips. Therefore, for the purposes of this analysis, the VMT from construction is not required to be quantified per SB 743 requirements. The project construction would generally be consistent with typical construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. There would be no special conditions for constructing the project. Further, measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for temporary, construction related VMT.

The regional VMT per employee for the Imperial County region is estimated to be 18.59 VMT per employee per City of El Centro General Plan Update Transportation Impact Study. While worker and vendor trips would generate VMT, once construction is completed, the construction-related traffic would cease and VMT would return to pre-construction conditions. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Sections 15064.3(b)(3), and impacts related to VMT would be less than significant.

Operation

Even though the threshold of Small Projects is used to establish less-than-significant VMT impacts for land development projects, they can be used to screen projects that would generate nominal operation and maintenance traffic. Based on OPR guidance, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact. As mentioned previously, the operation of the project would require 4 to 10 full-time employees and therefore would generate up to 20 daily trips, and therefore would not generate significant VMT. Because the operational phase of the project generates less than 110 daily trips, it would screen out of conducting a detailed VMT analysis.

Therefore, utilizing the guidance provided by OPR, the operation of the project would not generate a significant number of trips and thereby not cause a substantial amount of VMT. Therefore, the operation and maintenance of the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)(1) and 15064.3(b)(3), and impacts related to VMT would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.14-3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would occur on privately-owned land located in a rural area. To accommodate emergency access, PV panels would be spaced to maintain proper clearance. Internal access roads, up to 30 feet wide, would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. Access roads would be graded and compacted (native soils) as required for construction, operations, maintenance, and emergency vehicle access. Additionally, any proposed haul routes would be submitted to the County for approval prior to construction. Therefore, the project would not substantially increase hazards due to a

geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.14-4 Would the project result in inadequate emergency access?

All proposed facilities would be constructed within the property boundaries of the project site and would not affect emergency vehicle access to the facility or any roadway. The project site would include both a primary and secondary access driveway (if required). PV panels would be spaced to maintain proper clearance for emergency access. Internal access roads, up to 30 feet wide, would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. Access roads would be graded and compacted (native soils) as required for construction, operations, maintenance, and emergency vehicle access. The access and service roads would also have turnaround areas at any dead-end to allow clearance for fire trucks per fire department standards. If needed, the access and service roads would also have turnaround areas at any dead-end to allow clearance for fire trucks per fire department standards.

At the time of final design for the project, and as a Condition of Approval of the project, the applicant will submit a final Haul Route Study that identifies what road improvements, if any, are requested by Department of Public Works and a cost estimate. The applicant would work with Department of Public Works to address the appropriate improvements and Applicant's responsibility for the cost of improvements, if required. The haul route study would include the following components:

1. Pictures and/or other documents to verify the existing conditions of the roads proposed to be utilized for haul routes
2. The haul route study shall evaluate impacts and provide recommendations on improvements, as well as quantity and cost estimates for such improvements

The County Department of Public Works will require a Roadway Maintenance Agreement, which would include a requirement that the applicant provide financial security to maintain the road(s) to be utilized during construction as identified on the approved haul route study. The applicant would be responsible to repair any damages caused by construction traffic during construction and maintain the applicable road(s) in a safe condition. The use of the proposed access roads is not otherwise anticipated to increase hazards because of design features or incompatible uses and no significant impact is identified.

Mitigation Measure(s)

No mitigation measures are required.

3.14.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

As presented above, construction traffic would not result in a significant impact on any of the project area roadway segments, intersections, and freeway segments. A similar scenario would occur during the decommissioning and site restoration stage for the proposed project. ADT would be similar to or less than the ADT required for construction. Similarly, the decommissioning activities would not result

in a significant impact related to possible safety hazards, or possible conflicts with adopted policies, plans, or programs as the decommissioning and subsequent restoration would revert the project site to pre-project conditions. Therefore, decommissioning and restoration of the project site would not generate traffic resulting in a significant impact on the circulation network. A less than significant impact is identified and no mitigation is required.

Residual

The construction and operation of the proposed project would not result in direct impacts on intersections, roadway segments, and freeway segments. Therefore, less than significant impacts have been identified. No mitigation is required and no residual unmitigated impacts would occur with implementation of the proposed project.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.15 Tribal Cultural Resources

This section discusses tribal cultural resources that may be potentially impacted by the proposed project. The following identifies the existing cultural resources within the project site, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project.

Information for this section is summarized from the *Cultural Resources Inventory Report* prepared by Dudek. This report is included in Appendix F1 of this EIR.

3.15.1 Existing Conditions

Tribal Cultural Setting

See Section 3.6, Cultural Resources of this EIR and the *Cultural Resources Inventory Report* (Appendix F of this EIR) for a description of the regional ethnohistory.

Sacred Lands File Results

The California Native American Heritage Commission (NAHC) identifies, catalogs, and protects Native American cultural resources on private and public lands in California. Cultural resources include graves, cemeteries, and places of special religious or social significance to Native Americans. The NAHC also records the historical territories of state recognized tribes into a database called the Sacred Lands File (SLF). A records search of the SLF is conducted to ensure that the tribes potentially affected by a project are properly notified and consulted.

A SLF search request was submitted on August 15, 2024 to the California NAHC. The search results were received on August 28, 2024, and were positive. The NAHC response provided contact information for the 13 tribes that may have information on cultural resources on the project site.

Letters requesting information were sent via certified mail on September 3, 2024. Emails were also sent to the contacts in an effort to elicit a quicker response. As of September 3, 2024, the Viejas Band of Kumeyaay Indians have requested to be involved with monitoring efforts. Communication with the remaining tribes is ongoing.

3.15.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the project.

Federal

Native American Graves Protection and Repatriation Act (1990); Title 25, United States Code Section 3001, et seq.

The Native American Graves Protection and Repatriation Act defines “cultural items,” “sacred objects,” and “objects of cultural patrimony;” establishes an ownership hierarchy; provides for review; allows excavation of human remains, but stipulates return of the remains according to ownership; sets penalties; calls for inventories; and provides for the return of specified cultural items.

PC ORIGINAL PKG

State

Assembly Bill 52

AB 52 amends PRC 5097.94, and adds eight new sections to the PRC relating to Native Americans. AB 52 was passed in 2014 and took effect on July 1, 2015. It establishes a new category of environmental impacts that must be considered under CEQA called tribal cultural resources (PRC 21074) and establishes a process for consulting with Native American tribes and groups regarding potential impacts to tribal resources. Under AB 52, a project that may substantially change the significance of a tribal cultural resource is a project that may have a significant impact on the environment. If a project may cause a significant impact on a tribal cultural resource, the lead agency shall implement measures to avoid the impacts when feasible.

Senate Bill 18

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to approvals and amendments of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

Prior to the approval of any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts on, cultural places on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

Public Resources Code Section 21074

PRC Section 21074 defines a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, and any object with cultural value to a California Native American Tribe. A tribal cultural resource must be on or eligible for the CRHR or must be included in a local register of historical resources. The lead agency can determine if a tribal cultural resource is significant even if it has not been evaluated for the CRHR or is not included on a local register.

Assembly Bill 4239

AB 4239, passed in 1976, established the NAHC as the primary government agency responsible for identifying and cataloging Native American cultural resources. The bill authorized the Commission to act in order to prevent damage to and insure Native American access to sacred sites and authorized the Commission to prepare an inventory of Native American sacred sites located on public lands.

Public Resources Code Section 21074

PRC Section 21074 defines a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, and any object with cultural value to a California Native American Tribe. A tribal cultural resource must be on or eligible for the CRHR or must be included in a local register of historical resources. The lead agency can determine if a tribal cultural resource is significant even if it has not been evaluated for the CRHR or is not included on a local register.

PC ORIGINAL PKG

Public Resources Code 5097.97

No public agency and no private party using or occupying public property or operating on public property under a public license, permit, grant, lease, or contract made on or after July 1, 1977, shall in any manner whatsoever interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution; nor shall any such agency or party cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

Public Resources Code 5097.98 (b) and (e)

PRC 5097.98 (b) and (e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until he/she confers with the NAHC-identified most likely descendants (MLD) to consider treatment options. In the absence of MLDs or of a treatment acceptable to all parties, the landowner is required to reenter the remains elsewhere on the property in a location not subject to further disturbance.

California Health and Safety Code, Section 7050.5

California HSC 7050.5 makes it a misdemeanor to disturb or remove human remains found outside a cemetery. This code also requires a project owner to halt construction if human remains are discovered and to contact the County Coroner.

3.15.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to tribal cultural resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to tribal cultural resources are considered significant if the project causes a substantial adverse change in the significance of a tribal cultural resource defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k)
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe

Impact Analysis

Impact 3.15-1 ***Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***

Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)

A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

AB 52 requires a lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic areas of the proposed project. In accordance with AB 52, the County provided notification of the proposed project to Native American tribes that the County understands to be traditionally and culturally affiliated with the geographic area of the proposed project. Notification letters were provided and sent via certified mail on September 3, 2024 and emails were also sent to the contacts in an effort to elicit a quicker response. The County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians have requested to be involved with monitoring efforts. No other responses have been received at this time.

Ray Teran of the Viejas Band of Kumeyaay Indians (“Viejas”) responded via email on September 3, 2024, stating he had reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas. He further noted that cultural resources have been located within or adjacent to the project site and requested that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities. In addition, he requested that Viejas be informed of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains. Implementation of Mitigation Measures CUL-2 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance.

Mitigation Measure(s)

TCR-1 **Discovery of Unidentified Tribal Cultural Resources.** If previously unidentified tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with Imperial County and any interested Tribes, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are determined to be a tribal cultural resource as defined in PRC Section 21074.

PC ORIGINAL PKG

Significance After Mitigation

The proposed project has the potential to impact unidentified tribal cultural resources during construction. However, implementation of Mitigation Measures CUL-2 and TCR-1 would reduce this potential impact to a less than significant level.

3.15.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

At the end of the project's useful life, all equipment and facilities will be properly dismantled. No impact is anticipated from restoration activities as the ground disturbance and associated impacts will have occurred during the construction phase of the proposed project.

Residual

With implementation of Mitigation Measures CUL-2 and TCR-1, potential impacts on unidentified tribal cultural resources would be reduced to a level less than significant. No unmitigable impacts on tribal cultural resources would occur with implementation of the proposed project.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

3.16 Utilities and Service Systems

This section includes an evaluation of potential impacts for identified Utilities/Service Systems that could result from implementation of the project. Utilities/Service Systems include wastewater treatment facilities, stormwater drainage facilities, water supply and treatment, and solid waste disposal. The impact analysis provides an evaluation of potential impacts to Utilities/Service Systems based on criteria derived from CEQA Guidelines in conjunction with actions proposed in Chapter 2, Project Description. The information for this section is summarized, in part, from the draft *Water Supply Assessment* (WSA) prepared for the project by Dudek. This report is included in Appendix J of this EIR.

The IS/NOP prepared for this EIR determined that impacts with regards to solid waste disposal, storm drainage, and wastewater treatment would be less than significant. Therefore, these impacts are not addressed in detail in this EIR; however, the rationale for eliminating these issues is discussed in Chapter 6.0, Effects Found Not Significant.

3.16.1 Existing Conditions

The Imperial Valley area is located within the south-central part of Imperial County and is bound by Mexico on the south, the Algodones Sand Hills on the east, the Salton Sea on the north and San Diego County on the northwest, and the alluvial fans bordering the Coyote Mountains and the Yuha Desert to the southwest. Imperial Valley depends on the Colorado River for its water, which the Imperial Irrigation District (IID) transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Golden State Water (which includes all or portions Calipatria, Niland, and some adjacent Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. The project site is located within IID's Imperial Unit and district boundary and as such is eligible to receive water service.

Imported Water

The sole source of imported water supply in Imperial County is Colorado River water. IID holds senior water rights to Colorado River water and imports raw (untreated) water via the All-American canal, an 80-mile gravity flow canal that conveys an average of approximately 3.1 million acre-feet (MAF), less water transfer obligations, to the Imperial Valley annually. IID provides Colorado River water to customers in their service area via three main branches (the East Highline, Central Main, and Westside Main) and their tributary lateral canals.

The project site is adjacent to the Westside Main Canal. Lateral canals and ditches that intersect the project site include: Fern Side Main, Fig Canal, Fern Canal, Fern Lateral 2, Fern Lateral 3, Foxglove Canal, and Foxglove Lateral 1. Project parcels were historically served imported Colorado River water from IID.

As of April 2025, IID delivers untreated Colorado River water to the project site for agricultural uses through 19 gates and laterals. The 10-year record for 2015-2024 of water delivery accounting is shown in Table 3.16-1. The data documents a 10-year 7,348 acre-feet per year average.

This page is intentionally blank.

PC ORIGINAL PKG

Table 3.16-1. Ten-Year Historic Delivery (AFY), 2015-2024

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Westside Main 14A (Brundy)	319.7	219.7	81.7	372.2	431.2	345.8	280.3	429.1	398.1	546.9
Foxglove 3 (Brundy)	507.3	322.6	530.9	585.1	527.9	502.5	395.6	525.8	477.9	582
Foxglove 1 (Downs)	437	444.7	393.4	391.4	310.8	396.3	401.4	395.2	423.3	437.5
Foxglove 2 (Downs)	426.4	462.5	394.6	386.3	316.3	347.2	413.2	398.1	404.5	465.7
Fern 15 (Gabrych/Kuhn)	431.5	232.1	380.9	310.9	288.5	304.8	356.7	330.4	228.6	243.2
Fern 22 (Gabrych/Kuhn)	793.5	0	0	408.5	993.6	1,029.4	1182.7	838.5	949.5	902.6
Fig 6 (Gabrych/Kuhn)	249.8	221.3	261	287	311.2	177.5	108.6	0	0	255.5
Fig 7 (Gabrych/Kuhn)	430.9	393.4	491	411.3	457.1	450.4	436.4	502.8	365.3	347.4
Fig 12A (Gabrych/Kuhn)	1,133.8	855.4	264	219.1	450.6	760.9	308.6	989.6	264	141.5
Fig 13 (Gabrych/Kuhn)	395.1	268.2	299.4	142.1	142.1	98.8	203.6	487	518.6	587
Fig 18 (Gabrych/Kuhn)	0	0	0	0	0	0	0	0	0	0
Westside Main 13 (LaValle Sabbia)	1,325.8	1,314.1	1,155.7	1,302.3	1,206.9	903.1	1,310.7	1,620.2	1,258.2	936.6
Westside Main 13A (LaValle Sabbia)	0	544.7	914.1	887.5	719.2	771.6	953.7	931.7	888.8	648.7

PC ORIGINAL PKG

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fern 17 (Tomlinson)	243.1	290.8	373.5	386.4	165.2	253.2	333	329	230.5	48.1
Fern 18 (Tomlinson)	27.9	69.6	113	52.8	37.9	43	46.8	47.4	131	8
Fern 20 (Tomlinson)	148.6	149.7	248.2	192.2	150.1	126.1	203.5	204.8	132.8	29.9
Fern 23 (Tomlinson)	638.4	603.1	827.6	811	817.6	603.1	680.4	778.8	209.4	0
Fern 29 (Tomlinson)	155	178.6	251.1	203.6	220.2	173.6	234.8	250.9	134.4	34.9
Fern FSM 12A (Whitmer)	0	0	0	0	0	0	0	0	0	0
TOTAL	**7,663.8**	**6,570.5**	**6,980.1**	**7,349.7**	**7,546.4**	**7,287.3**	**7,778**	**9,059.3**	**7,014.9**	**6,215.5**

Source: Appendix J of this EIR

PC ORIGINAL PKG

Groundwater

The project site overlies the Imperial Valley Groundwater Basin (Basin), which is designated by the Department of Water Resources (DWR) as a very low priority basin with respect to the Sustainable Groundwater Management Act. Accordingly, groundwater is not managed under a Groundwater Sustainability Plan. Groundwater usage is regulated by Imperial County's Groundwater Ordinance contained in Title 9, Division 22, of the Land Use Ordinance, Section 92201.01. The Basin is located in the southeastern part of California and extends from the Salton Sea south to the international border with Mexico. The Basin covers approximately 1,200,000 acres, or 1,870 square miles (California Department of Water Resources 2004)).

3.16.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

State

Senate Bill 610

With the introduction of Senate Bill 610, any project under CEQA shall provide a WSA if:

- The project meets the definition of the Water Code Section 10912:

  For the purposes of this part, the following terms have the following meanings:

  (a) ‘‘Project’’ means any of the following:

  (1) A proposed residential development of more than 500 dwelling units.

  (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.

  (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

  (4) A proposed hotel or motel, or both, having more than 500 rooms.

  (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

  (6) A mixed-use project that includes one or more of the projects specified in this subdivision.

  (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

  (b) If a public water system has fewer than 5,000 service connections, then ‘‘project’’ means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that

would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

After review of Water Code Section 10912, the proposed project is deemed a "project" because it is a proposed industrial use occupying more than 40 acres of land.

California Water Code

Water Code Sections 10656 and 10657 restrict state funding for agencies that fail to submit their urban water management plan to the DWR. In addition, Water Code Section 10910 describes the WSA that must be undertaken for projects referred under PRC Section 21151.9, including an analysis of groundwater supplies. Water agencies are given 90 days from the start of consultation in which to provide a WSA to the CEQA lead agency. Water Code Section 10910 also specifies the circumstances under which a project for which a WSA was once prepared would be required to obtain another assessment. Water Code Section 10631, directs that contents of the urban water management plans include further information on future water supply projects and programs and groundwater supplies.

Local

Imperial Integrated Regional Water Management Plan

The Imperial Integrated Regional Water Management Plan (Imperial IRWMP) serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the City of Imperial City Council and the IID Board of Directors approved it in December 2012. Approval by these 3 stakeholders met the basic requirement of California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.

Importantly, the Imperial IRWMP provides an assessment of the primary water resource challenges facing the Imperial Valley and their impact on long-term water supplies. As described in Chapter 5 of the Imperial IRWMP, the primary water resource challenge facing the Imperial Valley is long-term availability of Colorado River water. Multiple investigators have evaluated the impacts of climate change on flows in the Colorado River and estimate that Colorado River flows may decrease by 1 million acre-feet (MAF) to 3 MAF annually. This anticipated reduction in flows, "should not impact IID's Priority 3(a) quantified amount of 3.1 MAFY of Colorado River water as reported at Imperial Dam" (IID 2012).

While IID does not anticipate that reduced Colorado River water flows will impact their appropriation of Colorado River water, the Imperial IRWMP notes that future water demands may exceed the 3.1 MAF annual Priority 3(a) quantified appropriative right. To address this, the Imperial IRWMP identifies a suite of projects that aim to:

- Expand the size of the Imperial Valley water supply portfolio
- Prevent or recapture water leaving the region
- Reapportion water within the water supply portfolio (IID 2012)

PC ORIGINAL PKG

Implementation of the Imperial IRWMP provides an opportunity to actively prioritize projects, evaluate the need to implement these projects, and identify funding opportunities.

Equitable Distribution Plan

IID's Equitable Distribution Plan apportions available water supply by Category (Agricultural, Potable Water User, and Industrial/Commercial Water User) and provides a framework for: (1) receiving Colorado River water apportionment, (2) aggregating apportionment between farms, (3) transferring agricultural water between agricultural users, and (4) receiving IID On-Farm Efficiency Conservation Program or Fallowing Program benefits. Implementation of this program is a critical component of IID's implementation of on-farm conservation and temporary fallowing programs.

Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects

The IID Interim Water Supply Policy (IWSP) provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP designates up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects. The IWSP provides a mechanism and process to develop a water supply agreement for any appropriately permitted project, and establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed to offset the new demand.

Depending on the nature, complexity and water demands of the project, new projects may be charged a one-time Reservation Fee and annual Water Supply Development Fees for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project.

IID customers with new projects receiving water under the IWSP will be charged the appropriate water delivery rate based on measured deliveries. As of March 2025, IID has issued two water supply agreements and one "Will-Serve Letter" under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP (Appendix J of this EIR).

Temporary Land Conversion Fallowing Policy

Water demands for certain non-agricultural projects are typically less than those required for agricultural operations. To support conservation and provide additional water for other uses under IID's consumptive use cap, IID developed the Temporary Land Conversion Fallowing Policy. The Temporary Land Conversion Fallowing Policy supplements the IWSP for Non-Agricultural Projects and is consistent with the IID's Equitable Distribution Plan. Water conserved through this program can be used by IID to satisfy IID's conserved water obligation and for environmental mitigation purposes.

County of Imperial General Plan

The Imperial County General Plan provides goals, objectives, policies, and programs regarding the preservation and use of water. Table 3.16-2 provides a consistency analysis of the applicable Imperial County General Plan goals and objectives from the Conservation and Open Space Element, and Renewable Energy and Transmission Element, as they relate to the proposed project. While the EIR analyzes the project's consistency with the General Plan pursuant to CEQA Guidelines

PC ORIGINAL PKG

Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.16-2. County of Imperial General Plan Consistency Analysis – Water Service

Applicable General Plan Goals and Policies	Consistency Determination	Analysis
Conservation and Open Space Element		
Preservation of Water Resources, Goal 6: The County will conserve, protect, and enhance water resources in the County.	Consistent	Since the project would temporarily convert agricultural land into a non-agricultural use, the proposed project would reduce the need for IID to fallow irrigation; thereby, reducing agricultural water demand.
Preservation of Water Resources, Objective 6.4: Eliminate potential surface and groundwater pollution through regulations as well as educational programs.	Consistent	Currently, groundwater quality in the region is poor. However, since the project would temporarily convert farmland into a non-agricultural use, the project would reduce the amount of water used on site; thereby, reducing potential surface and groundwater pollution from agricultural uses. Additionally, the project would be required to comply with NPDES permits and regulations to address pollutants from run-off that may result during construction and operation of the proposed project.
Renewable Energy and Transmission Element		
Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.	Consistent	Water for the project site will be used on-site during construction and operation for potable, non-drinking non-potable water needs. Additionally, as further detailed in Section 3.16.3, the project would result in a decrease in water use compared to the current active agricultural uses on the project site.

Source: County of Imperial 2016; 2015b.
IID = Imperial Irrigation District; NPDES = National Pollutant Discharge Elimination System

3.16.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to utilities and service systems are considered significant if any of the following occur:

Water Supply

- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Methodology

The WSA (Appendix J of this EIR) was prepared using project-specific data to calculate the project's water consumption during construction and at build-out collectively ("operational").

PC ORIGINAL PKG

Impact Analysis

Impact 3.16-1 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for Municipal, Commercial, and Industrial (MCI) temporary water use. Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the project Applicant will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which provides IID the information needed to manage the IID-apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts.

Water for the proposed project will be needed on-site for operational demands including the O&M building, fire flow storage, and panel washing (no water for dust suppression during operation required). Untreated Colorado River water will be supplied to the project site via the adjacent Westside Main Canal and 19 delivery gates (listed in Table 3.16-1which are assumed to be in good condition. The proposed project is estimated to require up to 10 AFY over 30 years. The project's operational water uses are shown in Table 3.16-3.

The proposed project's water demand is a decrease of 7,338 AFY from the historical 10-year average (7,348 AFY) or 99.9 percent less than the historic 10-year average annual delivery for agricultural uses at the project site.

Table 3.16-3. Project Operational Water Uses (AFY)

Use	Acre-Feet per Year	Total AF Over 30-Year Period
Water for Landscape Irrigation	0	0
Water for Dust Control	0	0
Water for Operation and Maintenance (30 years)	10	300
TOTAL RAW WATER USAGE	**10**	**300**

Source: Appendix J of this EIR

Imperial County estimates a cumulative, non-agricultural project water supply demand increase of up to 63,243 AFY within the foreseeable 30-year planning period, within its jurisdiction. However, all new non-agricultural projects, including the proposed project, are required to mitigate their respective water supply demand via conservation programs or conservation projects in order to receive future water apportionments.

New, non-agricultural projects may be susceptible to delivery cutbacks when an EDP Apportionment is exhausted, thus all approved projects require best management practices and water use efficiency at all times. Given the prolonged drought conditions and recent communication to IID from the Department of the Interior, reductions to all basin contractors, including IID and its water customers, are increasingly likely. If such reductions were to come

into effect within an approved project's operation, the County of Imperial will work with IID to ensure any anticipated reduction can be managed via conservations programs or conservation projects.

IID's quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID's use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including seepage recovery from IID canals and the All-American Canal and measures to reduce operational discharge. Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including the proposed project for the next 20 years and for the life of the proposed project under a water supply consistent with the district's full entitlement.

Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). In the event that IID determines that the proposed project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. IID has adopted an IWSP for non-agricultural projects from which water supplies can be contracted to serve new non-agricultural developments within IID's water service area. The IWSP sets aside 25,000 AFY of IID's Colorado River water supply to serve new non-agricultural projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID. Under any fully executed water supply agreement, IID has the capacity to procure or develop water supplies for the project through the implementation of policies, the construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions, including the requisite environmental permitting.

The project's operational water demand of approximately 10 AFY represents 0.054 percent of the unallocated supply that may be set aside for additional conservation and contracting under the IWSP for non-agricultural projects, and approximately 0.016 percent of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed project represents a 99.9 percent decrease from the 10-year historical average agricultural water use for 2015-2024 at the project site.

The historical stability of the IID water supply, the amount of foreseeable water available, along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers suggest that the proposed project's water needs will be reasonably met for the next 20 years as assessed for compliance under SB-610.

Thus, the proposed project's estimated water demand would not affect IID's ability to provide water to other users in IID's water service area. Therefore, the proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources, and impacts would be less than significant.

PC ORIGINAL PKG

Mitigation Measure(s)

No mitigation measures are required.

3.16.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Similar to construction, water for decommissioning (primarily for dust control) is anticipated to be obtained from IID canals or laterals in conformance with IID rules and regulations for MCI temporary water use. Decommissioning activities is anticipated to last approximately one year in duration and require less water than construction activities. Due to the relatively short-term duration of decommissioning, the project is not anticipated to affect IID's ability to provide water to other users in IID's water service area. The proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources, and impacts would be less than significant.

Residual

The proposed project would not result in significant impacts on the water supply of Imperial County; therefore, no mitigation is required. The proposed project will not result in residual impacts.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

4 Analysis of Long-Term Effects

4.1 Growth-Inducing Impacts

In accordance with Section 15126.2(e) of CEQA Guidelines, an EIR must:

> *"discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are Projects which would remove obstacles to population growth ... Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some Projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

Projects promoting direct growth will impose burdens on a community by directly inducing an increase in population or resulting in the construction of additional developments in the same area. For example, projects involving expansions, modifications, or additions to infrastructure, such as sewer, water, and roads, could have the potential to directly promote growth by removing existing physical barriers or allowing for additional development through capacity increases. New roadways leading into a previously undeveloped area directly promote growth by removing previously existing physical barriers to development and a new wastewater treatment plant would allow for further development within a community by increasing infrastructure capacity. Because these types of infrastructure projects directly serve related projects and result in an overall impact to the local community, associated impacts cannot be considered isolated. Indirect growth typically includes substantial new permanent employment opportunities and can result from these aforementioned modifications.

The proposed project is located within the unincorporated area of Imperial County and it does not involve the development of permanent residences that would directly result in population growth in the area. The unemployment rate in Imperial County, as of January 2025 was 17.9 percent (State of California Employment Development Department 2025). The applicant expects to utilize construction workers from the local and regional area, a workforce similar to that involved in the development of other utility-scale solar facilities. Based on the unemployment rate, and the availability of the local workforce, construction of the proposed project would not have a growth-inducing effect related to workers moving into the area and increasing the demand for housing and services. Once construction is completed, no permanent construction workers would be hired. The proposed project would employ 4 to 10 full-time personnel to maintain the project facility 7 days a week during normal daylight hours. As such, the proposed project would not induce substantial population growth in the area.

While the proposed project would contribute to energy supply, which indirectly supports population growth, the proposed project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, it would also replace existing sources of non-renewable energy. Unlike a gas-fired power plant, the proposed project is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts, consistent with the findings and declarations in SB 100 that a benefit of the Renewable Portfolio

Standard is displacing fossil fuel consumption within the state. The project is being proposed in response to state policy and legislation promoting development of renewable energy.

The proposed project would supply energy to accommodate and support existing demand and projected growth, but the energy provided by the project would not foster any new growth because (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the project site; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project (CEQA Guidelines Appendix F(II); PRC Section 21100(b)(3)). However, the relationship between the proposed project's increased electrical capacity and the growth-inducing impacts outside the surrounding area is too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 CCR Section 15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in Napa Citizens for Honest Gov't v. Napa County Board of Supervisors, 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth" *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the proposed project's growth-inducing effects cannot be resolved by collection of further data because of the diversity of factors affecting growth.

While this document has considered that the proposed project, as an energy project, might foster regional growth, the particular growth that could be attributed to the proposed project is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the proposed project. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the proposed project's contribution of additional electrical capacity. The County of Imperial has not adopted a threshold of significance for determining when an energy project is growth-inducing. Further evaluation of this impact is not required under CEQA.

Additionally, the project would not involve the development of any new local or regional roadways, new water systems, or sewer; and thus, the project would not further facilitate additional development into outlying areas. For these reasons, the proposed project would not be growth-inducing.

4.2 Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines Section 15126.2(d), an EIR must identify any significant irreversible environmental changes that would be caused by implementation of the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses.

Energy resources needed for the construction of the proposed project would contribute to the incremental depletion of renewable and non-renewable resources. Resources, such as timber, used in building construction are generally considered renewable and would ultimately be replenished. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the project. Thus, the project would irretrievably commit resources over the anticipated 30-year life of the project.

PC ORIGINAL PKG

At the end of the project's operation term, the applicant may determine that the project should be decommissioned and deconstructed. Should the project be decommissioned, the project applicant is required to restore land to its pre-project state. Consequently, some of the resources on the site could potentially be retrieved after the site has been decommissioned. Concrete footings, foundations, and pads would be removed and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. The applicant anticipates using the best available recycling measures at the time of decommissioning.

Implementation and operation of the proposed project would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources. Additionally, the project is consistent with the state's definition of an "eligible renewable energy resource" in Section 399.12 of the California Public Utilities Code and the definition of "in-state renewable electricity generation facility" in Section 25741 of the California PRC.

4.3 Significant and Unmitigable Impacts

In accordance with CEQA Guidelines Section 15126(c), EIRs must include a discussion of significant environmental effects that cannot be avoided if the proposed project is implemented. The impact analysis, as detailed in Section 3 of this EIR, concludes that no significant and unmitigable impacts were identified. Where significant impacts have been identified, mitigation measures are proposed, that when implemented, would reduce the impact level to less than significant.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

5 Cumulative Impacts

The CEQA Guidelines (Section 15355) define a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The CEQA Guidelines [Section 15130(a)(1)] further states that "an EIR should not discuss impacts which do not result in part from the project."

Section 15130(a) of the CEQA Guidelines provides that "[A]n EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable..." Cumulatively considerable, as defined in Section 15065(a)(3), "means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

An adequate discussion of significant cumulative impacts requires either: (1) "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or (2) "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact."

The CEQA Guidelines recognize that cumulative impacts may require mitigation, such as new rules and regulations that go beyond project-by-project measures. An EIR may also determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Lead Agency must identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable (CEQA Guidelines Section 15130(a)(3)).

This EIR evaluates the cumulative impacts of the project for each resource area, using the following steps:

1. Define the geographic and temporal scope of cumulative impact analysis for each cumulative effects issue, based on the project's reasonably foreseeable direct and indirect effects.
2. Evaluate the cumulative effects of the project in combination with past and present (existing) and reasonably foreseeable future projects and, in the larger context of the Imperial Valley.
3. Evaluate the project's incremental contribution to the cumulative effects on each resource considered in Chapter 3, Environmental Analysis. When the project's incremental contribution to a significant cumulative impact is considerable, mitigation measures to reduce the project's "fair share" contribution to the cumulative effect are discussed, where required.

5.1 Geographic Scope and Timeframe of the Cumulative Effects Analysis

The geographic area of cumulative effects varies by each resource area considered in Chapter 3. For example, air quality impacts tend to disperse over a large area, while traffic impacts are typically more localized. Similarly, impacts on the habitats of special-status wildlife species need to be considered within its range of movement and associated habitat needs.

The analysis of cumulative effects in this EIR considers a number of variables including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the project site and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects of a project, but not beyond the scope of the direct and indirect effects of that project.

The cumulative development scenario includes projects that extend through year (2030), which is the planning horizon of the County of Imperial General Plan. Because of uncertain development patterns that are far in the future, it is too speculative to accurately determine the type and quantity of cumulative projects beyond the planning horizon of the County's adopted County General Plan. Evaluating the proposed project's cumulative impacts when future facility decommissioning occurs is highly speculative because decommissioning is expected to occur in 20 to 25 years' time. Therefore, cumulative impacts during decommissioning are speculative for detailed consideration in this analysis.

5.2 Projects Contributing to Potential Cumulative Impacts

The CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the projects are to be considered: the use of a list of past, present, and probable future projects (the "list approach") or the use of adopted projections from a general plan, other regional planning document, or certified EIR for such a planning document (the "plan approach").

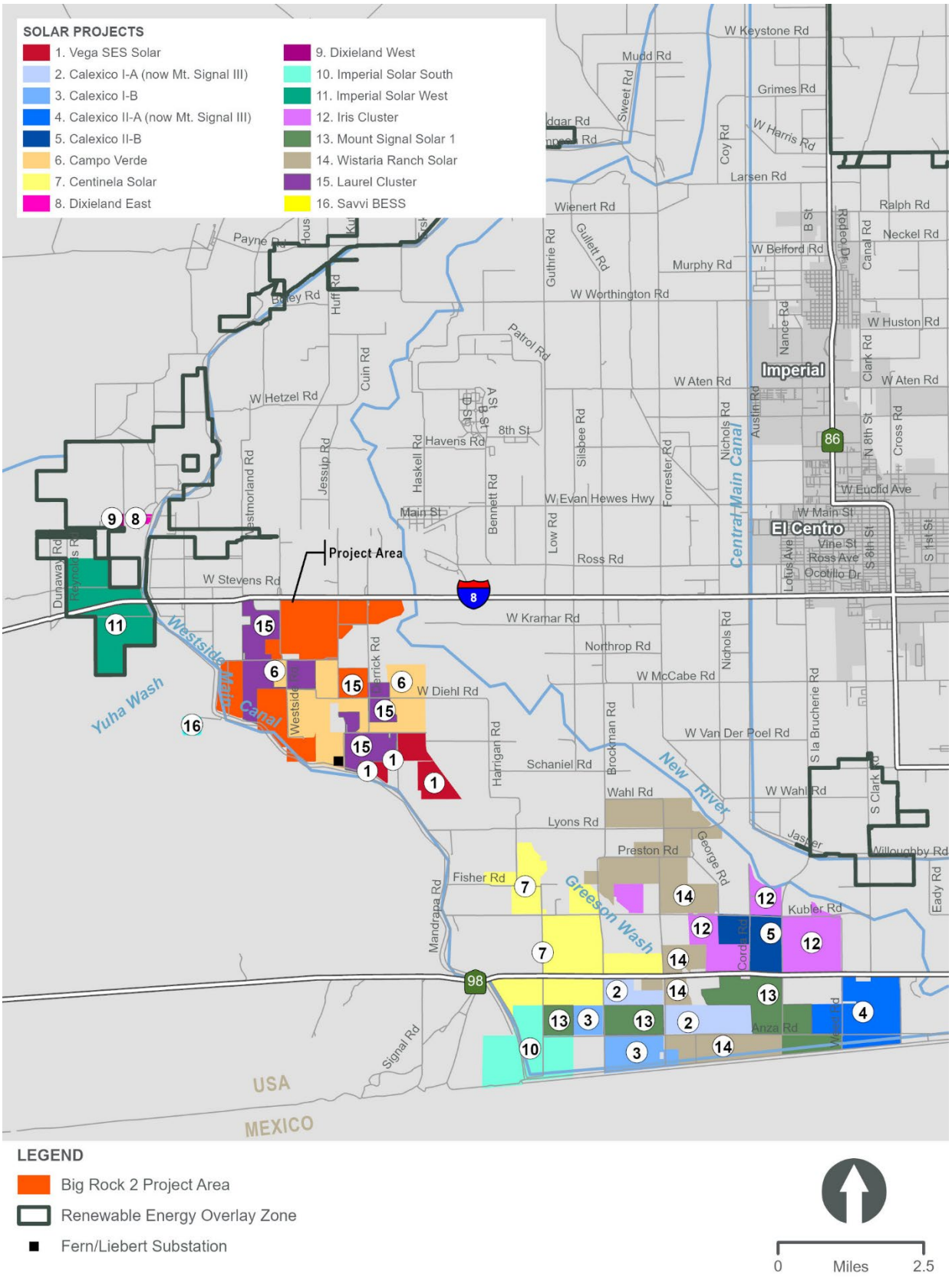
For this EIR, the list approach has been utilized to generate the most reliable future projections of possible cumulative impacts. When the impacts of the project are considered in combination with other past, present, and future projects to identify cumulative impacts, the other projects considered may also vary depending on the type of environmental impacts being assessed. As described above, the general geographic area associated with different environmental impacts of the project defines the boundaries of the area used for compiling the list of projects considered in the cumulative impact analysis. Figure 5-1 provides the general location for each of these projects in relation to the project site.

5.3 Cumulative Impact Analysis

This cumulative impact analysis utilizes an expanded list method (as defined under CEQA) and considers environmental effects associated with those projects identified in Table 5-1 in conjunction with the impacts identified for the project in Chapter 3 of this EIR. Table 5-1 includes projects known at the time of release of the NOP of the Draft EIR, as well as additional projects that have been proposed since the NOP date. Figure 5-1 provides the general location for each of these projects in relation to the project site.

PC ORIGINAL PKG

Figure 5-1. Cumulative Projects



This page is intentionally blank.

PC ORIGINAL PKG

Table 5-1. Projects Considered in the Cumulative Impact Analysis

Map Label[1]	Project Name	Project Type	Distance from Big Rock 2 Project Site	Size (Acres)	Capacity (MW)	Status[2]
1	VEGA SES Solar Energy Project	PV Solar Facility and BESS	Approximately 0.4 miles east	574	100 PV Solar/100 BESS	Pending Construction
2	Calexico I-A (now Mount Signal III)	PV Solar Facility	Approximately 6.1 miles southeast	719	100	Operational
3	Calexico I-B	PV Solar Facility	Approximately 6 miles southeast	610	100	Operational
4	Calexico II-A (now Mount Signal III)	PV Solar Facility	Approximately 9.5 miles southeast	940	100	Operational
5	Calexico II-B	PV Solar Facility	Approximately 7 miles southeast	530	100	Operational
6	Campo Verde	PV Solar Facility	This site borders of BR2	1,443	140	Operational
7	Centinela Solar	PV Solar Facility	Approximately 3.4 miles southeast	2,067	275	Operational
8	Dixieland East	PV Solar Facility	Approximately 2.6 miles northwest	31	2	Operational
9	Dixieland West	PV Solar Facility	Approximately 2.8 miles northwest	32	3	Operational
10	Imperial Solar South	PV Solar Facility	Approximately 5.4 miles southeast	946.6	200	Operational
11	Imperial Solar West	PV Solar Facility	Approximately 1.1 miles west	1,130	250	Operational
12	Iris Cluster	PV Solar Facility	Approximately 5.5 miles southeast	1,422	360	Operational
13	Mount Signal Solar I	PV Solar Facility	Approximately 5.7 miles southeast	1,431	200	Operational
14	Wistaria Ranch Solar	PV Solar Facility	Approximately 5 miles southeast	2,661	250	Operational
15	Laurel 1	PV Solar Facility	This site borders BR2			Pending Construction
	Laurel 2	PV Solar Facility	This site borders BR2			Pending Construction

PC ORIGINAL PKG

Table 5-1. Projects Considered in the Cumulative Impact Analysis

Map Label[1]	Project Name	Project Type	Distance from Big Rock 2 Project Site	Size (Acres)	Capacity (MW)	Status[2]
	Laurel 3	PV Solar Facility	This site borders BR2	1,396 (combined total for Laurel 1, 2, and 3)	325 (combined total for Laurel 1, 2, and 3)	Pending Construction
16	Saavi BESS	BESS	Approximately 0.5 mile west	39.25	400	Pending Entitlement

1 – See Figure 5-1 for cumulative project location.

2 – Project status based on information provided by County staff and on Imperial County Planning & Development Service's RE Geographic Information System Mapping Application (https://icpds.maps.arcgis.com/apps/webappviewer/index.html?id=0d869c18d11645cc918391fdcac24b80). Accessed on December 12, 2024.

BESS – Battery Energy Storage System; BR2=Big Rock 2; IID – Imperial Irrigation District; MW – megawatts; PV – photovoltaic

PC ORIGINAL PKG

5.3.1 Aesthetics

The cumulative study area for projects considered in the visual resources cumulative impact analysis considers a 5-mile radius from the project site. Views beyond 5 miles are obstructed by a combination of the flat topography coupled with the Earth's curvature. The short-term visual impacts of the project would be in the form of general construction activities including grading, use of construction machinery, and installation of the transmission poles and stringing of transmission lines, but would only be available to a very limited amount of people and would have to be in relative close proximity to the project site. Longer-term visual impacts of the project would be in the form of the presence of solar array grids, an electrical distribution and transmission system, and substation.

As provided in Section 3.2, Aesthetics, the existing visual character of the project site and the quality of views in terms of visibility beyond the site would not be substantially altered. The primary visual change that would be experienced by viewers in the surrounding area is the introduction of numerous rows of orderly solar panels, and installation of fencing along the site perimeter. The visual changes associated with the project would not be located in proximity to any designated scenic vistas or scenic highways. Project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to the approved but not yet constructed Laurel Solar 3 and 4 Projects and the existing operational Campo Verde Solar Facility that have altered the existing landscape in the project vicinity. Further, the project site would be restored to its existing condition following the decommissioning of the solar uses. As a result, although the visual character of the project site would change from undeveloped to one with developed characteristics, a less than significant impact associated with the proposed project has been identified.

Development of the proposed project in conjunction with the cumulative projects identified in Table 5-1 will gradually change the visual character of this portion of the Imperial Valley. However, projects located within private lands and/or under the jurisdiction of the County of Imperial are being designed in accordance with the County of Imperial's General Plan and Land Use Ordinance, which includes policies to protect visual resources in the County.

Finally, all projects listed in Table 5-1 would not produce a substantial amount of light and glare, as no significant source of light or glare is proposed. The project will otherwise comply with the County lighting ordinance, as would all other related projects. Based on these considerations, there would be no significant cumulatively considerable aesthetic impact, and cumulative aesthetic impacts would be less than significant.

5.3.2 Agricultural Resources

Cumulative impacts on agricultural resources take into account the proposed project's temporary impacts as well as those likely to occur as a result of other existing, proposed and reasonably foreseeable projects. To determine cumulative impacts on agricultural resources, an assessment is made of the temporal nature of the impacts on individual resources (e.g., temporary such as in solar projects versus permanent as in industrial or residential developments) as well as the inventory of agricultural resources within the cumulative setting.

As discussed in Section 3.3, Agricultural Resources, implementation of the project would result in the temporary conversion of land currently under or available for agricultural production to non-agricultural uses:

PC ORIGINAL PKG

- 973.24 acres of Prime Farmland
- 753.80 acres of Farmland of Statewide Importance
- 0.06 acres of Unique Farmland

Thus, the proposed project would incrementally add to the temporary conversion of agricultural land in Imperial County. According to the California Department of Conservation, in 2020, approximately 519,891 acres out of a total of 1,028,522 acres in Imperial County is classified as Important Farmland (California DOC n.d.). Table 5-2 summarizes the percentage of each type of farmland in the County that would be converted by the proposed project.

Table 5-2. Percentage Conversion of Farmland by Proposed Project

Agriculture Classification	Total Acreage in Imperial County (2020)	Approximate Acreage Converted on Project Site	Project Percentage of County Acreages
Prime Farmland	188,365	973.24	0.52
Farmland of Statewide Importance	289,002	753.80	0.26
Unique Farmland	1,767	0.06	0.00
Farmland of Local Importance	40,757	65.08	0.16
Total	**519,891**	**1,792.18**	**0.94**

Source: California DOC 2020

As shown in Table 5-2, the Prime Farmland and Farmland of Statewide Importance within the project site comprises approximately 0.78 percent (0.52 + 0.26) of the total Important Farmland in the County. Thus, the proposed project would temporarily convert a very small fraction of the total Important Farmlands in the County and have a minimal effect on agricultural land on a cumulative scale. Furthermore, the conversion would be temporary and last for the duration of the project's useful life which is expected to be up to 30 years.

Development of the solar energy facility, BESS, and supporting infrastructure is subject to the County's zoning ordinance. The project site is located on 24 privately-owned legal parcels zoned A-2, A-2-RE, A-2-R, A-2-R-RE, A-3, and A-3-RE.

Pursuant to Title 9, Division 5, Chapter 8, the following uses are permitted in the A-2 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kv)*
- *Facilities for the transmission of electrical energy (100-200 kv)*

PC ORIGINAL PKG

- *Resource extraction and energy development as per Division 17*
- *Solar energy electrical generator*

Pursuant to Title 9, Division 5, Chapter 9, the following uses are permitted in the A-3 zone subject to approval of a CUP from Imperial County:

- *Battery Storage Facility (must be connected to an existing electrical power generation plant such as solar, geothermal, wind, natural gas, or other renewable energy generator, as an accessory unit to said power plant). The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Communication Towers: including radio, television, cellular, digital, along with the necessary support equipment such as receivers, transmitters, antennas, satellite dishes, relays, etc.*
- *Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to be approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters, meeting the requirements in Division 17. The maximum allowance of battery shall be in a ratio of 2 to 1 compared to solar.*
- *Solar energy plants meeting the requirements in Division 17*

Upon approval of a CUPs, the project's uses would be consistent with the Imperial County Land Use Ordinance and thus, is also consistent with the General Plan land use designations of the site. Additionally, as a condition of project approval, the project applicant or its successor in interest will be responsible for implementing a reclamation plan when the project is decommissioned at the end of its lifespan.

As discussed in Section 3.3, Agricultural Resources, Mitigation Measure AG-1a (Payment of Agricultural and Other Benefit Fees), AG-1b (Site Reclamation Plan), and AG-2 (Pest Management Plan) would be implemented to reduce potential impacts on agricultural resources to a level less than significant. Each individual cumulative project would be or would have been required to provide mitigation for any impacts on agricultural resources in accordance with the County's policies directed at mitigating the impact associated with the conversion of important farmlands. Therefore, the project's contribution to this impact would be less than cumulatively considerable.

5.3.3 Air Quality

Imperial County is used as the geographic scope for analysis of cumulative air quality impacts. As shown in Table 5-1, many of the cumulative projects are large-scale renewable energy generation projects, where the main source of air emissions would be generated during the construction phases of these projects; however, there would also be limited operational emissions associated with operations and maintenance activities for these facilities. Additionally, a majority of the projects listed in Table 5-1 are already constructed and operational. Therefore the potential for a cumulative, short-term air quality impact as a result of construction activities is anticipated to be less than significant.

Currently, the SSAB is either in attainment or unclassified for all federal and state air pollutant standards with the exception of 8-Hour $O_3$and $PM_{2.5}$.

PC ORIGINAL PKG

The AQAP for the SSAB, through the implementation of the AQMP and SIP for PM_{10}, sets forth a comprehensive program that will lead the SSAB into compliance with all federal and state air quality standards. With respect to PM_{10}, the ICAPCD implements Regulation VIII – Fugitive Dust Rules, to control these emissions and ultimately lead the basin into compliance with air standards, consistent with the AQAP. Within Regulation VIII are Rules 800 through 806, which address construction and earthmoving activities, bulk materials, carry-out and track-out, open areas, paved and unpaved roads, and conservation management practices. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:

- Phasing of work in order to minimize disturbed surface area;
- Application of water or chemical stabilizers to disturbed soils;
- Construction and maintenance of wind barriers; and
- Use of a track-out control device or wash down system at access points to paved roads.

Compliance with Regulation VIII is mandatory on all construction sites, regardless of size. However, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the air district is required 10 days prior to the commencement of any construction activity.

Construction

The proposed project would generate air emissions due to vehicle and dust emissions associated with construction activities. Similar effects would also be realized upon site decommissioning, which would be carried out in conjunction with the project's restoration plan, and subject to applicable ICAPCD standards. Likewise, the other cumulative projects that are pending construction (Laurel I, Laurel II, and Laurel III), or pending entitlement (Saavi BESS) identified in Table 5-1 would result in the generation of air emissions during construction activities.

With respect to the proposed project, during the construction and decommissioning phases, the project would generate PM_{10}, $PM_{2.5}$, ROG, CO, and NO_X emissions during each active day of construction.As discussed in Section 3.4, Air Quality, the emissions of criteria pollutants from project construction activities would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would minimize construction emissionsWith implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

The proposed project, in conjunction with the construction of other cumulative projects as identified in Table 5-1, could result in a cumulatively considerable increase in the generation of PM_{10}, $PM_{2.5}$, and NO_x; however, like the proposed project, cumulative projects would be subject to mitigation pursuant to County ICAPCD's Regulations and Rules, and the cumulative impact would be reduced to a level less than significant through compliance with these measures. Because the project will be required to implement measures consistent with ICAPCD regulations designed to alleviate the cumulative impact associated with PM_{10}, the proposed project's contribution is rendered less than cumulatively considerable and is therefore, less than significant.

PC ORIGINAL PKG

Operation

As the proposed project would have no major stationary emission sources and would require minimal vehicular trips, operation of the proposed solar facility would result in substantially lower emissions than project construction. The project's operational emissions would not exceed the Tier I thresholds; therefore, the impact would be less than significant. Operational impacts of other renewable energy facilities identified in Table 5-1 would also be similar. Although these cumulative projects generally involve large areas, their operational requirements are very minimal, requiring minimal staff or use of machinery or equipment that generate emissions. Further, alternative energy projects, such as the project, would assist attainment of regional air quality standards and improvement of regional air quality by providing clean, renewable energy sources. Consequently, the projects would provide a positive contribution to the implementation of applicable air quality plan policies and compliance with EO S-3-05.

However, from a cumulative air quality standpoint, the potential cumulative impact associated with the generation of O_3, $PM_{2.5}$ and PM_{10} emissions during operation of the cumulative projects is a consideration because existing O_3 and PM_{10} levels in the SSAB are at unhealthy levels during certain periods. Imperial County is classified as non-attainment for $PM_{2.5}$ for the urban areas of Imperial County. However, the project's operational contribution to O_3, $PM_{2.5}$ and PM_{10} would be below a level of significance. As with the construction phases, the cumulative projects would be required to comply with ICAPCD's Regulation VIII for dust control (Regulation VIII applies to both the construction and operational phases of projects). As a result, the ICAPCD would be required to comply with the various dust control measures and to prepare and implement operational dust control plans as approved by the ICAPCD, which is a component of ICAPCD's overall framework of the AQAP that sets forth a comprehensive program for SSAB's compliance with all federal and state air quality standards. Therefore, the project would not contribute to long-term cumulatively considerable air quality impacts and the project would not result in cumulatively significant air quality impacts, and cumulative impacts would be less than significant.

5.3.4 Biological Resources

The geographic scope for considering cumulative impacts on biological resources includes the Imperial Valley and related biological habitats. Table 5-1 lists the projects considered for the biological resources cumulative impact analysis.

In general terms, in instances where a potential impact could occur, CDFW and USFWS have promulgated a regulatory scheme that limits impacts on these species. The effects of the project would be rendered less than significant through mitigation requiring compliance with all applicable regulations that protect plant, fish, and animal species, as well as waters of the U.S. and state. Other cumulative projects would also be required to avoid impacts on special-status species and/or mitigate to the satisfaction of the CDFW and USFWS for the potential loss of habitat.

As described in Section 3.5, Biological Resources, the project would have the potential to result in impacts on biological resources. These impacts are generally focused on potential construction-related effects to burrowing owls, raptor species (California Black Rail, Yuma Ridgeway's Rail, and northern harrier), d migratory birds, and bats. Additionally, project construction has the potential to result in direct and indirect impacts on nesting birds.

Burrowing Owls are protected by the CDFW mitigation guidelines for burrowing owl (CDFW 2012) and Consortium guidance (1993), which require a suite of mitigation measures to ensure direct effects to burrowing owls during construction activities are avoided and indirect effects through burrow

PC ORIGINAL PKG

destruction and loss of foraging habitat are mitigated at prescribed ratios. Mitigation measures identified in Section 3.5, Biological Resources, would ensure that all regulations required to protect burrowing owls, raptor species, and migratory birds, are implemented, thereby minimizing potential impacts on these species to a less than significant level. Similarly, the cumulative projects within the geographic scope of the project would be required to comply with the legal framework as described above. Based on these considerations, impacts on biological resources would not be cumulatively considerable.

As with the proposed project, each of the cumulative projects would be required to provide mitigation for impacts on biological resources. The analysis below is conducted qualitatively and in the context that the cumulative projects would be subject to a variety of statutes and administrative frameworks that require mitigation for impacts on biological resources.

Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of Birds listed at 50 CFR 10.3 are protected by the MBTA (16 USC 703 et seq.), a Federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The MBTA is enforced by USFWS. This act prohibits the killing of any migratory birds without a valid permit. Any activity which contributes to unnatural migratory bird mortality could be prosecuted under this act. With few exceptions, most birds are considered migratory under this act. Raptors and active raptor nests are protected under California FGCs 3503.5, 3503, and 3513.

The CWA and California's Porter-Cologne Water Quality Control Act provide protection for water-related biological resources by controlling pollution, setting water quality standards, and preventing jurisdictional streams, lakes, and rivers from being filled without a federal permit. No jurisdictional wetlands are located with the project site that could otherwise be directly impacted by construction of the proposed project. Likewise, Mitigation Measures HYD-1 and HYD-2 would be required to avoid or minimize potential water quality impacts that could otherwise indirectly impact biological resources. Further, the proposed project would result in a net decrease in water demand, which would provide a benefit to IID's water budget and available supply for the Salton Sea. Implementation of the project would result in fallowing of currently irrigated agricultural fields. The IID's "Imperial Valley Natural Community Conservation Plan and Habitat Conservation Plan Planning Agreement No. 2810-2004-001-06 (February 2006) covers water conservation and irrigation and drainage of land to which IID delivers water to which the environmental impacts and various approaches to mitigate potential impacts to the Salton Sea include fallowing agricultural lands as identified in the HCP Final EIR/EIR. EIR Section 3.16 discusses the IID's Interim Water Supply Policy (IWSP) for Non-Agricultural Projects and Temporary Land Conversion Fallowing Policy (TLCFP) adopted by the IID and according to the TLCFP "This fallowing program satisfies multiple district objectives and service to reduce the conservation and water use demands on other IID water uses and thus provide district-wide benefits."

Given the above, the project would not contribute substantially to a cumulative biological resources impact. Similarly, the cumulative projects within the geographic scope of the proposed project will be required to comply with the legal frameworks set forth above, as well as others, and will be required to mitigate their impacts to a less than significant level. Therefore, the project would not contribute to a cumulatively considerable impact to biological resources, and cumulative impacts would be less than significant.

PC ORIGINAL PKG

5.3.5 Cultural Resources

As discussed in Section 3.6, Cultural Resources, 7 previously recorded cultural resources were identified within the project site during field surveys. Under Impact 3.6-1, the eligibility of the identified resources were discussed. None of the 7 previously recorded cultural resources were determined eligible for listing in the CRHR or NRHP.

The potential of finding a buried archaeological site during construction is considered low. However, like all construction projects in the state, the possibility exists. This potential impact is considered significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce potential impacts associated with the unanticipated discovery of unknown buried archaeological resources. Implementation of Mitigation Measure CUL-3 would reduce potential impacts on human remains to a level less than significant.

Future projects with potentially significant impacts on cultural resources would be required to comply with federal, state, and local regulations and ordinances protecting cultural resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures CUL-1 through CUL-3, the proposed project would have a less than cumulatively considerable contribution to impacts on cultural resources.

During operations and decommissioning of the project, no additional impacts on archaeological resources would be anticipated because the soil disturbance would have already occurred and been mitigated during construction.

5.3.6 Geology and Soils

The Imperial Valley portion of the Salton Trough physiographic province of Southern California is used as the geographic scope for the analysis of cumulative impacts on geology/soils and mineral resources. Cumulative development would result in an increase in population and development that could be exposed to hazardous geological conditions, depending on the location of proposed developments. Geologic and soil conditions are typically site specific and can be addressed through appropriate engineering practices. Cumulative impacts on geologic resources would be considered significant if the project would be impacted by geologic hazard(s) and if the impact could combine with off-site geologic hazards to be cumulatively considerable. None of the projects identified within the geographic scope of potential cumulative impacts would intersect or be additive to the project's site-specific geology and soils impacts; therefore, no cumulatively considerable effects are identified for geology/soils, and cumulative impacts would be less than significant.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant paleontological resources impact due to the potential loss of paleontological resources unique to the region. However, mitigation is included in this EIR to reduce potentially significant project impacts to paleontological resources during construction of the proposed project. Implementation of Mitigation Measures GEO-3 and GEO-4 would ensure that the potential impacts on paleontological resources do not rise to the level of significance. Future projects with potentially significant impacts on paleontological resources would be required to comply with federal, state, and local regulations and ordinances protecting paleontological resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and Mitigation Measures

PC ORIGINAL PKG

GEO-3 and GEO-4, the proposed project would have a less than cumulatively considerable contribution to impacts on paleontological resources.

5.3.7 Greenhouse Gas Emissions

Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Although the emissions of the projects alone would not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. In turn, global climate change has the potential to result in rising sea levels, which can inundate low-lying areas; affect rainfall and snowfall, leading to changes in water supply; and affect habitat, leading to adverse effects on biological resources.

SCAQMD considers projects that generate more than 10,000 $MTCO_2e$ per year to be significant. the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold.

As discussed in Section 3.8, Greenhouse Gas Emissions, the project would result in the generation of approximately 3,470 $MTCO_2e$, or approximately 112 $MTCO_2e$ annually amortized over a 30-year period. Therefore, the construction emissions are less than the SCAQMD's threshold of 10,000 $MTCO_2e$ per year. As the project's emissions do not exceed the SCAQMD's threshold, the proposed project would not result in a cumulatively considerable impact to GHG emissions and would not conflict with the State GHG reduction targets. Other cumulative projects identified in Table 5-1 largely consist of utility-scale solar facilities. The nature of these projects is such that, like the project, they would be consistent with the strategies of the Climate Change Scoping Plan. In order to meet the AB 32 GHG emissions reduction mandate, the Scoping Plan relies on achievement of the RPS target of 33 percent of California's energy coming from renewable sources by 2020 and 50 percent by 2030. The RPS target was updated in September 2018 under SB 100 to 60 percent by 2030. The project and other similar projects are essential to achieving the RPS.

Given that the project is characterized as a renewable energy project and places emphasis on solar power generation, project operations would be almost carbon-neutral with the majority of the operational GHG emissions associated with vehicle trips. Based on these considerations, no significant long-term operational GHG impacts would occur and, therefore, project-related GHG impacts would not be cumulatively considerable.

5.3.8 Hazards and Hazardous Materials

The geographic scope considered for cumulative impacts from health, safety, and hazardous materials is the area within 1 mile of the boundary of the project sites. One mile is the standard American Society of Testing and Materials (ASTM) standard search distance for hazardous materials.

Under cumulative conditions, implementation of the project in conjunction with the projects listed in Table 5-1 is not anticipated to present a public health and safety hazard to residents. Additionally, the project and related projects would all involve the storage, use, disposal, and transport of hazardous materials to varying degrees during construction, operation, and decommissioning. Impacts from these activities are less than significant for the project because the storage, use, disposal, and transport of hazardous materials are extensively regulated by various Federal, state, and local laws, regulations,

PC ORIGINAL PKG

and policies. It is foreseeable that the project and related projects would implement and comply with these existing hazardous materials laws, regulations, and policies. Therefore, the related projects would not cause a cumulative impact, and the project would not result in a cumulatively considerable incremental contribution to a cumulative impact related to use or routine transport of hazardous materials.

5.3.9 Hydrology and Water Quality

Table 5-1 lists the projects considered for the hydrology and water quality cumulative impact analysis. The geographic scope for considering cumulative hydrology and water quality impacts is the Imperial Valley Hydrologic Unit as defined by the Colorado Basin RWQCB Basin Plan.

The construction of the project is expected to result in short-term water quality impacts. Compliance with the SWRCB's NPDES general permit for activities associated with construction (2009-0009-DWQ) would reduce water quality impacts. As with the proposed project, each of the cumulative projects would be required to comply with the Construction General Permit. The SWRCB has determined that the Construction General Permit protects water quality, is consistent with the CWA, and addresses the cumulative impacts of numerous construction activities throughout the state. This determination in conjunction with the implementation of mitigation would ensure short-term water quality impacts are not cumulatively considerable.

The project is not expected to result in long-term operations-related impacts related to water quality. The project would mitigate potential water quality impacts by implementing site design, source control, and treatment control BMPs, as outlined in Mitigation Measures HYD-1 and HYD-2. Some cumulative projects would require compliance with the SWRCB's NPDES general permit for industrial activities, as well as rules found in the CWA, Section 402(p)(1) and 40 CFR 122.26, and implemented Order No. 90-42 of the RWQCB. With implementation of SWRCB, Colorado River RWQCB, and County policies, plans, and ordinances governing land use activities that may degrade or contribute to the violation of water quality standards, cumulatively considerable impacts on water quality would be minimized to a less than significant level.

Based on a review of the FEMA Flood Insurance Rate Map FIRM, the proposed project site is located in Zone X (unshaded). The FEMA Zone X (unshaded) designation is an area determined to be outside the 0.2 percent annual chance floodplain. As such, the project would not result in a significant cumulatively considerable impact on floodplains by constructing new facilities within an identified flood hazard zone.

Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact to hydrology or water quality, and cumulative impacts would be less than significant.

5.3.10 Land Use Planning

The geographic scope for the analysis of cumulative land use and planning impacts is typically defined by government jurisdiction. The geographic scope for considering potential inconsistencies with the General Plan's policies from a cumulative perspective includes all lands within the County's jurisdiction and governed by its currently adopted General Plan. In contrast, the geographic scope for considering potential land use impacts or incompatibilities include the project site plus a one-mile buffer to ensure a consideration for reasonably anticipated potential direct and indirect effects.

PC ORIGINAL PKG

As provided in Section 3.11, Land Use/Planning, the project would not involve any facilities that could otherwise divide an established community. Based on this circumstance, no cumulatively considerable impacts would occur. As discussed in Section 3.11, Land Use/Planning, the project would not conflict with the goals and objectives of the County of Imperial General Plan if all entitlements (General Plan amendment, Conditional Use Permits, and Zone Change) are approved by the County Board of Supervisors. In addition, a majority of the cumulative projects identified in Table 5-1 would not result in a conflict with applicable land use plans, policies, or regulations. In the event that incompatibilities or land use conflicts are identified for other projects listed in Table 5-1, similar to the project, the County would require mitigation to avoid or minimize potential land use impacts. Where General Plan Amendments and/or Zone Changes are required to extend the RE Overlay Zone, that project would also be required to demonstrate consistency with the overall goals and policies of the General Plan, and would be required to demonstrate meeting the criteria for extending the RE Overlay onto the project site. Based on these circumstances, no significant cumulatively considerable impact would occur, and cumulative impacts would be less than significant.

5.3.11 Noise and Vibration

When determining whether the overall noise (and vibration) impacts from related projects would be cumulatively significant and whether the projects' incremental contribution to any significant cumulative impacts would be cumulatively considerable, it is important to note that noise and vibration are localized occurrences; as such, they decrease rapidly in magnitude as the distance from the source to the receptor increases. Therefore, only those related projects and identified in Table 5-1 that are in the direct vicinity of the project site and those that are considered influential in regard to noise and vibration would have the potential to be considered in a cumulative context with the project's incremental contribution.

Construction equipment noise from the related projects identified in Table 5-1would be similar in nature and magnitude to those discussed for the project in Section 3.12, Noise and Vibration. Specifically, noise levels from on-site construction activities would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The site preparation phase would be anticipated to generate the most substantial noise levels as the on-site equipment associated with grading, compacting, and excavation tend to be the loudest. As discussed in Section 3.12, Noise and Vibration, the project's noise levels would not exceed the County's 75 dBA L_{eq} construction noise threshold. Therefore, impacts from construction noise are considered less than significant. Similar to the proposed project, other cumulative projects would be required to comply with the County's construction noise standards. Construction activity is limited to the hours of 7 a.m. to 7 p.m. Monday through Friday, and 9 a.m. to 5 p.m. on Saturdays. Adhering to the County's construction hours would reduce the noise and vibration impacts to below a level of significance. Thus, the incremental contribution of the project to a cumulative noise impact would not be cumulatively considerable.

Stationary-source and vehicular noise from the aforementioned related projects would be similar in nature and magnitude to those discussed for the projects in Section 3.12, Noise and Vibration. For the proposed project, no noise impacts have been identified. Operation of the other cumulative projects listed in Table 5-1 could result in the long-term stationary source noise levels that exceed applicable standards at nearby sensitive receptors and/or result in substantial increases in ambient noise levels. However, given that the project facilities would be constructed within the A-2, A-2-R, and A-3 zones, and components of the project associated with noise during operation would be located at appropriate distances from the residential uses scattered in this portion of the County, long-term operational noise levels are not expected to exceed normally acceptable noise levels for these zones (e.g., 70 dBA Ldn).

Thus, the incremental contribution of the project to significant cumulative noise impacts would not be cumulatively considerable.

5.3.12 Public Services

The project would result in increased demand for public services (fire protection service and law enforcement services) (Section 3.13, Public Services). Future development in the Imperial Valley, including projects identified in Table 5-1, would also increase the demand for public services. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public services within their jurisdictional boundaries. In conjunction with the project's approval, the project applicant would also be conditioned to ensure sufficient funding is available for any fire protection or prevention needs and law enforcement services. Based on the type of projects proposed (e.g., solar energy generation and battery storage), their relatively low demand for public services other than fire and police, it is reasonable to conclude that the project would not increase demands for education, or other public services. Service impacts associated with the project related to fire and police would be addressed through payment of impact fees as part of the project's Conditions of Approval to ensure that the service capabilities of these departments are maintained. Therefore, no cumulatively considerable impacts would occur.

5.3.13 Transportation

As stated in Section 3.14, Transportation, during the construction phase of the project, the maximum number of trips generated on a daily basis would be approximately 1,016 trips (1,032 passenger car equivalent). Construction-related trips are temporary and would not generate permanent trips. As a condition of approval under the project's CUP(s), a traffic control plan as part of a Construction Traffic Management Plan (CTMP) would be implemented by the project applicant or contractor to reduce potential impacts at affected intersections (see 3.14, Transportation).

The majority of the projects listed in Table 5-1 are already constructed. As shown on Table 5-1, there are cumulative projects that pending construction (Laurel I, Laurel II, and Laurel III), or pending entitlement (Saavi BESS). The construction phasing of these projects is not anticipated to overlap with the proposed project. Furthermore, the cumulative projects are not anticipated to use the same construction haul route as the proposed project. During operations, the proposed project would generate up to 20 trips per day. Based on the low amount of operational trips generated and low existing traffic volumes on area roadways, no substantial transportation impacts are anticipated. Based on these findings, the project would not result in cumulatively considerable roadway or intersection impacts, and this impact would be less than significant.

5.3.14 Tribal Cultural Resources

As discussed in Section 3.15, Tribal Cultural Resources, the County requested for tribes to provide any information regarding any Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern known to occur in the project area. To date, the Viejas Band of Kumeyaay Indians ("Viejas") have requested to be involved with monitoring efforts. The proposed project was determined to have cultural significance or ties to Viejas. As a result, implementation of Mitigation Measures CUL-3 and TCR-1 would ensure that the potential impacts on unidentified tribal cultural resources do not rise to the level of significance. Other projects listed in Table 5-1 would potentially be located in sensitive areas where unidentified tribal cultural resources may exist. Therefore, future cumulative projects would also be required to comply with the requirements of AB

52 to determine the presence/absence of tribal cultural resources and engage in consultation to determine appropriate mitigation measures to minimize or avoid impacts on tribal cultural resources. Based on these considerations, the project would not contribute to or result in a significant cumulatively considerable impact tribal cultural resources.

5.3.15 Utilities/Service Systems

Future development in Imperial County would increase the demand for utility service in the region. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public utilities within their jurisdictional boundaries. The proposed project would not require or result in the relocation or construction of new or expanded wastewater facilities, storm water facilities, or water facilities. Additionally, the project would be comprised of mostly recyclable materials and would not generate significant volumes of solid waste that could otherwise contribute to significant decreases in landfill capacity. Based on these considerations, the project would result in less than significant impacts on existing utility providers and, therefore, would not result in cumulatively considerable impacts.

PC ORIGINAL PKG

6 Effects Found Not Significant

In accordance with Section 15128 of the CEQA Guidelines, an EIR must contain a statement briefly indicating the reasons that various potential significant effects of a project were determined not to be significant. Based on the Initial Study and Notice of Preparation prepared for the proposed project (Appendix A of this EIR), Imperial County has determined that the proposed project would not have the potential to cause significant adverse effects associated with the topics identified below. Therefore, these topics are not addressed in this EIR; however, the rationale for eliminating these topics is briefly discussed below.

6.1 Agriculture and Forestry Resources

6.1.1 Forestry Resources

No portion of the project site or the immediate vicinity is zoned or designated as forest lands, timberlands, or timberland production. As such, the proposed project would not result in a conflict with existing zoning or cause the need for a zone change specifically related to forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). Therefore, implementation of the proposed project would not impact forestry resources.

6.2 Energy

The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, and petroleum-based fuel supplies and distribution systems. The proposed project would not utilize any natural gas during either construction or operation of the proposed project, and no further analysis of natural gas is provided in this analysis.

The following discussion discusses the potential energy consumption associated with the construction and operation of the proposed project and analyzes if any energy utilized by the proposed project is wasteful, inefficient, or unnecessary consumption of energy resources.

6.2.1 Energy Consumption

Collectively, the proposed project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. Operation of the proposed project would not result in the consumption of electricity or natural gas and thus, would not contribute to the County wide usage and would directly support the RPS goal of increasing the percentage of electricity procured from renewable sources.

Therefore, the energy analysis focuses on the two sources of energy that are most relevant to the projects: the equipment fuel necessary for construction and the automotive fuel necessary for ongoing maintenance activities. This analysis conservatively assumes that all of the automobile trips projected to arrive at the project site during operations would be new to Imperial County.

PC ORIGINAL PKG

Construction

Energy consumption for diesel and gasoline associated with the proposed project is summarized in Table 6-1 and Table 6-2, respectively.

Table 6-1. Proposed Construction Energy Consumption – Diesel

Timing	CO2 Metric Tons (kg CO2/gallon)	Energy Consumption (gallons)
Phase 1 – 2026	499	48,913
Phase 2 – 2026	423	41,408
Phase 3 – 2026	786	76,964
Phase 3 – 2027	271	26,503
Phase 4 – 2027	119	11,673
Phase 5 – 2050	910	89,100
Total Project Diesel	**--**	**294,561**

Source: HDR 2024

Table 6-2. Proposed Construction Energy Consumption – Gasoline

Timing	CO2 Metric Tons (kg CO2/gallon)	Energy Consumption (gallons)
Phase 1 – 2026	63	7,185
Phase 2 – 2026	99	11,263
Phase 3 – 2026	805	91,655
Phase 3 – 2027	680	77,449
Phase 4 – 2027	48	5,465
Phase 5 – 2050	1,212	138,059
Total Project Diesel	**--**	**331,076**

Source: HDR 2024

Fuel necessary for project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the project site. The fuel expenditure necessary to construct the solar facility and infrastructure would be temporary, lasting only as long as project construction. As shown in Table 6-1 and Table 6-2, construction of the proposed project would result in a total consumption of approximately 625,637 gallons of total fuel (294,561 gallons of diesel and approximately 331,076 gallons of gasoline).

According to the 2023 California Annual Retail Fuel Outlet Report Results (CEC-A15), gasoline and diesel sales in Imperial County in 2023 is estimated at 74 million gallons and 27 million gallons, respectively (CEC 2024b). Accordingly, the estimated 294,561 gallons of diesel fuel required during project construction would represent approximately 0.011 percent of total diesel sales in Imperial County. The estimated 331,076 gallons of gasoline required during project construction would represent approximately 0.004 percent of total gasoline sales in Imperial County.

Fuel energy consumed during project construction would be temporary and would not represent a substantial demand on energy resources. In addition, energy conservation would occur during project construction through compliance with the CARB anti-idling and emissions regulations, which require that equipment not used for more than five minutes be turned off. Compliance with these regulations would result in less fuel combustion and energy consumption and thus minimize the project's

PC ORIGINAL PKG

construction-related energy use. Project construction equipment would also be required to comply with EPA and CARB engine emission standards. These emission standards require highly efficient combustion systems to maximize fuel efficiency and reduce unnecessary fuel consumption. Furthermore, construction activities associated with the proposed project would be required to adhere to all State and ICAPCD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources.

Construction-Related Electricity

During construction of the proposed project, electricity would be consumed to construct the new structures and infrastructure. Electricity would be supplied to the project site by IID and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Energy generated by the project would be collected using up to 66 kilovolt (kV) collector lines. A 230-kV overhead gen-tie transmission line is anticipated to link the project substation to the Liebert Switchyard, which will then be connected via an overhead 230-kV gen-tie line to the existing SDG&E Imperial Valley Substation, which would provide adequate capacity to handle the power generated and utilized by the proposed project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with County and IID guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Operations

Once operational, electricity required during operations would be greatly offset by the electricity produced by the solar facility. Specifically, operation of renewable energy facility would offset GHG emissions by replacing energy generated by fossil fuel power plants. The project would generate up to 500 MW of renewable energy, of which 500 MW net of energy would be added to the power grid. In addition, the proposed project would provide up to 500 MW of battery storage. This renewable energy would be used in place of electricity generated by fossil fuel sources. Therefore, the proposed project would result in a less than significant impact. No impact would occur from electricity-related energy consumption from the proposed project.

It should be noted that, the proposed project would comply with all Federal, State, and County requirements related to the consumption of transportation energy and would provide a non-carbon

source of electricity to power electric vehicles in Imperial County. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant.

6.2.2 Compliance with State or Local Plans for Renewable Energy or Energy Efficiency

The purpose of the proposed project is to construct a renewable energy and storage facility in Imperial County. Once in operation, it will decrease the need for energy from fossil fuel–based power plants in the state. The result would be a net increase in electricity resources available to the regional grid, generated from a renewable source. The proposed project would help California meet its Renewable Portfolio Standard of 60 percent of retail electricity sales from renewable sources by the end of 2030 and 100 percent by 2045. Additionally, the project would also be consistent with the County's General Plan Conservation and Open Space Element, Objective 9.2 which encourages renewable energy developments. Therefore, the project would directly support state and local plans for renewable energy development. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, no impact would occur.

6.3 Mineral Resources

The project site is not used for mineral resource production and the applicant is not proposing any form of mineral extraction. According to Figure 8: Imperial County Existing Mineral Resources of the Conservation and Open Space Element of the General Plan (County of Imperial 2016), no known mineral resources occur within the project site nor does the project site contain mapped mineral resources. Therefore, the proposed project would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of California nor would the proposed project result in the loss of availability of a locally important mineral resource.

6.4 Population and Housing

Development of housing is not proposed as part of the project. Project construction would involve the use of temporary workforce, however, once operational, the project will only involve approximately 4 to 10 employees for O&M activities. Therefore, the proposed project would not result in a substantial growth in the area, as the number of employees required to operate and maintain the facility is minimal.

No housing exists within the project site and no people reside within the project site. Therefore, the proposed project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. The proposed project would result in no impact to population and housing.

6.5 Public Services

Schools. The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Construction of the proposed project would not result in an increase in student population within the Imperial County's School District since it is anticipated that construction workers would commute in during construction. The number of construction and operational workers coming to the region is low and is not expected to increase demand for schools or require the construction of new schools. The proposed project would have a less than significant impact on Imperial County schools.

PC ORIGINAL PKG

Parks and Other Public Facilities. The number of construction and operational workers coming to the region is low and is not expected to increase on existing or future parks. Therefore, substantial permanent increases in population that would adversely affect local parks, libraries, and other public facilities are not expected. The project is expected to have a less than significant impact on parks, libraries, and other public facilities.

6.6 Recreation

The project site is not used for formal recreational purposes. The project would be staffed with 4 to 10 full-time employees. As such, the project would not significantly increase the use or accelerate the deterioration of regional parks or other recreational facilities. The temporary increase of population during construction that might be caused by an influx of workers would be minimal and not cause a detectable increase in the use of parks. The workforce required to construct the project is anticipated to come from existing populations that live in or commute from the surrounding local community. Additionally, the project does not include or require the expansion of recreational facilities. Therefore, no impact is identified for recreation.

6.7 Utilities and Service Systems

Wastewater Facilities. The proposed project would generate a minimal volume of wastewater during construction. During construction activities, wastewater would be contained within portable toilet facilities and disposed of at an approved site. Operation of the proposed project would require a total of 4 to 10 on-site full-time employees and will include an O&M building. Wastewater generation would be minimal. The project's wastewater will be treated via on-site septic systems, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations, and standards. The proposed project would not exceed wastewater treatment requirements of the RWQCB and this is considered a less than significant impact.

Storm Water Facilities. The proposed project would involve the construction of drainage control facilities within the project site, and included in the project impact footprint, of which environmental impacts have been evaluated. Otherwise, the project would not require or result in the relocation or construction of storm drainage facilities off site (i.e., outside of the project footprint) because the proposed solar facility would not generate a significant increase in the amount of impervious surfaces that would increase runoff during storm events, and therefore, would not require the construction of off site storm water management facilities. Water from solar panel washing would continue to percolate through the ground, as a majority of the surfaces within the project site would remain pervious. The proposed project would not require or result in the relocation or construction of new or expanded storm water facilities beyond those proposed as part of the project and evaluated in the EIR. This is considered a less than significant impact.

Power, Natural Gas, and Telecommunication Facilities. The proposed project would involve construction of power facilities. However, these are components of the project as evaluated in the EIR. The proposed project would not otherwise generate the demand for or require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities that would in turn, result in a significant impact to the environment. Therefore, impacts would be less than significant.

Solid Waste Facilities. Solid waste generation would be minor for the construction and operation of the Project. Solid waste during construction would be disposed of using a locally licensed waste hauling service, most likely Allied Waste. Trash would likely be hauled to the Calexico Solid Waste

PC ORIGINAL PKG

Site (13-AA-0004) located approximately 13 miles southeast of the project site. The Calexico Solid Waste Site has approximately 1,561,235 cubic yards of remaining capacity is estimated to remain in operation through 2179 (CalRecycle 2024). Therefore, there is ample landfill capacity in the County to receive the minor amount of solid waste generated by construction and operation of the proposed Project.

Additionally, because the proposed project would generate solid waste during construction and operation, the project would be required to comply with state and local requirements for waste reduction and recycling; including the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991. Also, conditions of the CUPs would contain provisions for recycling and diversion of Imperial County construction waste policies.

Further, when the proposed project reaches the end of its operational life, the components would be decommissioned and deconstructed. When the project concludes operations, much of the wire, steel, and modules of which the system is comprised would be recycled to the extent feasible. The project components would be deconstructed and recycled or disposed of safely, and the site could be converted to other uses in accordance with applicable land use regulations in effect at the time of closure. Commercially reasonable efforts would be used to recycle or reuse materials from the decommissioning. All other materials would be disposed of at a licensed facility. A less than significant impact is identified for this issue.

6.8 Wildfire

According to the Draft Fire Hazard Severity Zone Map for Imperial County prepared by the California Department of Forestry and Fire Protection, the project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan; expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; exacerbate fire risk; or, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact is identified for wildfire.

PC ORIGINAL PKG

7 Alternatives

7.1 Introduction

The identification and analysis of alternatives is a fundamental concept under CEQA. This is evident in that the role of alternatives in an EIR is set forth clearly and forthrightly within the CEQA statutes. Specifically, CEQA §21002.1(a) states:

> *"The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."*

The CEQA Guidelines require an EIR to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines §15126.6(a)). The CEQA Guidelines direct that selection of alternatives focus on those alternatives capable of eliminating any significant environmental effects of the project or of reducing them to a less-than significant level, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. In cases where a project is not expected to result in significant impacts after implementation of recommended mitigation, review of project alternatives is still appropriate.

The range of alternatives required within an EIR is governed by the "rule of reason" which requires an EIR to include only those alternatives necessary to permit a reasoned choice. The discussion of alternatives need not be exhaustive. Furthermore, an EIR need not consider an alternative whose implementation is remote and speculative or whose effects cannot be reasonably ascertained.

Alternatives that were considered but were rejected as infeasible during the scoping process should be identified along with a reasonably detailed discussion of the reasons and facts supporting the conclusion that such alternatives were infeasible.

Based on the alternatives analysis, an environmentally superior alternative is designated among the alternatives. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives (CEQA Guidelines §15126.6(e)(2)).

7.2 Criteria for Alternatives Analysis

As stated above, pursuant to CEQA, one of the criteria for defining project alternatives is the potential to attain the project objectives. Established objectives of the project applicant for the proposed project include:

- Provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.
- Integrate the proposed project operating facilities with previously proposed and entitled PV solar and BESS projects in the project vicinity to maximize economies of scale.

PC ORIGINAL PKG

- Provide annual revenues consistent with the Public Benefit Program for Solar Power Plants in Imperial County (Amended May 9, 2023, by the Board of Supervisors) that directly supports Agriculture, Community Benefits Funds, and Public Services (e.g., Sheriff, Public Health, Fire Department) within Imperial County.
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County.
- Promote economic development and bring regionally defined living-wage jobs to the region throughout the life of the proposed Project.
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of greenhouse gases (GHGs) to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under SB 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030.
- Support California's Renewable Portfolio Standards (RPS) Program consistent with the timeline established by SB 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California Legislature and signed by Governor Brown in September 2018, which established a 50 percent RPS goal by December 31, 2026, 60 percent by December 31, 2030, and a goal that 100 percent of electric retail sales to end-use customers be provided by renewable energy and zero-carbon resources by 2045.
- Utilize historically farmed lands that could otherwise be fallowed due to current and future water shortages, thereby providing local farmers and/or agricultural landowners in Imperial County an alternative to the economic losses associated with limiting their agricultural production.

7.3 Alternatives Considered but Rejected

7.3.1 Alternative Site

Section 15126.6(f)(2) of the CEQA Guidelines addresses alternative locations for a project. The key question and first step in the analysis is whether any of the significant effects of the proposed project would be avoided or substantially lessened by constructing the proposed project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR. Further, CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

The proponent does not have control of an alternate site; if control were viable, the proponent would have to re-initiate the application process as a new project. Similar to the proposed project site, an alternate site would require environmental review once the proponent has prepared sufficient project description information. At present, the proponent does not have control of an alternate site. This alternative would be the most complex, costly, and time-consuming alternative to implement. It is unknown if the environmental impacts associated with this alternative would be less than the proposed project because it would be speculative to evaluate an unsecured alternate site. This is primarily due

PC ORIGINAL PKG

to the fact that the proponent does not have control of an alternate site. Therefore, an alternative site was eliminated from further consideration in this EIR.

7.4 Alternative 1: No Project/No Development Alternative

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e)(1), "the specific alternative of 'no project' shall also be evaluated along with its impact." Also, pursuant to Section 15126.6(e)(2); "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, … at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be further developed with a solar energy project. The No Project/No Development Alternative would not meet any of the project objectives.

7.4.1 Environmental Impact of Alternative 1: No Project/No Development Alternative

Aesthetics

Under the No Project/No Development Alternative, the project site would not be developed and would continue to be agricultural land. The No Project/No Development Alternative would not modify the existing project site or add construction to the project site; therefore, there would be no change to the existing condition of the site. Under this alternative, there would be no potential to create a new source of light or glare associated with the PV arrays. As discussed in greater detail in Section 3.2, Aesthetics, the proposed project would result in a less than significant impact associated with introduction of new sources of light and glare. Under this alternative, no impacts related to light, glare, and aesthetic impacts would occur.

Agricultural Resources

Under the No Project/No Development Alternative, the project site would not be developed and would continue to be utilized as agricultural land. Compared to the proposed project, implementation of this alternative would avoid the conversion of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland per the FMMP. Therefore, this alternative would not contribute to the conversion of agricultural lands or otherwise adversely affect agricultural operations and mitigation would not be required. Compared to the proposed project, this alternative would avoid the need for future restoration of the project site to pre-project conditions. This alternative would avoid any agricultural impacts associated with the proposed project.

Air Quality

Under the No Project/No Development Alternative, there would be no air emissions associated with project construction or operation, and no project- or cumulative-level air quality impact would occur. Therefore, no significant impacts to air quality or violation of air quality standards would occur under this alternative. Moreover, this alternative would be consistent with existing air quality attainment plans and would not result in the creation of objectionable odors.

As discussed in Section 3.4, Air Quality, the proposed project would exceed the ICAPCD's significance thresholds for emissions of PM_{10} during construction of the project. mitigate the potential impacts associated with construction-generated emissions with regard to PM_{10}, the project would adhere to the requirements of ICAPCD Regulation VIII for the control of fugitive dust (Mitigation Measure AQ-1). Furthermore, implementation of Mitigation Measure AQ-2 would ensure construction equipment will be equipped with an engine designation of EPA Tier 4 engine. Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

This alternative would not result in air quality emissions compared to the proposed project, the majority of which would occur during construction. The No Project/No Development Alternative would not reduce the long-term need for renewable electricity generation. As a consequence, while the No Project/No Development Alternative would not result in new impacts to air quality as a result of construction, it would likely not realize the overall benefits to regional air quality when compared to the operation of the proposed project. Compared to the proposed project, this alternative would avoid significant air quality impacts.

Biological Resources

Under the No Project/No Development Alternative, existing biological resource conditions within the project site would largely remain unchanged and no impacts would occur. Unlike the proposed project which requires mitigation for biological resources including burrowing owl and other migratory birds, this alternative would not result in construction of a solar facility that could otherwise result in significant impacts to these biological resources. Compared to the proposed project, this alternative would avoid impacts to biological resources.

Cultural Resources

The proposed project would involve ground-disturbing activities that have the potential to disturb previously undocumented cultural resources that could qualify as historical resources or unique archaeological resources pursuant to CEQA. Under the No Project/No Development Alternative, the project site would not be developed and no construction-related ground disturbance would occur. Therefore, compared to the proposed project, this alternative would avoid impacts to cultural resources.

Geology and Soils

Because there would be no development at the project site under the No Project/No Development Alternative, no grading or construction of new facilities would occur. Therefore, there would be no impact to project-related facilities as a result of local seismic hazards (strong ground shaking), soil erosion, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, corrosive soils, suitability of soils for supporting septic tanks, and paleontological resources. In contrast, the proposed project would require the incorporation of mitigation measures related to potential seismic hazards, soil erosion, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, corrosive soils, suitability of soils for supporting septic tanks, and paleontological resources to minimize impacts

PC ORIGINAL PKG

to a less than significant level. Compared to the proposed project, this alternative would avoid significant impacts related to local geology and soil conditions and paleontological resources.

Greenhouse Gas Emissions

Under the No Project/No Development Alternative, there would be no GHG emissions resulting from project construction or operation or corresponding impact to global climate change. The No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of SB 32. While this alternative would not further implement policies (e.g., SB X1-2) for GHG reductions, this alternative would also not directly conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This alternative would not create any new GHG emissions during construction but would not lead to a long-term beneficial impact to global climate change by providing renewable clean energy. For the proposed project, a less than significant impact was identified for construction-related GHG emissions, and in the long-term, the project would result in an overall beneficial impact to global climate change as the result of creation of clean renewable energy, that does not generate GHG emissions. Compared to the proposed project, while the No Project/No Development Alternative would not result in new GHG emissions during construction, it would be less beneficial to global climate change as compared to the proposed project. Further, the construction emissions (amortized over 30 years) associated with the project would be off-set by the beneficial renewable energy provided by the project, negating any potential that the No Project/No Development alternative would reduce construction-related GHG emissions.

Hazards and Hazardous Materials

The No Project/No Development Alternative would not include any new construction. Therefore, no potential exposure to hazardous materials would occur. Therefore, no impact is identified for this alternative for hazards and hazardous materials.

Hydrology/Water Quality

The No Project/No Development Alternative would not result in modifications to the existing drainage patterns or volume of storm water runoff as attributable to the proposed project, as the existing site conditions and on-site pervious surfaces would remain unchanged. In addition, no changes with regard to water quality would occur under this alternative. Therefore, compared to the proposed project, this alternative would avoid impacts to hydrology and water quality.

Land Use/Planning

As discussed in Section 3.11, Land Use/Planning, the proposed project would not physically divide an established community or conflict with applicable plans, policies, or regulations. Under the No Project/No Development Alternative, the project site would not be developed and continue to be utilized as agricultural land. Current land uses would remain the same. No General Plan Amendment, Zone Change, or CUPs would be required under this alternative. Under this alternative, no existing community would be divided, and no inconsistencies with planning policies would occur. No land use impacts would occur.

Noise and Vibration

This alternative would not require construction or operation of the project; therefore, this alternative does not have the potential to temporarily increase ambient noise levels within the vicinity of the project site and affect sensitive receptors. As discussed in Section 3.12, Noise and Vibration, the proposed project would not result in significant noise impacts on sensitive receptors during construction and operation. Compared to the proposed project, this alternative would not generate noise and would not result in any noise or vibration impacts.

Public Services

The No Project/No Development Alternative would not increase the need for public services which would otherwise be required for the proposed project (additional police or fire protection services). Therefore, no impact to public services is identified for this alternative.

Transportation

There would be no new development under the No Project/No Development Alternative. Compared to the proposed project, this alternative would not generate vehicular trips during construction or operation. For these reasons, no impact would occur and this alternative would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities.

Tribal Cultural Resources

The proposed project would involve ground-disturbing activities that have the potential to disturb previously undocumented tribal cultural resources. Under the No Project/No Development Alternative, the project site would not be developed, and no construction-related ground disturbance would occur. Therefore, compared to the proposed project, this alternative would avoid potential impacts to tribal cultural resources.

Utilities and Service Systems

Compared to the proposed project, the No Project/No Development Alternative would not require the expansion or extension of existing utilities, since there would be no new project facilities that would require utility service. No solid waste would be generated under this alternative. Therefore, this alternative would result in no impacts to existing utilities or solid waste facilities.

Conclusion

Implementation of the No Project/No Development Alternative would generally result in reduced impacts for a majority of the environmental issues areas considered in Chapter 3, Environmental Analysis when compared to the proposed project. A majority of these reductions are realized in terms of significant impacts that are identified as a result of project construction. However, this alternative would not realize the benefits of reduced GHG emissions associated with energy use, which are desirable benefits that are directly attributable to the proposed project.

PC ORIGINAL PKG

Comparison of the No Project/No Development Alternative to Project Objectives

The No Project/No Development Alternative would not meet any of the objectives of the project. Additionally, the No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of SB 32 (California Global Warming Solutions Act of 2006).

PC ORIGINAL PKG

7.5 Alternative 2: Reduced Project Site

The purpose of this alternative is to reduce impacts on Prime Farmland within the project site. As discussed in Section 3.3, Agricultural Resources, implementation of the project would result in the temporary conversion of 973.24 acres of Prime Farmland to non-agricultural uses. A majority of the Prime Farmland occurs within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would reduce the overall size of the solar facility by avoiding the Prime Farmland occurring within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. This alternative would avoid developing parcels that contain large areas of Prime Farmland. (NOTE: this alternative would not avoid several pockets of Prime Farmland as shown in Figure 7-1, as these represent small, isolated pockets of land, which would likely not remain economically viable or practically feasible to farm as they would be surrounded by solar uses). Therefore, the project site would be reduced by approximately 788 acres from a total of 1,849 acres to 1,061 acres.

Aesthetics

Under Alternative 2, the overall size of the solar energy facility would be reduced. No significant visual aesthetic impact has been identified as the proposed project's facilities would not impact scenic resources, result in the substantial degradation of the existing visual character of the project site, or add a substantial amount of light and glare. As such, this alternative would not avoid or reduce any significant impacts identified for the project and the aesthetic impact would be similar to the proposed project.

Agricultural Resources

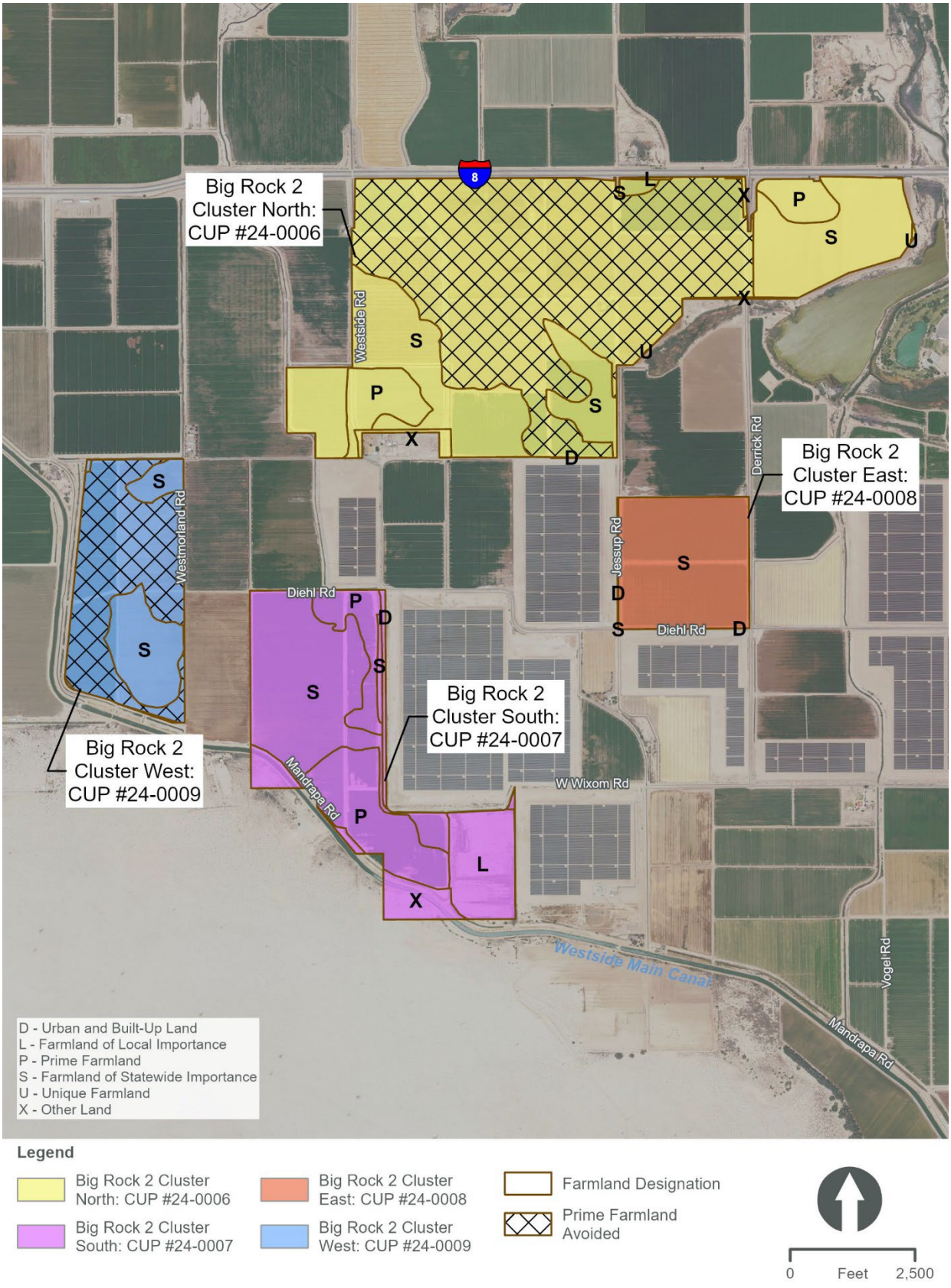
Under Alternative 2, the conversion of approximately 788 acres of Prime Farmland to non-agricultural uses would be avoided within the Big Rock 2 Cluster North Site and Big Rock 2 Cluster West Site. However, the proposed project would still result in the conversion of pockets of Prime Farmland within the overall project site, as well as Farmland of Statewide Importance and Unique Farmland, and would still require mitigation for the temporary conversion of Important Farmland to non-agricultural uses to reduce significant impacts to a level less than significant. Impacts associated with contributing to the conversion of other agricultural lands or otherwise affecting agricultural operations would still occur, but would be less than would occur under the proposed project. Compared to the proposed project, this alternative would result in less of an impact on agricultural resources as compared to the proposed project.

Air Quality

Under Alternative 2, air emissions during construction would be less than the proposed project because of the reduced site development. A less than significant impact with mitigation incorporated has been identified for the proposed projects during construction. Similar to the proposed project, this alternative would be required to comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Similar to the proposed project, this alternative would be consistent with existing AQMPs and would not result in the creation of objectionable odors. This alternative would provide less MW generation compared to the proposed project, thereby reducing its ability to provide a long-term source of renewable energy. Compared to the proposed project, while this alternative would result in less air quality impacts, it would likely provide fewer desirable benefits to overall regional air quality as attributable to the proposed project. Compared to the proposed project, this alternative would result in less air quality impacts.

PC ORIGINAL PKG

Figure 7-1. Alternative 2 – Reduced Project Site



PC ORIGINAL PKG

Biological Resources

Under Alternative 2, the overall size of the solar energy facility would be reduced. Although the overall size of the solar energy facility would be reduced, there is still potential for impacts on special-status species. Compared to the proposed project, this alternative would result in a reduction in impacts on biological resources, but would still require mitigation.

Cultural Resources

Although the overall size of the solar energy facility would be reduced, this alternative would still require ground-disturbing activities, which has the potential to disturb undocumented cultural resources that could qualify as historical resources or unique archaeological resources pursuant to CEQA, and human remains. Compared to the proposed project, this alternative would result in a reduction in impacts on cultural resources because of the reduced site development, but would still require mitigation related to monitoring for inadvertent discovery.

Geology and Soils

Under Alternative 2, while the overall project footprint would be reduced, grading and construction of new facilities would still occur. Similar to the proposed project, this alternative would also be subject to potential impacts related to local seismic hazards (strong ground shaking), soil erosion, liquefaction, lateral spreading, subsidence, collapsible soils, expansive soils, corrosive soils, suitability of soils for supporting septic tanks, and paleontological resources, and incorporation of mitigation measures would be required to minimize these impacts to a less than significant level. This alternative would result in similar geology and soil and paleontological resources impacts as the proposed project.

Greenhouse Gas Emissions

Under Alternative 2, the overall project footprint would be reduced, thereby contributing to reductions in GHG emissions during project construction. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced. This alternative would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Similar to the proposed project, this alternative would not exceed SCAQMD's screening threshold of 10,000 metric tons of CO_2e per year. This alternative would contribute to similar and desirable reductions in GHG emissions and associated contribution to global climate change through the production of renewable energy, although to a lesser degree. This alternative would have a similar impact as the proposed project.

Hazards and Hazardous Materials

Similar to the proposed project, construction of this alternative would involve the limited use of hazardous materials, such as fuels and greases to fuel and service construction equipment. Similar to the proposed project, no impact associated with potential safety hazards to the public residing or working within proximity to a public airport would occur. Implementation of this alternative would result in a similar hazards and hazardous materials impact as the proposed project.

PC ORIGINAL PKG

Hydrology/Water Quality

Alternative 2 would result in modifications to the existing drainage patterns and the volume of storm water runoff, as this alternative would introduce impervious area on-site, although to a lesser degree than the proposed project. Because the overall project footprint would be reduced, this alternative would realize a minor reduction in the corresponding impacts on hydrology and on-site drainage; however, the same mitigation measures would be applicable to this alternative. Compared to the proposed project, this alternative would result in less of an impact on hydrology/water quality.

Land Use Planning

Implementation of this alternative would not avoid or reduce a land use and planning impact, as no significant impact associated with the project has been identified. As with the proposed project, this alternative would be consistent with the County Land Use Ordinance, Division 17, RE Overlay Zone, which authorizes the development and operation of RE projects with approved CUPs. Implementation of this alternative would be similar to the proposed project with respect to land use and planning.

Noise

As with the proposed project, Alternative 2 would not result in significant noise impacts associated with construction activities. As with the proposed project, operational impacts associated with this alternative would not expose persons or generate noise levels in excess of applicable noise standards, exposure persons to, or generate excessive groundborne vibration, or expose persons to excessive aircraft noise. This alternative would have similar noise impacts as the proposed project.

Public Services

Alternative 2 would require increased public services, specifically law enforcement and fire protection services. While the solar facility would be slightly smaller, the impacts of this alternative to public services and associated service ratios would be similar. Like the proposed project, this alternative would be conditioned to provide law enforcement and fire service development impact fees. Therefore, this alternative would result in a similar impact related to public services as the proposed project.

Transportation

This alternative would result in a similar level of construction and operation-related vehicle and truck trips as compared to the proposed project. However, the increase in vehicular traffic was identified as a less than significant impact for the proposed project. In this context, Alternative 2 would not reduce or avoid an impact related to transportation and would result in less than significant impacts similar to the proposed project. As with the proposed project, Alternative 2 would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities. This alternative would result in a similar impact related to transportation as the proposed project.

Tribal Cultural Resources

Although the overall size of the solar energy facility would be reduced, this alternative would still require ground-disturbing activities, which has the potential to disturb undocumented tribal cultural resources. Compared to the proposed project, this alternative would result in a reduction in impacts on tribal cultural resources because of the reduced site development, but would still require mitigation.

Utilities and Service Systems

Implementation of this alternative would result in an overall less demand for utilities, including water. However, this alternative would not avoid or reduce a significant impact associated with the project as a less than significant impact to utilities has been identified associated with the project. Implementation of this alternative would not achieve to the same degree the beneficial impacts of providing renewable energy. As compared to the proposed project, the overall demand for utilities would be less under this alternative.

Conclusion

As shown on Table 7-1, this alternative would reduce impacts to agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

Comparison of Alternative 2: Reduced Project Site

Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, as a consequence of the reduced size of the project, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced.

7.6 Environmentally Superior Alternative

Table 7-1 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As noted on Table 7-1, the No Project/No Development Alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” As shown on Table 7-1, Alternative 2 would be the environmental superior alternative because it would reduce impacts for the following environmental issue areas as compared to the proposed project: agricultural resources, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities/service systems.

PC ORIGINAL PKG

Table 7-1. Comparison of Alternative Impacts to Proposed Project

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Aesthetics	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Agricultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Air Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Biological Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Geology and Soils	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Similar Impact
GHG Emissions	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hazards and Hazardous Materials	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Hydrology/ Water Quality	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Land Use/Planning	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Noise and Vibration	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact

PC ORIGINAL PKG

Environmental Issue Area	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Project Site
Public Services	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* *No Impact*	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Transportation	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Similar Impact
Tribal Cultural Resources	Less than Significant with Mitigation	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact (Avoid)	*CEQA Significance:* Less than Significant with Mitigation *Comparison to Proposed Project:* Less Impact
Utilities/Service Systems	Less than Significant	*CEQA Significance:* No Impact *Comparison to Proposed Project:* No Impact	*CEQA Significance:* Less than Significant *Comparison to Proposed Project:* Less Impact

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

8 References

California Air Pollution Control Officers Association. 2021. Health Effects. Available on-line at: http://www.capcoa.org/health-effects/. Accessed on December 5, 2024.

California Air Resources Board (CARB). 2017. Climate Change Scoping Plan. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed on December 9, 2024.

——— 2024a. Ambient Air Quality Standards Designation Tool. Available on-line at: https://ww2.arb.ca.gov/capp/cst/tch/ambient-air-quality-standards-designation-tool. Accessed on December 10, 2024.

——— 2024b. Table of Ambient Air Quality Standards. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed on December 10, 2024.

——— 2024c. EMFAC2017 Web Database Emissions Inventory. Available on-line at: http://www.arb.ca.gov/emfac/2017. Accessed on December 20, 2024.

California Department of Conservation (DOC). 2016. Imperial County Williamson Act FY 2016/2017. Available on-line at: https://www.icpds.com/assets/California-Department-of-Conservation-2016-1642792259.pdf. Accessed on December 18, 2024.

——— 2020. Alternate Imperial County 2018-2020 Land Use Conversation Table A-10. Available on-line at: Alternate Imperial County 2018-2020 Land Use Conversion. Accessed on December 30, 2024.

——— 2022. California Important Farmland Finder. Available on-line at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed on December 18, 2024.

——— 2024. California Williamson Act Enrollment Finder. Available on-line at: https://gis.conservation.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312. Accessed December 26, 2024.

California Department of Education. 2017. "California School Directory: Westside Elementary." Available on-line at: https://www.cde.ca.gov/SchoolDirectory/details?cdscode=13631646008577. Accessed on December 16, 2024.

California Department of Fish and Game (CDFG). 2012. *Staff Report on Burrowing Owl Mitigation.* Available on-line at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true. Accessed on October 17, 2024.

California Department of Forestry and Fire Protection. 2023. Fire Hazard Severity Zones in SRA – Imperial County. Available on-line at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed on December 4, 2024.

California Department of Transportation (Caltrans). 1998. Technical Noise Supplement.

——— 2013. Transportation and Construction Vibration Guidance Manual. Available on-line at: https://www.placer.ca.gov/DocumentCenter/View/8273/Caltrans-2013-Transportation-and-Construction-Vibration-Guidance-Manual-PDF. Accessed on December 13, 2024.

California Department of Water Resources (DWR). 2021. Groundwater Sustainability Agency Map Viewer: Imperial Valley Groundwater Basin. Available on-line at:

PC ORIGINAL PKG

https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true. Accessed on October 22, 2024.

California Energy Commission (CEC). 2024a. California Energy Consumption Database. http://www.ecdms.energy.ca.gov/Default.aspx. Accessed December 19, 2024.

——— 2024b. 2023 California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division – September 19, 2024. Available on-line at: https://www.energy.ca.gov/media/3874. Accessed on December 20, 2024.

CalRecycle. 2024. SWIS Facility/Site Activity Details – Calexico Solid Waste Site (13-AA-0004). Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4179?siteID=591. Accessed on December 20, 2024.

California Natural Resources Agency. 2018. A Summary of Key Findings from California's Fourth Climate Change Assessment. Available on-line at: https://www.energy.ca.gov/sites/default/files/2019-11/20180827_Summary_Brochure_ADA.pdf. Accessed on December 9, 2024.

California Regional Water Quality Control Board (RWQCB). 2019. Water Quality Control Plan for the Colorado River Basin Region. Available on-line at: https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/docs/2020/rb7bp_e2019.pdf. Accessed on December 10, 2024.

——— 2021. 2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) — Statewide. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CAR725000002000012709505 7. Accessed on October 22, 2024.

——— 2022. Impaired Water Bodies. Available on-line at https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CAR725000002000012709505 7. Accessed December 19, 2024.

California State Water Resources Control Board (SWRCB). 2021. California Basin Plan Beneficial Use Viewer. Available on-line at: https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=116f7daa9c4d4103afda1257be82eb16. Accessed on October 29, 2024.

City of El Centro. General Plan Update Transportation Impact Study. 2021. Available on-line at: https://cityofelcentro.org/communitydevelopment/wp-content/uploads/sites/14/2022/05/Appendix-H.1-Transportation-Impact-Study.pdf. Accessed on December 2, 2024.

County of Imperial. 1996. Airport Land Use Compatibility Plan, Imperial County Airports. Available on-line at: https://www.icpds.com/hearings/airport-land-use-commission.

——— 2022. Seismic and Public Safety Element. Available on-line at: https://www.icpds.com/assets/GPA21-0004-Seismic-and-Public-Safety-Element-11-22-2022.pdf

——— 1997 Water Element. Available on-line at: https://www.icpds.com/assets/planning/water-element.pdf.

——— 2008. Circulation and Scenic Highways Element. Available on-line at: https://www.icpds.com/assets/planning/circulation-scenic-highway-element-2008.pdf.

——— 2015a. Agricultural Element. Available on-line at: https://www.icpds.com/assets/planning/agricultural-element-2015.pdf.

PC ORIGINAL PKG

——— 2015b. Renewable Energy and Transmission Element. Available on-line at: https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf.

——— 2015c. Noise Element. Available on-line at: https://www.icpds.com/assets/planning/noise-element-2015.pdf.

——— 2016. Conservation and Open Space Element. Available on-line at: https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf.

——— 2023. Land Use Ordinance. Title 9. Division 5: Zoning Areas Established. Amended November 21, 2023. Available on-line at: https://www.icpds.com/assets/5-Zoning-Areas-Established-.pdf.

——— 2022. Title 9, Division 7: Noise Abatement and Control. Available on-line at: https://www.icpds.com/assets/planning/ordinances/title-9-div-7-2015.pdf.

Federal Emergency Management Agency (FEMA). 2008. FEMA Flood Map Service Center: Imperial County Unincorporated Areas [map]. Available on-line at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed on October 22, 2024

Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model User's Guide. Available on-line at: https://planning.lacity.gov/eir/8150Sunset/References/4.G.%20Noise/N.07_FHWA%20User%20Guide_2006.pdf. Accessed on December 16, 2024.

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. Available on-line at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf . Accessed on December 16, 2024.

Groundwater Exchange. 2021. Available on-line at: https://groundwaterexchange.org/basin/imperial-valley-7-030/. Accessed on October 22, 2024.

Imperial County Agricultural Commissioner. 2023. 2023 Imperial County Agricultural Crop & Livestock Report. Available on-line at: https://agcom.imperialcounty.org/wp-content/uploads/2024/10/2023-CR-design-10.08.pdf. Accessed December 26, 2024.

Imperial County Air Pollution Control District (ICAPCD). 2009. Final 2009 Imperial County State Implementation Plan for Particulate Matter Less than 10 Microns in Aerodynamic Diameter. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/08/Final-IC-2009-PM10-SIP-document.pdf. Accessed on October 24, 2024.

——— 2014. Final 2013 State Implementation Plan for the 2006 24-Hour PM2.5 Moderate Nonattainment Area. Available on-line at: https://ww2.arb.ca.gov/resources/documents/2013-state-implementation-plan-2006-24-hour-pm25-moderate-nonattainment-area. Accessed December 5, 2024.

——— 2017a. 2017 Imperial County Plan for 2008 8-hour Ozone Standard. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/OzoneSIP.pdf. Accessed on December 6, 2024.

——— 2017b. CEQA Air Quality Handbook. 2017. Guidelines for the Implementation of the California Environmental Quality Act of 1970. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/CEQAHandbk.pdf. Accessed on October 24, 2024.

——— 2018a. 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less than 10 Microns in Diameter. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/2018PM10PlanBoardPacket.pdf. Accessed on October 17, 2024.

——— 2018b. 2018 Annual Particulate Matter Less than 2.5 Microns in Diameter State Implementation Plan. Available on-line at: https://apcd.imperialcounty.org/wp-content/uploads/2020/01/2018-IC-PM25SIP.pdf. Accessed on October 17, 2024.

Imperial County Fire Department (ICFD). 2019. Fire Department and Office of Emergency Services. Available on-line at: https://firedept.imperialcounty.org/. Accessed on December 5, 2024.

Imperial Irrigation District 2012. Imperial Integrated Regional Water Management Plan. Available on-line at: https://www.iid.com/water/water-supply/water-plans/imperial-integrated-regional-water-management-plan

National Highway Traffic Safety Administration (NHTSA). 2021. *USDOT Proposes Improved Fuel Economy Standards for MY 2024-2026 Passenger Cars and Light Trucks.* Available on-line at: https://www.nhtsa.gov/press-releases/fuel-economy-standards-2024-2026-proposal. Accessed on December 17, 2024.

——— 2022. *USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026.* Available on-line at: https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026. Accessed on December 18, 2024.

Southern California Association of Governments (SCAG). 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal). Available on-line at: https://scag.ca.gov/connect-socal. Accessed on December 11, 2024.

State of California Employment Development Department. 2025. Immediate Release, El Centro Metropolitan Statistical Area (MSA) (Imperial County). Available on-line at: https://labormarketinfo.edd.ca.gov/geography/msa/imperial.html. Accessed on March 27, 2024.

United States Department of Transportation (DOT). 2020. Lithium Battery Guide for Shippers. Available on-line at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2023-07/Lithium%20Battery%20Guide.pdf. Accessed on December 16, 2024.

PC ORIGINAL PKG

9 EIR Preparers and Persons and Organizations Contacted

9.1 EIR Preparers

This EIR was prepared for the County of Imperial by HDR at 591 Camino de la Reina, Suite 300, San Diego, CA 92108. The following professionals participated in its preparation:

County of Imperial

Jim Minnick, Planning & Development Services Director

Michael Abraham, AICP, Assistant Planning & Development Services Director

Diana Robinson, Planning Division Manager

Rocio Yee, Planner II

HDR

Tim Gnibus, Principal

Sharyn Hidalgo, Project Manager

Regan Del Rosario, Environmental Planner

Steven Yu, Environmental Planner

Gary Goldman, Geotechnical Section Manager

Victoria Hsu, Senior Air Quality Specialist

Anitra Rice, Senior Air Quality Specialist

Hong Spores, Senior Hydrogeologist

Sharon Jacob, Geographic Information Systems Analyst

Trent Lundberg, Geographic Information Systems Analyst

Katherine Turner, Document Production Administrator

HDR was assisted by the following consultants:

Dudek (Biological Technical Report, Cultural Resources Inventory Report, Transportation Impact Analysis, Visual Resources Report, Water Supply Assessment)

605 Third Street

Encinitas, CA 92024

HDR (Air Quality and Greenhouse Gas Emissions Technical Report, Land Evaluation and Site Assessment, Phase I ESA, and Preliminary Geological and Geotechnical Assessment Report)

591 Camino de la Reina, Suite 300

San Diego, CA 92108

PC ORIGINAL PKG

9.2 Persons and Organizations Contacted

The following persons and organizations were contacted in preparation of this document:

- Imperial Irrigation District

PC ORIGINAL PKG

Appendix A

Initial Study and Notice of Preparation and Responses

PC ORIGINAL PKG

Notice of Preparation

PC ORIGINAL PKG

To: Office of Planning & Research
(Agency)

P.O. Box 3044, 1400 Tenth Street, Room 212
(Address)

Sacramento, CA 95812-3044

Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:		**Consulting Firm** (If applicable):	
Agency Name	Imperial County, Planning & Dev Svcs.	Firm Name	HDR
Street Address	801 Main Street	Street Address	591 Camino de la Reina, Suite 300
City/State/Zip	El Centro, CA 92243	City/State/Zip	San Diego, CA 92108
Contact	Diana Robinson	Contact	Tim Gnibus

The County of Imperial will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the Environmental Information, which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, table of Assessor's Parcel Numbers (APN), and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but ***not later than 35 days*** after receipt of this notice.

Please send your response to Imperial County Planning & Development Services, Attn: Diana Robinson at the address shown above. We will need the name for a contact person in your agency.

Project Title: Big Rock 2 Cluster Solar & Storage Project

Project Location: The project site is located on approximately 1,849 acres of privately-owned, vacant land in Imperial County, California. Please refer to Attachment A for the list of APNs and Figures 1 and 2 for the general project location. The project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road.

Project Description (brief)**:** The Project would include the construction and operation of a photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility comprised of up to 500 megawatts alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the San Diego Gas & Electric (SDG&E) Imperial Valley substation via an overhead 230-kV gen-tie line. Two gen-tie line alternatives are proposed.

The County Land Use Ordinance, Division 17, includes the Renewable Energy (RE) Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved conditional use permit (CUP). CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed

PC ORIGINAL PKG

without an amendment to the RE Overlay Zone. The majority of the project site is located outside of the RE Overlay Zone.

Implementation of the project requires an amendment to the County's General Plan Renewable Energy and Transmission Element, Zone Change, and approval of four CUPs, as described below:

- **General Plan Amendment:** The applicant is requesting a General Plan Amendment to include/classify all project parcels into the RE Overlay Zone. No change in the underlying General Plan land use (Agriculture) is proposed.
- **Zone Change:** The project site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural/Rural), A-3 (Heavy Agricultural), A-2-RE (General Agricultural – Renewable Energy Overlay) and A-3-RE (Heavy Agricultural – Renewable Energy Overlay). The applicant is requesting a Zone Change to include/classify all project parcels into the Renewable Energy Overlay Zone.
- **Conditional Use Permit:** Implementation of the project would require the approval of four CUPs by the County to allow for the construction and operation of the proposed solar energy facility with an integrated BESS on land zoned A-2, A-2-R, A-3, A-2-RE and A-3-RE.
- **Water Supply Assessment:** Implementation of the project would require the approval of the Water Supply Assessment.

Project Applicant: 90FI 8me, LLC

Date _____ Signature _____

Title _____

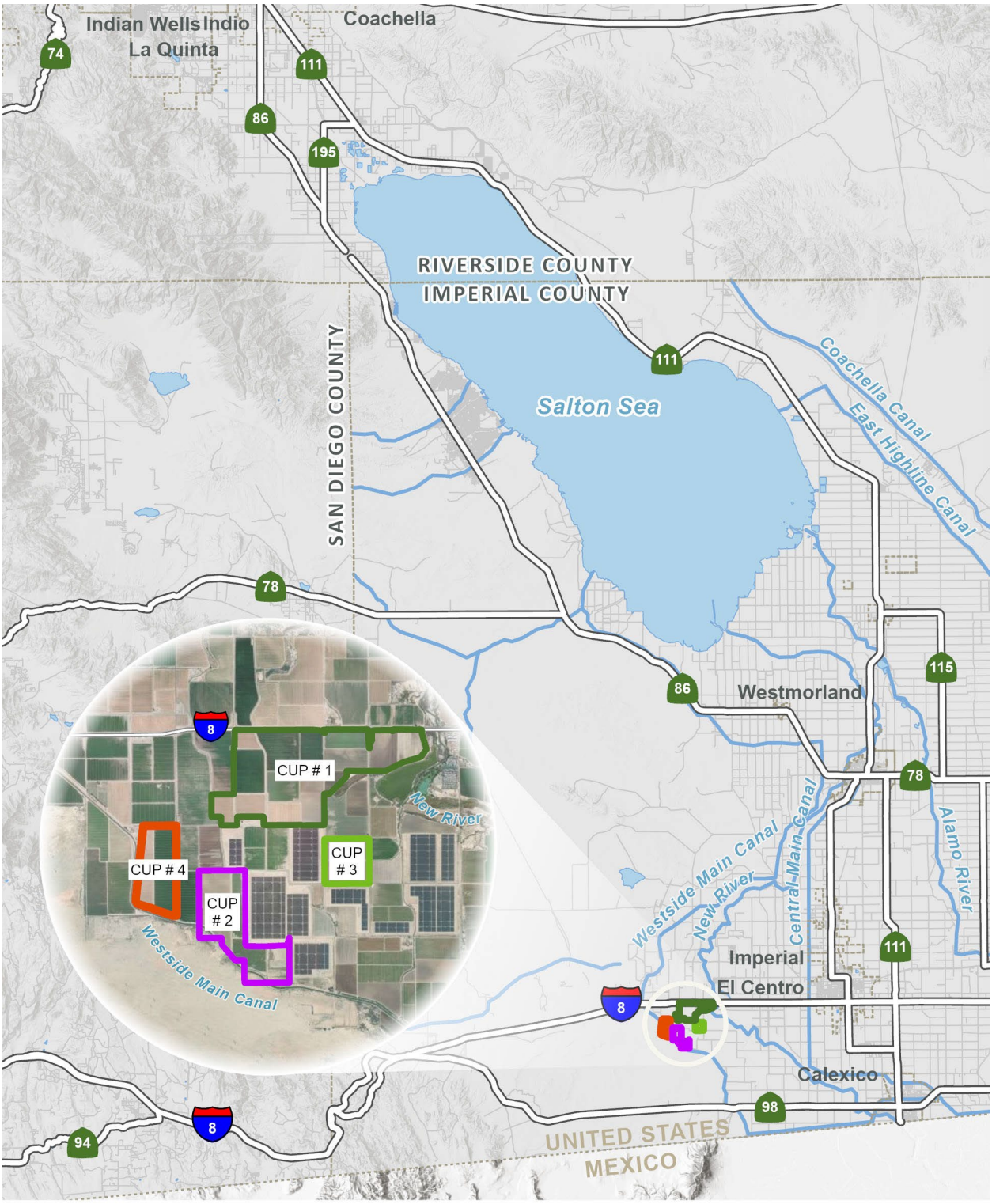
Telephone _____

Reference: California Administrative Code, Title 14, (CEQA Guidelines) Section 15082(a), 15103, 15375.

PC ORIGINAL PKG

Figure 1. Project Location

PC ORIGINAL PKG



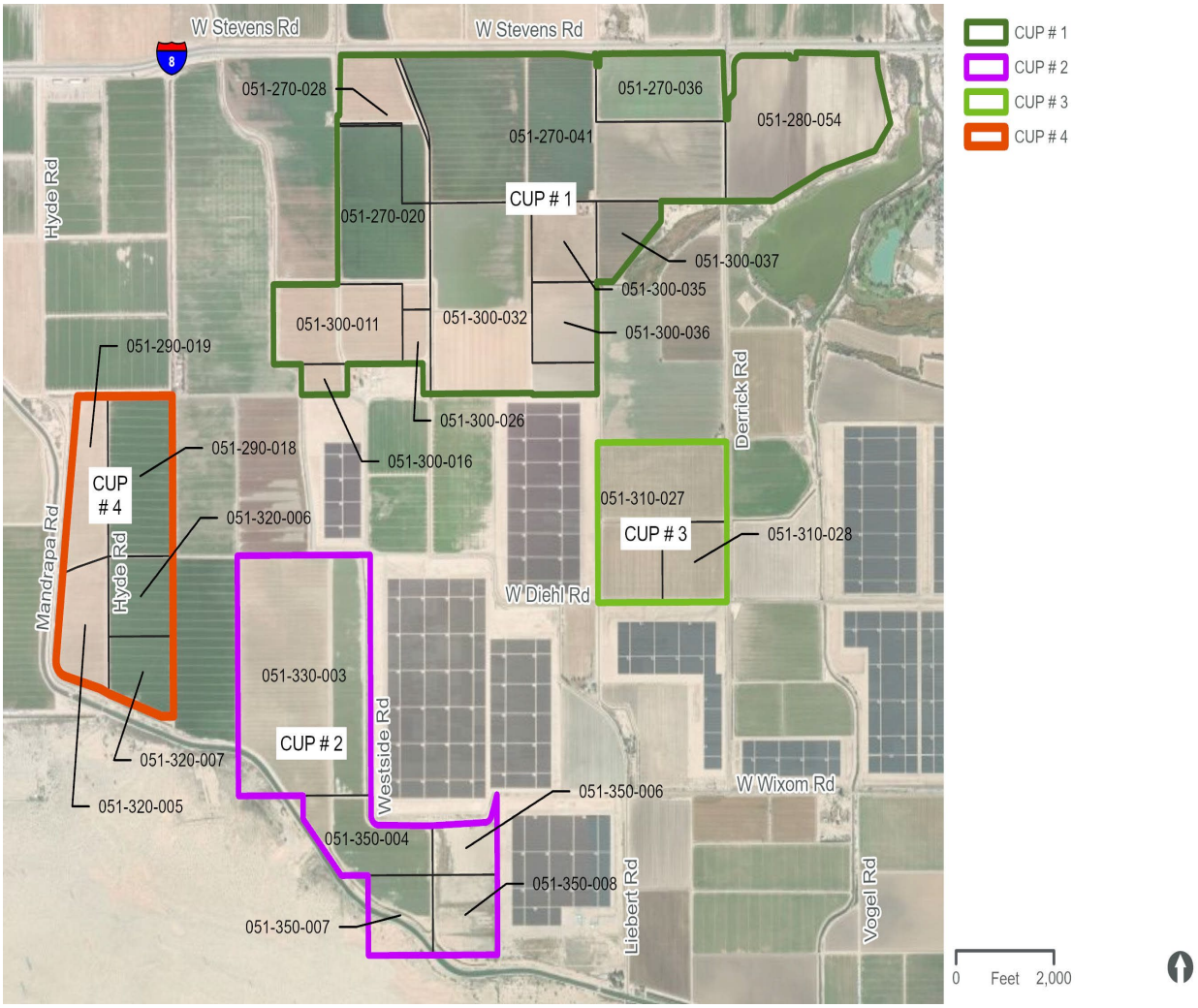
PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Figure 2 Project Site Boundaries/Local Vicinity

PC ORIGINAL PKG



PC ORIGINAL PKG

ATTACHMENT A – Big Rock 2 Cluster Solar & Storage Project Assessor's Parcel Numbers (APN), Zoning, and Acreage

Big Rock Cluster North: CUP No. 24-0006

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	85.5
	Sub-total		**910.0**
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
13	051-300-036 (to be re-entitled)	A-3-RE	40.3
	Sub-total		**120.3**
	TOTAL ACRES		**1,030**

Big Rock Cluster South: CUP No. 24-0007

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410.0**

PC ORIGINAL PKG

Big Rock Cluster East/Laurel Cluster South: CUP No. 24-0008

	APN	Zoning	Acres
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	TOTAL ACRES		**160.0**

Big Rock Cluster West: CUP No. 24-0009

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9
5	051-320-007	A-3	35.3
	TOTAL ACRES		**249.0**

PC ORIGINAL PKG

Imperial County
Planning & Development Services Department

NOTICE OF PREPARATION OF DRAFT EIR FOR THE BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT AND NOTICE OF PUBLIC EIR SCOPING MEETING

The Imperial County Planning & Development Services Department intends to prepare an Environmental Impact Report (EIR) for the proposed Big Rock 2 Cluster Solar & Storage Project as described below. A public scoping meeting for the proposed EIR will be held by the Imperial County Planning & Development Services Department on September 26, 2024 at 6:00PM. The scoping meeting will be held at the Imperial County Planning & Development Services Department, located at 801 Main Street, El Centro, CA 92243. Comments regarding the scope of the EIR will be accepted at this meeting.

SUBJECT: Environmental Impact Report (EIR), Big Rock 2 Cluster Solar & Storage Project (General Plan Amendment 24-0002, Zone Change 24-0003, Conditional Use Permits 24-0006 thru -0009, and Variances 24-0002 thru -0005 & Water Supply Agreement (WSA).

BOARD OF SUPERVISORS CONSIDERATION: To Be Determined.

PROJECT LOCATION: The project site is located on approximately 1,849 acres of privately-owned, vacant land in Imperial County, California. The project site is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road.

PROJECT DESCRIPTION: The Project would include the construction and operation of a photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility comprised of up to 500 megawatts alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the San Diego Gas & Electric (SDG&E) Imperial Valley substation via an overhead 230-kV gen-tie line. Two gen-tie line alternatives are proposed. Implementation of the project requires the following:

- **General Plan Amendment:** To include/classify all project parcels into the RE Overlay Zone.
- **Zone Change:** The applicant is requesting a Zone Change to include/classify all project parcels into the Renewable Energy Overlay Zone.
- **Conditional Use Permit:** Implementation of the project would require the approval of four CUPs to allow for the construction and operation of the proposed solar energy facility with an integrated BESS on land zoned A-2, A-2-R, A-3, A-2-RE and A-3-RE.
- **Water Supply Assessment:** Implementation of the project would require the approval of the Water Supply Assessment.

Project Applicant: 90FI 8me, LLC

URBAN AREA PLAN: None, located in unincorporated area of County of Imperial

BOARD OF SUPERVISORS DISTRICT: District 2, Supervisor Luis A. Plancarte

ANTICIPATED SIGNIFICANT EFFECTS: The EIR will analyze potential impacts associated with the following: Aesthetics; Agricultural Resources; Air Quality; Biological Resources; Cultural Resources; Cumulative Impacts; Geology/Soils; Greenhouse Gas Emissions/Climate Change; Growth-inducing Impacts; Hazards/Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Noise; Public Services; Transportation/Traffic; and Utilities and Service Systems including water supply and energy.

COMMENTS REQUESTED: The Imperial County Planning & Development Services Department would like to know your ideas about the effects this project might have on the environment and your suggestions as to mitigation or ways the project may be revised to reduce or avoid any significant environmental impacts. Your comments will guide the scope and content of environmental issues to be examined in the EIR. Your comments may be submitted in writing to Diana Robinson, Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243. Available project information may be reviewed at this location.

NOTICE OF PREPARATION REVIEW PERIOD: September 3rd 2024 thru October 7th 2024

PC ORIGINAL PKG

Initial Study

PC ORIGINAL PKG

Initial Study and NOP

Big Rock 2 Cluster Solar & Storage Project

Initial Study #: 24-0009

CUP #s:

- Big Rock Cluster North: #24-0006
- Big Rock Cluster South: #24-0007
- Big Rock Cluster East/Laurel Cluster South: #24-0008
- Big Rock Cluster West: #24-0009

General Plan Amendment: #24-0002

Zone Change: #24-0003

Variance: #24-0002

Imperial County, CA

December 2024

Reviewed by:

County of Imperial

Planning & Development Services Department

801 Main Street

El Centro, CA 92243

Prepared by:

HDR Engineering, Inc.

591 Camino de la Reina, Suite 300

San Diego, CA 92108

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Contents

Introduction 1
A. Purpose 1
B. CEQA Requirements and the Imperial County's Rules and Regulations for Implementing CEQA 1
C. Intended Uses of Initial Study and Notice of Preparation 2
D. Contents of Initial Study and Notice of Preparation 2
E. Scope of Environmental Analysis 3
F. Policy-Level or Project-Level Environmental Analysis 3
G. Tiered Documents and Incorporation by Reference 3

Environmental Checklist Form 6
Environmental Factors Potentially Affected 9
Environmental Evaluation Committee Determination 9

Project Summary 11
Project Location 11
Project Summary 13
Environmental Setting 18
General Plan Consistency 19

Evaluation of Environmental Impacts 23
I. Aesthetics 25
II. Agriculture and Forestry Resources 27
III. Air Quality 29
IV. Biological Resources 30
V. Cultural Resources 32
VI. Energy 33
VII. Geology and Soils 34
VIII. Greenhouse Gas Emissions 36
IX. Hazards and Hazardous Materials 37
X. Hydrology and Water Quality 39
XI. Land Use and Planning 41
XII. Mineral Resources 42
XIII. Noise 43
XIV. Population and Housing 44
XV. Public Services 45
XVI. Recreation 46
XVII. Transportation 47
XVIII. Tribal Cultural Resources 48
XIX. Utilities and Service Systems 49
XX. Wildfire 51
XXI. Mandatory Findings of Significance 53

References 54

List of Preparers 55

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Introduction

A. Purpose

This document is a ☐ policy-level; ☒ project-level Initial Study for evaluation of potential environmental impacts resulting with the proposed Big Rock 2 Cluster Solar & Storage Project.

B. CEQA Requirements and the Imperial County's Rules and Regulations for Implementing CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's Rules and Regulations for Implementing CEQA, an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

☒ According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

☐ According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.

☐ According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will result in potentially significant environmental impacts and therefore, an Environmental Impact Report is deemed as the appropriate document to provide necessary environmental evaluations and clearance for the proposed project.

This Initial Study and Notice of Preparation are prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); the State CEQA Guidelines & County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA; applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning

PC ORIGINAL PKG

Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

C. Intended Uses of Initial Study and Notice of Preparation

This Initial Study and Notice of Preparation are informational documents which are intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Initial Study and Notice of Preparation, prepared for the project will be circulated for a period of no less than 35 days for public and agency review and comments.

D. Contents of Initial Study and Notice of Preparation

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

PROJECT SUMMARY, LOCATION AND ENVIRONMENTAL SETTINGS describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

PC ORIGINAL PKG

E. Scope of Environmental Analysis

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. No Impact: A “No Impact” response is adequately supported if the impact simply does not apply to the proposed applications.
2. Less Than Significant Impact: The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
3. Less Than Significant with Mitigation Incorporated: This applies where incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact."
4. Potentially Significant Impact: The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. Policy-Level or Project-Level Environmental Analysis

This Initial Study will be conducted under a ☐ policy-level, ☒project-level analysis.

Regarding mitigation measures, it is not the intent of this document to “overlap” or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County’s jurisdiction, are also not considered mitigation measures, and therefore, will not be identified in this document.

G. Tiered Documents and Incorporation by Reference

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. Tiered Documents

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

“Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.”

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

“Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development

PC ORIGINAL PKG

projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

2. **Incorporation by Reference**

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]).

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR is available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.
- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243, Ph. (442) 265-1736.
- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

PC ORIGINAL PKG

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the ‘County of Imperial General Plan EIR is SCH #93011023.

The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f])

PC ORIGINAL PKG

Environmental Checklist Form

1. **Project Title:** Big Rock 2 Cluster Solar & Storage Project
2. **Lead Agency name and address:** Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243
3. **Contact person and phone number:** Diana Robinson, Planning Division Manager, 442-265-1736
4. **Project location:** The proposed Big Rock 2 Cluster Solar and Storage Project is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately owned land, comprising 24 assessor parcels. The project site includes 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 south will be re-entitled as part of the proposed project.

   The entire Project area is designated Agricultural in the General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.
5. **Project sponsor's name and address:**
   90FI 8me, LLC,
   4370 Town Center Boulevard, Suite 110
   El Dorado Hills, CA 95762
6. **General Plan Designation:** Agriculture
7. **Zoning:** A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture), and A-2-RE (General Agricultural - Renewable Energy Overlay).
8. **Description of project:** The Project would include the construction and operation of a PV solar energy generation and battery energy storage system (BESS) facility comprised of up to 500 megawatts alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or “gen-tie” line linking a Project substation to the Imperial Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the San Diego Gas & Electric (SDG&E) Imperial Valley substation via an overhead 230-kV gen-tie line. Two gen-tie line alternatives are proposed.
9. **Surrounding land uses and setting: Briefly describe the project's surroundings:** The project site is surrounded by a mix of agricultural fields, and within and/or adjacent to the Laurel Cluster Solar Farm Project site and is adjacent to, and/or in immediate proximity to other solar farms including the VEGA SES Solar Energy Project and Campo Verde Solar project.

PC ORIGINAL PKG

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

- Dust Control Plan - Air Pollution Control District
- Rule 310 Exemption (as applicable) - Air Pollution Control District
- Construction Traffic Control Plan - Department of Public Works
- County Road Encroachment Permits - Department of Public Works
- Vacation of Public Easements (as applicable) - Department of Public Works
- Site Plan and Architectural Review - Planning & Development Services
- Occupancy Permits - Planning & Development Services
- Fire Safety Plan - Fire Department and Office of Emergency Management
- Project Access and Fire Water Requirements - Fire Department and Office of Emergency Management
- On-site Water Treatment Permit - Division of Environmental Health, Department of Public Works
- Private Sewage Disposal Permit - Division of Environmental Health
- Project Decommissioning Plan - Planning & Development Services, Department of Public Works
- Pest Management Plan - Agricultural Commissioner's Office

Imperial Irrigation District

Various approvals may be required from IID in conjunction with implementation of the proposed Project. Wherever an IID facility (drain, irrigation canal, electric line, etc.) intersects the Project, an encroachment would occur as the proposed Project would cross IID facilities with access points and electrical crossings. The proposed Project may also drain into IID drain facilities. Due to the preliminary nature of the Project and the rapidly changing technology, the exact locations of proposed access and drainage encroachments, and electrical crossings, are not known at this time. The Project encroachments/crossings would not interfere with the purpose of IID's facilities. The following IID approvals, although not discretionary approvals, include, but are not limited to:

- Encroachment Permits/Agreements
- Electrical Crossings
- Water Supply Agreements/Water Card
- Station Service/"Backfeed" Agreement
- Distribution Power/Electric Service Agreement

Other Agency Approvals

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nation Wide Permit (NWP) (if required)

PC ORIGINAL PKG

- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement (SAA) (if required)
- Regional Water Quality Control Board Water Quality (RWQCB) Clean Water Act (CWA) 401 Water Quality Certification (WQC) Permit (if required), Waste Discharge Requirements (WDR) Permit, and National Pollution Discharge Elimination System (NPDES) Construction General Permit Coverage (for project construction activities)
- California Department of Transportation (Caltrans) Right-of-Way Encroachment Permits and/or Oversized Loads Permits (as required)

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    Pursuant to AB-52 and Public Resources Code, Section 21080.3.1(d) Formal Notification of Determination that a Project Application is Complete or Decision to undertake a Project, and Notification of Consultation Opportunity, the County sent the following via certified mail:

    - Campo Band of Mission Indians (June 12, 2024)
    - Quechan Indian Tribe (June 12, 2024)

    Additionally, in accordance with Senate Bill 18, the County sent tribal notification letters on September 3, 2024.

PC ORIGINAL PKG

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☒	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology/Soils	☒	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials
☒	Hydrology / Water Quality	☒	Land Use/Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☒	Public Services
☒	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☒	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

Environmental Evaluation Committee Determination

After Review of the Initial Study, the Environmental Evaluation Committee (EEC) has:

- ☐ Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

PC ORIGINAL PKG

CALIFORNIA DEPARTMENT OF FISH AND GAME DE MINIMIS IMPACT FINDING:

☐Yes ☐No

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☐	☐	☐
ENVIRONMENTAL HEALTH	☐	☐	☐
OFFICE EMERGENCY SERVICES	☐	☐	☐
APCD	☐	☐	☐
AG	☐	☐	☐
SHERIFF DEPARTMENT	☐	☐	☐
ICPDS	☐	☐	☐

Jim Minnick, Director of Planning/EEC Chairman Date:

Signature

PC ORIGINAL PKG

Project Summary

Project Location

The proposed Big Rock 2 Cluster Solar and Storage Project is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. An overview of the project location from a regional perspective is shown in Figure 1. The project site is west of Drew Road and east and north of Mandapa Road. The entire project site comprises 1,849 acres of privately owned land, comprising 24 assessor parcels. The project site includes 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South projects will be re-entitled as part of the proposed project.

The entire Project area is designated Agricultural in the General Plan. Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland.

1. **Big Rock Cluster North: CUP No. 24-0006**

   Big Rock Cluster North: CUP No. 24-0006 is located immediately south of I-8 and north of W Vaughn Road. The easterly limits of this site are generally defined by the New River, with the westerly limits of this site defined by Westside Road. The site is traversed by the Fern Canal and the Fig Lateral.

	APN	Zoning	Acres
1	051-270-020	A-2-R	101.8
2	051-270-028	A-2	52.3
3	051-270-036	A-2	67.4
4	051-270-041	A-2-R	279.0
5	051-280-054	A-2	149.5
6	051-300-011	A-2	79.6
7	051-300-016	A-2	10.8
8	051-300-026	A-2	13.4
9	051-300-035	A-3	40.3
10	051-300-037	A-3	28.9
11	051-300-032 (northern portion)	A-2	85.5
	Sub-total		**910.0**
Laurel 2 North CUP #21-0014 (Expires December 2024)			
12	051-300-032 (southern portion) (to be re-entitled)	A-2-RE	80.0
13	051-300-036 (to be re-entitled)	A-3-RE	40.3

PC ORIGINAL PKG

	Sub-total		**120.3**
	TOTAL ACRES		**1,030**

2. Big Rock Cluster South: CUP No. 24-0007

Big Rock Cluster South: CUP No. 24-0007 is located generally south of Dixie Lateral One and north of the Westside Main Canal. The Dixie Drain Three generally marks the eastern boundary and an unnamed, unpaved farm road delineates the western boundary.

	APN	Zoning	Acres
1	051-330-003	A-3	246.5
2	051-350-004	A-3	57.4
3	051-350-006	A-3	26.3
4	051-350-007	A-3	40.0
5	051-350-008	A-3	40.0
	TOTAL ACRES		**410.0**

3. Big Rock Cluster East/Laurel Cluster South: CUP No. 24-0008 (to be re-entitled)

Big Rock Cluster East/Laurel Cluster South: CUP No. 24-0008 is north of W Diehl Road, west of Jessup Road, and east of Derrick Road. An unnamed, unpaved farm road marks the northern boundary.

	APN	Zoning	Acres
1	051-310-027	A-2-R-RE	120.0
2	051-310-028	A-2-R-RE	39.9
	TOTAL ACRES		**160.0**

4. Big Rock Cluster West: CUP No. 24-0009

Big Rock Cluster West: CUP No. 24-0009 is located immediately east of Mandapa Road, south of W Vaughn Road, west of an unnamed, unpaved farm road, and north of the Westside Main Canal and Mandrapa Road.

	APN	Zoning	Acres
1	051-290-018	A-2-R	79.8
2	051-290-019	A-3	48.7
3	051-320-005	A-3	45.0
4	051-320-006	A-3	39.9

PC ORIGINAL PKG

5	051-320-007	A-3	35.3
	TOTAL ACRES		**249.0**

Project Summary

The Applicant proposes to develop, design, and construct a PV solar energy generation and BESS facility comprised of up to 500 megawatt alternating current (MWac) PV solar and up to 500 MWac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission line or "gen-tie" line linking a Project substation to the IID Liebert Switchyard. The Liebert Switchyard would then be connected to the SDG&E Imperial Valley substation via an overhead 230-kV gen-tie line. Two gen-tie line alternatives are also under consideration.

In order to implement the project, 90FI 8me LLC ("the Applicant") is seeking approval of four (4) Conditional Use Permits (CUPs) associated with the construction and operation of the utility-scale [solar energy generation and BESS facility.

It is anticipated that all BESS facilities associated with the Project will be developed concurrently with PV componentry and situated in proximity to Project sub-station(s); however, the CUP areas may cooperate if necessary to meet energy production and Project needs, by allowing one CUP area to utilize "BESS" credits of another. Likewise, the Project may share facilities such as Operations & Maintenance (O&M) facilities, transmission-related facilities, Project sub-station(s), and/or other appurtenances.

The project will include PV modules, collection, inverter and transformer systems, BESS, substation(s), transmission line and interconnection, an operations and maintenance building, roadway and IID crossings, water use and storage, site security and fencing, and lighting.

PV Module Configuration

The Project would use PV panels or modules on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). Although the panels could stand up to 15 feet in height, depending on the mounting system used, panels are expected to remain between six and eight feet in height.

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current ("DC"), which is converted to alternating current ("AC") at the inverter stations.

Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV.

PC ORIGINAL PKG

PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. Potential collector line routes for the Project are shown in Figure 3; however, not all routes will ultimately be developed.

Battery Energy Storage System

The Project will include one or more BESS, located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet.

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.

Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence.

Dedicated Project substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building.

Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard/Sub-station via one of the proposed gen-tie line alternatives as shown in Figure 3. Big Rock 2 will transmit electricity to IID via the Liebert Switchyard/Sub-station, currently under construction in the Big Rock

PC ORIGINAL PKG

1 Project; therefore, a new IID switchyard/sub-station will not be required, and thus obviating the need for any real estate conveyance to IID specific to Big Rock 2. The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be undergrounded as necessary.

Alternative gen-tie routing(s) is depicted in Figure 2 may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40’ x 80’ in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations. Any unused O&M areas onsite may be covered by solar panels.

Roadway and IID Crossings

The Project may require the following crossing types of IID canals and/or drains and unimproved Imperial County roads: overhead electric, underground electric, vehicular crossings. The exact locations of the crossings are not known at this time but are not anticipated to interfere with the purpose or continued use of these facilities. For instance, where a drain flows, the Project crossing or access point would still allow the drain to flow. As required by IID, the Project may be required to make minor improvements to on-site drains. IID requires solar projects to improve existing drain outflow pipes. This typically involves installation of new drain outflow pipes to reduce erosion within the drains.

Water Usage

Water demand for panel washing and O&M domestic use is not expected to exceed 100 acre-feet per year. Water usage during construction, primarily for dust-suppression purposes, is not expected to exceed 700 acre-feet in total. Decommissioning of the Project at the end of its anticipated useful lifespan may require approximately an additional 700 acre-feet. Water would be obtained from the landowner’s water supply, local irrigation district, or delivered via truck from off-area source(s). A

PC ORIGINAL PKG

small water treatment system may be installed onsite near or within the O&M building to provide deionized water for panel washing.

Water Storage

One or more above-ground water storage tanks with a total capacity of up to 100,000 gallons may be placed near the O&M building. The storage tank(s) near the O&M building would have the appropriate fire department connections to be used for fire suppression. These storage tanks could be up to 30-feet in height.

Site Security and Fencing

The Project area would be enclosed within a chain link fence measuring seven (7) to ten (10) feet in height from finished grade. An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

Annual Production

The Project PV solar will have a nominal output capacity of up to 500 (AC), generating sufficient electricity to power approximately 130,000 homes. The Project would generate electrical power during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. The Project's peak generating capacity corresponds to this time period. There is no generating capacity between sunset and sunrise due to the lack of solar energy, though power may be released from the 500 MW BESS at any time of day.

Electric Service

Commercial operational low voltage electric service may be obtained from IID for the Projects' O&M building(s) and auxiliary loads. Temporary electric service is typically obtained for primary construction logistical areas. Generator power may be utilized for temporary portable construction trailer(s) during Project construction and/or decommissioning.

PC ORIGINAL PKG

Project Construction

Construction Activities and Duration

The construction period for the Project is approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work
- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Construction Access. Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic could access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the Project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Workforce (Construction Phase)

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

Project Operation

Operational Activities

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

• Cleaning of PV panels

• Monitoring PV panel and BESS electricity generation

• Providing site security

• Maintenance of stormwater facilities

PC ORIGINAL PKG

• Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

Workforce (Operational Phase)

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

Environmental Setting

The project site is surrounded by a mix of agricultural fields and utility-scale solar facilities.

The topography of the Project area is relatively flat, consisting primarily of fields and unpaved roads, and all the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Due to the extensive irrigated farming history within the Project area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project. These include a segment of the New River adjacent to the northeast corner of the Project, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

Adjacent Lands

Existing Land Use

The Project is adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County.

Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course *(and associated Specific Plan Area)* to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the SDG&E Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

Operational Renewable Energy Facilities

Campo Verde Solar, owned by Southern Power, became operational in September 2013 and is located on multiple APNs that are adjacent to the proposed Project (Figure 3).

Renewable Energy Facilities Pending Entitlement

The Consolidated Edison Development Westside Canal Battery Storage Project is a utility-scale energy storage development approved by Imperial County and is located on two APNs adjacent to the southernmost parcels of the proposed Big Rock 2 Project (Figure 3).

PC ORIGINAL PKG

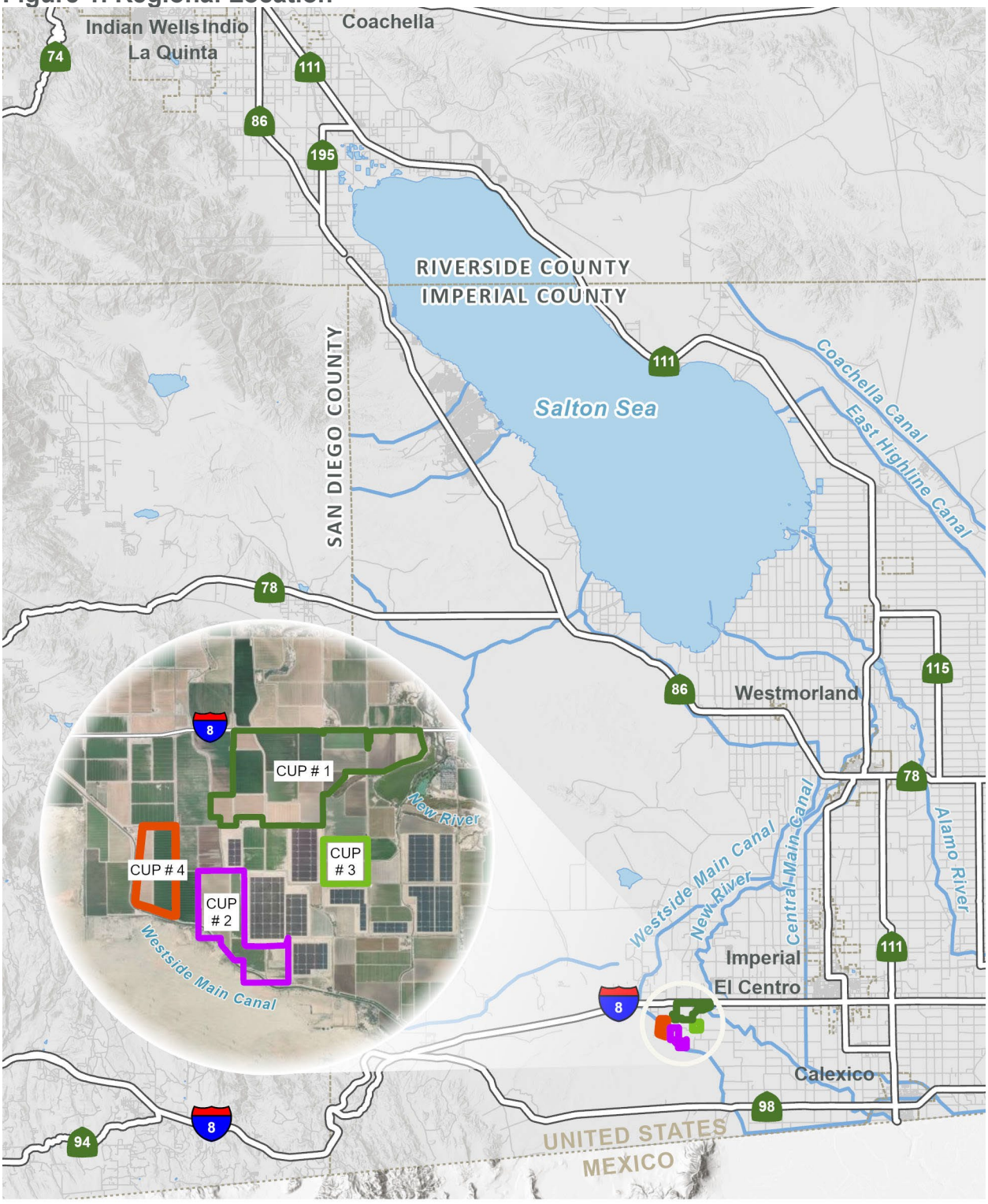
General Plan Consistency

The proposed project is located within an unincorporated area of the County. The existing General Plan land use designation is “Agriculture.” The project site is currently zoned A-2 (General Agricultural), A-2-R (General Agricultural Rural), A-3 (Heavy Agriculture) and A-2-RE (General Agricultural within the Renewable Energy Overlay). Construction of a solar facility would be allowed within the existing zoning under a Conditional Use Permit (CUP).

The County Land Use Ordinance, Division 17, includes the Renewable Energy (RE) Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved CUP. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overly Zone. The majority of the project site is located outside of the RE Overlay Zone. Therefore, the proposed project requires a General Plan Amendment and Zone Change to include/classify the project parcels into the RE Overlay Zone. No change in the underlying General Plan land use (Agriculture) is proposed.

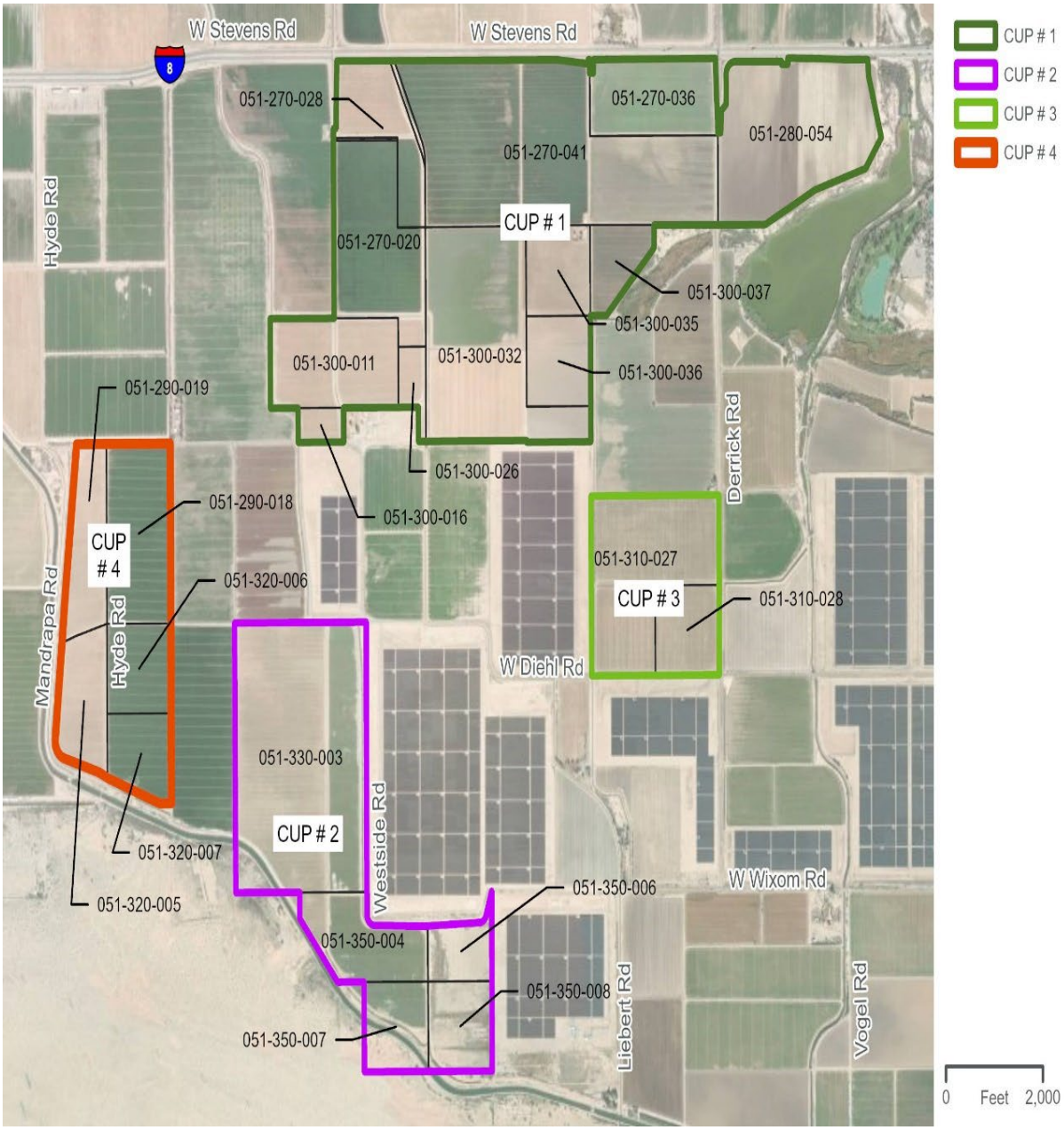
PC ORIGINAL PKG

Figure 1. Regional Location



PC ORIGINAL PKG

Figure 2. Project Site



PC ORIGINAL PKG

Figure 3 Detailed Site Plan

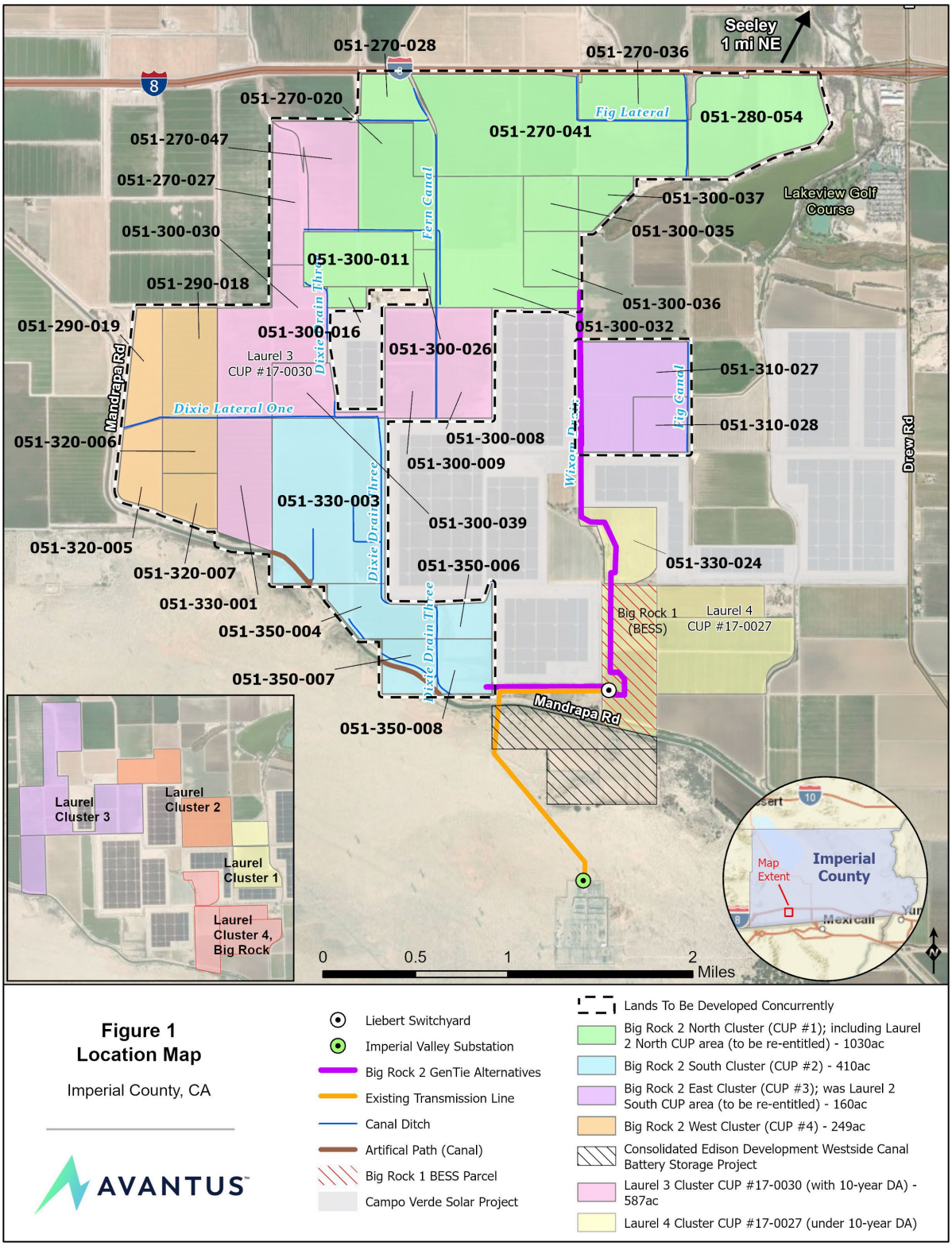


Figure 1
Location Map

Imperial County, CA

AVANTUS

- Liebert Switchyard
- Imperial Valley Substation
- Big Rock 2 GenTie Alternatives
- Existing Transmission Line
- Canal Ditch
- Artifical Path (Canal)
- Big Rock 1 BESS Parcel
- Campo Verde Solar Project
- Lands To Be Developed Concurrently
- Big Rock 2 North Cluster (CUP #1); including Laurel 2 North CUP area (to be re-entitled) - 1030ac
- Big Rock 2 South Cluster (CUP #2) - 410ac
- Big Rock 2 East Cluster (CUP #3); was Laurel 2 South CUP area (to be re-entitled) - 160ac
- Big Rock 2 West Cluster (CUP #4) - 249ac
- Consolidated Edison Development Westside Canal Battery Storage Project
- Laurel 3 Cluster CUP #17-0030 (with 10-year DA) - 587ac
- Laurel 4 Cluster CUP #17-0027 (under 10-year DA)

PC ORIGINAL PKG

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

PC ORIGINAL PKG

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

PC ORIGINAL PKG

I. Aesthetics

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Impact Analysis

a) **No Impact.** According to the Conservation and Open Space Element of the Imperial County General Plan, the solar energy facility site is not located within an area that has been formally identified as a federal, state, or county scenic vista. No scenic vistas or areas with high visual quality would be disrupted. Thus, no impact is identified for this issue area and no further analysis is warranted.

b) **No Impact.** According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System (Caltrans 2018), the project site is not located within a state scenic highway corridor, nor are there any state scenic highways located in proximity to the project site. The nearest eligible State scenic highway is the segment of the Sunset Cliffs Boulevard/State Route 98 west of Ocotillo. The project is located approximately 14 miles east of Ocotillo and therefore would not be visible from the project site. The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway. Therefore, no impact is identified for this issue area and no further analysis is warranted.

c) **Potentially Significant Impact.** Although the project site is not located near a scenic highway or designated scenic vista, the proposed project may result in a change to the look and rural character of the area. Therefore, a potentially significant impact is identified for this issue area. A visual assessment will be prepared for the project and this issue will be addressed in the EIR.

d) **Potentially Significant Impact.** The proposed project is located in a rural area of Imperial County and is developed with agricultural uses and utility-scale solar generation facilities. There are no established residential neighborhoods immediately adjacent to the project site. Minimal lighting is required for project operation and is limited to safety and security functions. All lighting will be directed away from any public right-of-way. The Big Rock Cluster 2 North is located along (immediately south of) I-8, and development setbacks from I-8 are incorporated into the project concept plan for this area. Further, the solar panels will

PC ORIGINAL PKG

be constructed of low reflective materials; therefore, it is not anticipated that they would result in creating glare. Although the proposed project is not expected to create a new source of substantial light or glare affecting day or nighttime views, a glint and glare assessment will be prepared for the project and this issue will be addressed in the EIR. Therefore, a potentially significant impact is identified for this issue area.

PC ORIGINAL PKG

II. Agriculture and Forestry Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☒	☐	☐	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** According to the California Department of Conservation's California Important Farmland Finder, portions of the project site are designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland (California Department of Conservation 2020). Therefore, implementation of the proposed project has a potential to result in the conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural use. This is considered a potentially significant impact, a Land Evaluation Site Assessment will be prepared for the project and this issue will be analyzed in further detail in the EIR.

PC ORIGINAL PKG

b) **Potentially Significant Impact.** The project sites are currently zoned A-2, A-2-R, A-2-RE, A-3 and A-3-RE and designated by the General Plan as "Agriculture." Solar energy facilities are allowed within these zones subject to a conditional use permit; however, project approvals include a General Plan Amendment and zone change for the entire project area. Approval of the General Plan amendment and zone change would add portions of the project area that are not currently within the Renewable Energy overlay to Imperial County's Renewable Energy Overlay only; no land use amendment is requested, and the underlying "Agriculture" designation would remain. Because the project sites are located on land designated for agricultural uses, this issue will be analyzed in further detail. As mentioned above, a Land Evaluation Site Assessment will be prepared for the projects, and this issue will be addressed in the EIR.

As of December 31, 2018, all Williamson Act contracts in Imperial County have been terminated. The project site is not located on Williamson Act contracted land. Therefore, the proposed project would not conflict with a Williamson Act contract and no impact is identified.

c) **No Impact.** There are no existing forest lands, timberlands, or timberland zoned "Timberland Production" within or immediately adjacent to the project site that would conflict with existing zoning or cause rezoning. Therefore, no impact is identified for this issue area.

d) **No Impact.** There are no existing forest lands within or immediately adjacent to the project site. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact is identified for this issue area.

e) **Potentially Significant Impact.** Refer to response II. a) above.

PC ORIGINAL PKG

III. Air Quality

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis

a) **Potentially Significant Impact.** The project site is located within the jurisdiction of Imperial County Air Pollution Control District (ICAPCD) in the Imperial County portion of the Salton Sea Air Basin. Construction of the proposed project would create temporary emissions of dust, fumes, equipment exhaust, and other air contaminants that may conflict with the ICAPCD's rules and regulations. These temporary construction emissions have the potential to result in a significant air quality impact.

b) **Potentially Significant Impact.** The criteria pollutants for which the project area is in state nonattainment under applicable air quality standards are O_3 and PM_{10}. Air pollutants transported into the Salton Sea Air Basin from the adjacent South Coast Air Basin (Los Angeles County, San Bernardino County, Orange County, and Riverside County) and Mexicali (Mexico) substantially contribute to the non-attainment conditions in the Salton Sea Air Basin. A potentially significant impact is identified for this issue area. The CalEEMod air quality model will be utilized to estimate the project's air quality emissions and the results will be included in the EIR analysis.

c) **Potentially Significant Impact.** The project site is located in a rural agricultural area of Imperial County, however, the area also has been developed with utility-scale solar projects. The nearest sensitive land use to the project site is a single-family residence located approximately 100 feet west and south of the proposed Big Rock 2 Cluster North facility. This issue is potentially significant and will be addressed in the EIR analysis.

d) **Less Than Significant Impact**. Land uses commonly considered to be potential sources of odorous emissions include wastewater treatment plants, sanitary landfills, food processing facilities, chemical manufacturing plants, rendering plants, paint/coating operations, and concentrated agricultural feeding operations and dairies. The construction and operation of the proposed solar and BESS, and supporting infrastructure and facilities

are not anticipated to result in odor emissions, and impacts would be less than significant.

PC ORIGINAL PKG

IV. Biological Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** According to the Conservation and Open Space Element of the General Plan (County of Imperial 2016), numerous special-status plants and special status species occur in the County of Imperial, and of particular concern is western burrowing owl. The project site has the potential to support native habitats and/or sensitive species. Burrowing owls and burrows are commonly found along canals and drains. Canals and laterals traverse portions of the project site, and the site is in relative proximity to the larger Westside Main Canal, and New River. Therefore, the project site has the potential to be used as burrowing owl foraging habitat, as burrowing owls and burrows are commonly found along canals and

PC ORIGINAL PKG

drains. Thus, a potentially significant impact is identified for this issue area. A biological resources technical report that will address the proposed project's potential impacts on biological resources will be prepared and this issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Refer to response IV. a) above.

c) **Potentially Significant Impact.** Being situated in an agricultural area, the project site and surrounding areas are traversed by a network of drains, canals, and other irrigation infrastructure administered by the IID, some of which constitute potentially jurisdictional features. An aquatic resources delineation that will address the proposed project's potential impacts on state or federally protected wetlands will be prepared and included in the EIR analysis.

d) **Potentially Significant Impact.** Refer to response IV. a) above.

e) **Potentially Significant Impact .** Refer to response IV. a) above.

f) **No Impact.** The project site is located within the designated boundaries of a Natural Community Conservation Plan & Habitat Conservation Plan (NCCP/HCP), nor is the project site not located within or adjacent to an Area of Critical Environmental Concern. No impact is identified for this issue area.

PC ORIGINAL PKG

V. Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The project site has been disturbed by past farming and farming-related uses. Thus, the presence of significant or undamaged cultural resources on the project site is unlikely. Although the proposed project is not expected to cause a substantial adverse change in the significance of a historical or archaeological resource, this issue will be analyzed further in the EIR. Therefore, a potentially significant impact is identified for this issue area. A cultural resources report that will address the proposed project's potential impacts on historic and prehistoric resources will be prepared and this issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Refer to response V. a) above.

c) **Potentially Significant Impact.** Although unlikely, there is a potential for unknown human remains to be unearthed during earthwork activities. This issue is potentially significant and will be addressed in the EIR analysis.

PC ORIGINAL PKG

VI. Energy

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact Analysis

a) **Less than Significant Impact.** The use of energy associated with the proposed project includes both construction and operational activities. Construction activities consume energy through the use of heavy construction equipment and truck and worker traffic. The proposed project will use several energy- and fuel-efficient design features that would help minimize inefficient or wasteful use of energy and increase conservation during construction. The operation of the solar and BESS facilities would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the proposed project would generate renewable energy resources and is considered a beneficial effect.

Based on these considerations, the proposed project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. A less than significant impact has been identified for this issue area.

b) **Less Than Significant Impact.** Construction equipment would comply with federal, state, and regional requirements where applicable. With respect to truck fleet operations the USEPA and the National Highway Traffic Safety Administration (NHTSA) have adopted fuel efficiency standards for medium- and heavy-duty trucks. Construction equipment and trucks are required to comply with CARB's regulations regarding heavy duty truck idling limits of five minutes at a location and the phase in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption for more fuel-efficient engines. Because the main objectives of the project are to assist the state in meeting its obligations under California's RPS Program and assist California in meeting the GHG emissions reduction goal 85 percent below 1990 levels in 2045, the project would be consistent with the applicable recommended actions of CARB's 22022 Climate Change Scoping Plan, as well as applicable federal, state, and local policies. The project would assist the State and regulated utility providers to generate a greater portion of energy from renewable sources consistent with the RPS. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency during construction and operations. Short-term and long-term impacts would be less than significant.

PC ORIGINAL PKG

VII. Geology and Soils

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☒	☐	☐	☐
iii. Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risk to life or property?	☒	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

PC ORIGINAL PKG

Impact Analysis

ai) **No Impact.** The project site is not located within or near an Alquist-Priolo Special Fault Study Zone. Therefore, no impact is identified for this issue area.

aii) **Potentially Significant Impact.** The project site is located in the seismically-active Imperial Valley in Southern California and considered likely to be subjected to moderate to strong ground motion from earthquakes in the region. The closest mapped earthquake fault zone is an unnamed fault located approximately 2.1 miles west of the project site. Geologic mapping by the USGS of the Imperial Valley after the April 4, 2010 magnitude 7.2MW El Mayor-Cucapah Earthquake indicates movement along several known and unknown faults west of the project site. Due to the project's location in a seismically active area, seismic hazards related to ground shaking could occur on the project site. With the exception of proposed operation and maintenance facilities, the project is not designed for human occupancy; however, the project could pose a threat to emergency personnel and/or persons utilizing operation and maintenance facilities. A potentially significant impact has been identified for this issue area. A geotechnical report that will address the proposed project's potential impacts on geology and soils will be prepared and this issue will be addressed in the EIR.

aiii) **Potentially Significant Impact.** Liquefaction occurs when granular soil below the water table is subjected to vibratory motions, such as vibratory motion produced by earthquakes. With strong ground shaking, an increase in pore water pressure develops as the soil tends to reduce in volume. If the increase in pore water pressure is sufficient to reduce the vertical effective stress (suspending the soil particles in water), the soil strength decreases, and the soil behaves as a liquid (similar to quicksand). Liquefaction can produce excessive settlement, ground rupture, lateral spreading, or failure of shallow bearing foundations.

Four conditions are generally required for liquefaction to occur:

1) The soil must be saturated (relatively shallow groundwater).
2) The soil must be loosely packed (low to medium relative density).
3) The soil must be relatively cohesionless (not clayey).
4) Groundshaking of sufficient intensity must occur to function as a trigger mechanism.

All of these conditions may exist to some degree at the project site. Therefore, there is a potentially significant impact associated with liquefaction. A geotechnical report that will address the proposed project's potential impacts on geology and soils will be prepared and this issue will be addressed in the EIR.

aiv) **No Impact.** According to Figure 2: Landslide Activity in the Seismic and Public Safety Element of the General Plan (County of Imperial 1997), the project site is not located in an area that is prone to landslide hazards. Furthermore, the site topography is flat, and no ancient landslides have been mapped in the area. Development of the project would not directly or indirectly cause potential substantive adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, no impact is identified for this issue area.

b) **Less than Significant Impact.** Soil erosion can result during construction as grading and construction can loosen surface soils and make soils susceptible to wind and water movement across the surface. Impacts are not considered significant because erosion would be controlled on-site in accordance with Imperial County standards, including preparation, review, and approval of a grading plan by the Imperial County engineer, as well as the applicant's proposed best management practices to control erosion. Implementation of Imperial County standards would reduce the potential impacts to a less than significant level.

c) **Potentially Significant Impact.** Near surface soils within the project site will need to be identified to determine if these soils are unstable. Therefore, this issue is potentially significant and will be analyzed in the EIR.

d) **Potentially Significant Impact.** Near surface soils within the project site will need to be identified to determine if these soils are unstable. Therefore, this issue is potentially significant and will be analyzed in the EIR.

e) **Less than Significant Impact.** The project proposes operations and maintenance facilities, which may include restrooms that would rely on septic tanks or similar wastewater disposal systems. However, the septic system(s) would be installed in accordance with County standards and therefore, the project would have a less than significant impact on the project site soil and its capacity to adequately support the use of septic tanks or alternative wastewater disposal systems.

f) **Potentially Significant Impact.** Many paleontological fossil sites are recorded in Imperial County and have been discovered during construction activities. Paleontological resources are typically impacted when earthwork activities, such as excavation cut into geological deposits (formations) with buried fossils. It is not known if any paleontological resources are located on the project site. The proposed project's potential to impact paleontological resources is considered potentially significant and this issue will be addressed in the EIR.

PC ORIGINAL PKG

VIII. Greenhouse Gas Emissions

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The production of greenhouse gas emissions associated with the proposed project includes both construction and operational activities. In the long-term, the project is expected to provide a benefit with respect to reduction of greenhouse gas emissions. However, construction of the project would generate GHG emissions over the anticipated construction period for the project, which is estimated at approximately 18 – 24 months. Exhaust emissions would result from construction equipment and machinery as well as from vehicular traffic generated by construction activities. Thus, a potentially significant impact is identified for this issue area. The CalEEMod air quality model will be utilized to estimate the project's GHG emissions and the results will be included in the EIR analysis.

b) **Potentially Significant Impact.** Refer to response VIII. a) above.

PC ORIGINAL PKG

IX. Hazards and Hazardous Materials

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** Construction of the proposed project would require the use of construction vehicles, associated grease, oil, and fuels, and potential use of other hazardous materials. Additionally, the project would include operation and maintenance facilities, which have the potential to store and handle hazardous materials. Vehicle fuels, oils, grease, and other potentially hazardous materials have the potential to be released into the environment through natural events or human error. This is considered a potentially significant impact and will be addressed in the EIR analysis.

b) **Potentially Significant Impact.** Refer to response IX. a) above.

PC ORIGINAL PKG

c) **Potentially Significant Impact**. Westside Elementary School is located is located within APN 051-300-016, which is within the Big Rock 2 North project area. Because the project involves the construction and operation of BESS system(s), there is a potentially significant impact related to emitting or handling hazardous or acutely hazardous materials substances or waste within one-quarter mile of an existing or proposed school.

d) **Potentially Significant Impact.** The project site has been utilized for agricultural production and there is the potential that contaminated soils are located within the project site. The project site is not known or anticipated to be listed as a hazardous materials site (Department of Toxic Substances Control 2023, State Water Resources Control Board 2023). However, a potentially significant impact associated with the potential for contaminated soils to be present on the project site has been identified, and a Phase I Environmental Site Assessment will be prepared for the project. This issue will be addressed in the EIR.

e) **No Impact.** The project is not located within 2 miles of a public airport or a public use airport. Therefore, implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact is identified for this issue area.

f) **Less Than Significant Impact.** Imperial County Office of Emergency Services (OES) has provided three plans addressing evacuation and evacuation responsibilities for County Fire, Police, and the OES among other topics related to emergency preparedness that do not identify specific evacuation routes. The project applicant would coordinate any construction activities and use of oversized loads or movement of construction/decommissioning equipment with the Imperial County Department of Public Works (ICDPW) and/or California Department of Transportation (Caltrans) and the El Centro Highway Patrol office. The project applicant will be required to file for an encroachment permit for any work or proposed work in the affected County or Caltrans road rights-of-way and for any and all new, altered or unauthorized existing driveway(s) to access the lot or lots and for any proposed road crossings. Thus, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and would result in a less than significant impact.

g) **No Impact.** The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low (County of Imperial 1997). The project site is not located in areas considered wildlands, as the vast majority of the surrounding area is cultivated farmlands and other utility-scale solar facilities. According to the Fire Hazard Severity Zone Viewer provided by the California Department of Forestry and Fire Protection, the project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). Therefore, there would be no impact associated with risk involving wildland fires.

PC ORIGINAL PKG

X. Hydrology and Water Quality

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to create urban non-point source discharge (e.g., synthetic/organic chemicals). No waste discharge requirements have been issued for the proposed project site. However, potentially significant water quality impacts have been identified and will be addressed in the EIR.

PC ORIGINAL PKG

b) **No Impact.** The proposed project would not involve the use of groundwater resources. No groundwater wells will be drilled, nor will the project require the use of ground water. No impact on groundwater supply or recharge would occur.

ci) **Less than Significant Impact.** The proposed project would result in the creation of impervious surfaces. Soil erosion could result during construction and earthmoving as well as during site reclamation. However, the project applicant is required to comply with the Construction General Permit and the Industrial General Permit, as well as Imperial County Land Use Ordinance, Title 9, Chapter 10 – Grading Regulations. County standards and compliance with the NPDES require the creation of a Stormwater Pollution Prevention Plan (SWPPP), and the use of best management practices (BMPs) to reduce impacts to surface and ground water quality attributed to erosion or siltation to a level less than significant. Applicant compliance with Imperial County and State standards would ensure the project does not significantly alter the site's drainage resulting in erosion or siltation on-or off-site, and impacts would be less than significant.

cii) **Less than Significant Impact.** Refer to response X. ci) above.

ciii) **Less than Significant Impact.** Refer to response X. ci) above.

civ) **Less Than Significant Impact.** According to the Federal Management Agency (FEMA) Flood Insurance Rate Map (Panel 06025C2075C), the project site is within Zone X, which is an area determined to be outside the 0.2 percent annual chance floodplain (FEMA 2008). Therefore, the proposed project would not impede or redirect flood flows and this is considered a less than significant impact.

d) **No Impact.** According to the Federal Management Agency (FEMA) Flood Insurance Rate Map (Panel 06025C2075C), the project site is within Zone X, which is an area determined to be outside the 0.2 percent annual chance floodplain (FEMA 2008). In addition, there are no large bodies of water near the project site. The Salton Sea is the closest body of water near the project site but is over 28 miles away from the site, and the Pacific Ocean is over 90 miles away. Therefore, the project would not risk release of pollutants due to project inundation by flood, tsunami or seiche. No impact would occur.

e) **Less Than Significant Impact.** No groundwater wells will be drilled, nor will the project require the use of ground water. Any water needed for fugitive dust control, or other BMPs that require water will be obtained through the project applicant's existing IID contract. Furthermore, the project is required to comply with County, State, and Federal water quality standards. The proposed project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This is considered a less than significant impact.

PC ORIGINAL PKG

XI. Land Use and Planning

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐

Impact Analysis

a) **No Impact.** The project site is located in a sparsely populated, agriculturally zoned portion of Imperial County. There are no established residential communities located within or in the vicinity of the project site. The nearest established residential community is the community of Seeley located north of the project site and north of I-8. Therefore, implementation of the project would not divide an established community and no impact would occur.

b) **Potentially Significant Impact**. The project site is currently designated by the General Plan as "Agriculture." Existing project site zoning consists of A-2, A-2-R, A-2-RE, A-3 and A-3-RE. The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved conditional use permit. Conditional use permit applications proposed for specific renewable energy projects not located in the Renewable Energy Overlay Zone would not be allowed without an amendment to the Renewable Energy Overlay Zone. The majority of the project site is located outside of the Renewable Energy Overlay Zone. Therefore, a General Plan Amendment and Zone Change is required in order to include/classify the project sites into the Renewable Energy Overlay Zone. Because a General Plan amendment and zone change would be required for project implementation, the proposed project may result in a conflict with an applicable land plan, policy, or regulation. The project site is not located within a Habitat Conservation Plan or Natural Community Conservation Plan.

PC ORIGINAL PKG

XII. Mineral Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is not used for mineral resource production. According to Figure 8: Imperial County Existing Mineral Resources of the Conservation and Open Space Element of the General Plan (County of Imperial 2016), no known mineral resources occur within the project site nor does the project site contain mapped mineral resources. Therefore, the proposed project would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of California nor would the proposed project result in the loss of availability of a locally important mineral resource. Thus, no impact is identified for this issue area and no further analysis is warranted.

b) **No Impact.** Refer to response XIII. a) above.

PC ORIGINAL PKG

XIII. Noise

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** The Imperial County Title 9 Land Use Ordinance, Division 7, Chapter 2, Section 90702.00 - Sound level limits, establishes one-hour average sound level limits for the County's land use zones. Agricultural/industrial operations are required to comply with the noise levels prescribed under the general industrial zones. Therefore, the proposed project will be required to maintain noise levels below 75 decibels (dB) (averaged over one hour) during any time of day.

The proposed project will also be expected to comply with the Noise Element of the General Plan which states that construction noise, from a single piece of equipment or a combination of equipment, shall not exceed 75 dB, when averaged over an eight-hour period, and measured at the nearest sensitive receptor. Construction equipment operation is also limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m on Saturday. Nevertheless, the proposed project will result in the increase in ambient noise levels during construction. A noise report that will address the proposed project's potential noise impacts will be prepared and this issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Groundborne vibration and noise could originate from earth movement during the construction phase of the proposed project. However, significant vibration is typically associated with activities such as blasting or the use of pile drivers, neither of which would be required during project construction. Construction activities most likely to cause vibration include heavy construction equipment and site grading operations. Although all heavy, mobile construction equipment has the potential to cause at least some perceptible vibration when operating close to buildings, the vibration is usually short term and is not of sufficient magnitude to cause building damage. Heavy equipment such as dozers, loaders, and drill rig equipment would be operated and, depending on the location within the project site, could be close enough to residences or structures to cause vibration impact. Operation of the project would not result in vibrations perceptible to nearby receptors. This issue will be addressed in the EIR.

c) **No Impact.** The project site is not located within an airport land use plan nor is it within two miles of a public airport or public use airport. As such, no impact would occur to people residing or working in the project area related to excessive noise levels.

PC ORIGINAL PKG

XIV. Population and Housing

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is currently used for agricultural production. Development of residential uses is not proposed. Project construction would involve the use of temporary workforce, however, once operational, the project will only involve a limited number of employees for periodic maintenance activities. It is assumed that the workforce would be from southern California and would likely not require accommodations. The project would not appear to induce population growth; therefore, the project would have no impact.

b) **No Impact.** No housing exists within the project site. Therefore, the proposed project would not displace any existing people or housing, which would require the construction of replacement housing elsewhere. No impact is identified for this issue area.

PC ORIGINAL PKG

XV. Public Services

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire Protection?	☒	☐	☐	☐
ii. Police Protection?	☒	☐	☐	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

Impact Analysis

ai) **Potentially Significant Impact.** Fire protection and emergency medical services in the area are provided by the Imperial County Fire Department. The proposed project would be required to comply with all existing regulations and requirements of the Imperial County Fire Department and would be reviewed for adherence to prevention measures for wildland fires. According to the Imperial County Natural Hazard Disclosure (Fire) Map prepared by the California Department of Forestry and Fire Protection in 2000, the project site may be located within, and/or adjacent to an area identified as a Moderate Fire Hazard Area. Additionally, the project proposes BESS facilities, which require specialized fire suppression equipment and training to contain fires associated with lithium-ion batteries. Construction and operation activities may result in an increased need for fire-fighting personnel and facilities in the area. Therefore, the potential impact on fire services from construction and operation of the proposed projects will be further evaluated in the EIR.

aii) **Potentially Significant Impact.** Police (law enforcement) protection services in the proposed project area are provided by the Imperial County Sheriff's Department. Although the potential is low, the proposed project may attract vandals or other security risks. The increase in construction related traffic could increase demand on law enforcement services. On-site security would be provided and access would be limited to the areas surrounding the project sites during construction and operation, thereby minimizing the need for police surveillance. However, the projects' impacts on sheriff services will be further evaluated in the EIR.

aiii) **Less Than Significant Impact.** The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Also, the number of construction and operational workers coming to the region is low and is not expected to increase demand for schools or require the construction of new schools. Therefore, impacts would be less than significant.

aiv) **Less Than Significant Impact.** The number of construction and operational workers coming to the region is low and is not expected to increase demand on existing or future parks. Therefore, impacts would be less than significant.

av) **Less Than Significant Impact.** The number of construction and operational workers coming to the region is low and is not expected to increase demand for any public services (such as post offices). Therefore, impacts would be less than significant.

PC ORIGINAL PKG

XVI. Recreation

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project would not directly or indirectly increase the number of residents keeping the county compliant with the Quimby Act which requires 5 acres of parkland for every 1,000 residents. No new residents will be introduced into the project area. The workforce required to construct the project are anticipated to come from existing populations that live in or commute from the surrounding local community. As there is no increase of residencies or residents, it is reasonably foreseeable that the project would not lead to an increase of use or deterioration of existing neighborhood, regional, or other recreational facilities. Therefore, the project would have no impact on the use or deterioration of existing recreational resources.

b) **No Impact.** The project does not include nor require the construction of a recreational facility as the project does not alter the current ratio of parkland acres to residents. Therefore, the project will have no impact on the construction or expansion of recreational facilities which might have an adverse effect on the environment.

PC ORIGINAL PKG

XVII. Transportation

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐
b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

Impact Analysis

a) **Potentially Significant Impact.** Construction of the proposed project would result in a small increase of traffic to the area, which may result in a potentially significant impact. As proposed, construction access to the project site could occur from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). An additional access alternative includes entrance to the Project site from Interstate 8 (I-8) to Dunaway Road, to West Evan Hewes Highway, to Westside Road. Large trucks would likely utilize I-8 and S29 (Drew Road) for materials deliveries. This impact is considered potentially significant, and a traffic impact study that will address the proposed project's potential impacts on traffic will be prepared. This issue will be addressed in the EIR.

b) **Potentially Significant Impact.** Section 15064.3(b) of the CEQA Guidelines provides guidance on determining the significance of transportation impacts and focuses on the use of vehicle miles traveled (VMT), which is defined as the amount and distance of automobile travel associated with a project. Given the nature of the project, after construction, there would be a nominal amount of vehicle trips generated by the project. Once the proposed project is implemented, the proposed project would require intermittent maintenance requiring a negligible amount of traffic trips on an annual basis. However minimal, the proposed project would increase the number of vehicular trips related to construction and the need for intermittent maintenance on an annual basis. Therefore, this issue is potentially significant and will be addressed in the traffic impact study and EIR analysis.

c) **No Impact.** The project would not result in any changes to any roads, intersections, streets, highways, nor would it provide any incompatible uses to the street and highway system. All vehicles that would be used for travel to and from the project site would be licensed and comply with all appropriate transportation laws and regulations including obtaining and adhering to provisions of any required permits for oversized loads. As such, no impact related to transportation design hazards would occur.

d) **No Impact.** All proposed facilities would be constructed within the property boundaries of the project site and would not affect emergency vehicle access to the facility or any roadway. Emergency vehicle access identified and designated in the project site, would not be changed as result of the proposed project. Therefore, no impacts to emergency access to the plant site or surrounding area would occur under the project.

PC ORIGINAL PKG

XVIII. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☒	☐	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

Impact Analysis

a-b) **Potentially Significant Impact.** Assembly Bill 52 was passed in 2014 and took effect July 1, 2015. It established a new category of environmental resources that must be considered under CEQA called tribal cultural resources (Public Resources Code 21074) and established a process for consulting with Native American tribes and groups regarding those resources. Assembly Bill 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.

In accordance with AB 52, Imperial County, as the CEQA lead agency, sent an AB 52 consultation request letter to the Campo Band of Mission Indians and Fort Yuma-Quechan Indian Tribe on June 12, 2024. This issue will be further analyzed in the EIR. In accordance with SB-18, the County also sent tribal notification letters on September 3, 2024.

PC ORIGINAL PKG

XIX. Utilities and Service Systems

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☒	☐	☐	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact Analysis

a) **Less Than Significant Impact.** Operational use of water resources for the project would be limited to domestic use within operations and maintenance buildings, solar panel washing, and fire protection services. Impacts associated with water facilities would be less than significant. Construction of the proposed facilities would not generate/discharge any wastewater. Impacts associated with water facilities would be less than significant.

No natural gas facilities are located near the project and no natural gas hookup is required for the project. No impacts associated with natural gas facilities would occur. The project will not have an impact on any telecommunications.

The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, impacts would be less than significant.

b) **Potentially Significant Impact.** Although water for operations and maintenance buildings, solar panel washing, and fire protection services during project operation is not anticipated to result in a significant increase in water demand/use, IID would provide the water required for operations and maintenance and

PC ORIGINAL PKG

potable water will be trucked onto the site. Thus, a potentially significant impact is identified for the availability of sufficient water supplies to serve the proposed project for the reasonably foreseeable future. The proposed project's potential impacts on water supplies will be analyzed in the EIR.

c) **No Impact.** The proposed project would generate a minimal volume of wastewater during construction, which would be in the form of portable chemical sanitary facilities that would be used by all construction personnel. These facilities will be serviced by a local contractor. In addition, all construction liquids would be disposed of in compliance with all appropriate local, state and federal disposal regulations. Therefore, no impacts to the wastewater treatment utility's service capacity would occur.

d) **Less than Significant Impact.** Solid waste generation would be minor for the construction and operation of the proposed project. Solid waste during construction will be disposed of in an approved solid waste disposal site in accordance with Imperial County Environmental Health Department requirements. Waste will be routinely collected and disposed of at an authorized landfill by a licensed disposal contractor. The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Additionally, because the proposed project would generate solid waste during construction and operation, they will be required to comply with state and local requirements for waste reduction and recycling; including the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991. Also, conditions of the conditional use permit will contain provisions for recycling and diversion of Imperial County construction waste policies. Therefore, a less than significant impact is identified for this issue area.

e) **Less than Significant Impact.** Refer to response XIX. d) above.

PC ORIGINAL PKG

XX. Wildfire

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** According to the Fire Hazard Severity Zone Viewer provided by the California Department of Forestry and Fire Protection, the project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impact is identified for this issue area.

b) **No Impact.** The project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). The Seismic and Public Safety Element of the County General Plan also states that the potential for a major fire in the unincorporated areas of the County are generally low (County of Imperial 1997). The project site is located on flat land, which does not pose a risk due to slope. The County's Multi-Jurisdictional Hazard Mitigation Plan (2021) recognizes and manages events of high winds and other extreme weather in Imperial County. The project would not exacerbate wildfire risks associated with slope or prevailing winds; no impact would occur.

c) **No Impact.** The project area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2023). The project will have two double-walled 20,000-gallon isopentane tanks on site which would be equipped with a fire suppression system supported by additional onsite water. This is required by the California Fire Code as adopted by the Imperial County Code. Additionally, the underground interconnection line would be situated along the existing utility lines along Dogwood Road. All infrastructure would comply with existing regulations and would not exacerbate fire risk; no impacts would occur.

d) **No Impact.** According to Figure 2: Landslide Activity in the Seismic and Public Safety Element of the General Plan (County of Imperial 1997), the project site is not located in an area that is prone to landslide

PC ORIGINAL PKG

hazards. Furthermore, the site topography is flat, and no ancient landslides have been mapped in the area. The project would not alter the existing drainage pattern surrounding the project site and it would comply with regulations that reduce the potential for excess runoff waters from the project site. The project would not expose people or structures to significant risks as a result of runoff, post-fire instability, or drainage changes, therefore no impact would occur.

PC ORIGINAL PKG

XXI. Mandatory Findings of Significance

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Impact Analysis

a) **Potentially Significant Impact.** The proposed project has the potential to result in significant environmental effects on biological resources and cultural resources, which could directly or indirectly cause adverse effects on the environment. These issues will be further evaluated in the EIR.

b) **Potentially Significant Impact.** Implementation of the proposed project has the potential to result in impacts related to: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology/soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, transportation, tribal cultural resources, and utilities/service systems. The proposed project has the potential to result in cumulative impacts with regards to the identified issue areas. Cumulative impacts will be discussed and further analyzed in the EIR.

c) **Potentially Significant Impact.** Implementation of the proposed project has the potential to result in impacts related to: air quality, geology/soils, and hazards and hazardous materials. These potential environmental effects could cause substantial adverse effects on human beings. These issues will be further evaluated in the EIR.

PC ORIGINAL PKG

References

California Department of Conservation (DOC). 2020. California Important Farmland Finder. Available on-line at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed December 8, 2023.

California Department of Forestry and Fire Protection. 2023. Fire Hazard Severity Zone Viewer. Available on-line at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed December 8, 2023.

California Department of Resources Recycling and Recovery (CalRecycle). 2019 Facility/Site Summary Details: Calexico Solid Waste Site (13-AA-0004). https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4179?siteID=591. Accessed December 11, 2023.

California Department of Transportation (Caltrans). 2018. California Scenic Highway Mapping System. Available on-line at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. December 8, 2023.

County of Imperial. 1997. County of Imperial General Plan. Seismic and Public Safety Element. https://www.icpds.com/assets/planning/seismic-and-public-safety.pdf.

——— 2016. County of Imperial General Plan. Conservation and Open Space Element. Available on-line at: https://www.icpds.com/planning/land-use-documents/general-plan/conservation-and-open-space-element.

——— 2021. Imperial County Multi-Jurisdictional Hazard Mitigation Plan. January 2021. Available on-line at: https://firedept.imperialcounty.org/wp-content/uploads/2021/01/Imperial-County-MHMP-2021-Plan-Update-2021_01_11.pdf.

Department of Toxic Substances Control. 2023. EnviroStor. Available on-line at: https://www.envirostor.dtsc.ca.gov/public/. Accessed December 8, 2023.

Federal Emergency Management Agency (FEMA). 2008. Flood Insurance Rate Map (Panel 06025C2075C).

State Water Resources Control Board. GeoTracker. Available on-line at: https://geotracker.waterboards.ca.gov/. Accessed on December 8, 2023.

PC ORIGINAL PKG

List of Preparers

This Initial Study was prepared for the Imperial County Planning and Development Services Department by HDR at 591 Camino de la Reina, Suite 300, San Diego, CA 92108. The following professionals participated in its preparation:

Imperial County Planning and Development Services Department

Jim Minnick, Planning and Development Services Director

Michael Abraham, AICP, Assistant Planning and Development Services Director

Diana Robinson, Planning Director

Rocio Yee, Planner I

HDR

Tim Gnibus, Principal/Project Manager

Anitra Rice, Deputy Project Manager

Regan Del Rosario, Deputy Project Manager

Anders Burvall, Senior Geographic Information Systems Analyst

Sharon Jacob, Geographic Information Systems Analyst

Katherine Turner, Document Production Administrator

PC ORIGINAL PKG

Comment Letters Received on Notice of Preparation

PC ORIGINAL PKG

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

September 30, 2024
Sent via email.

RECEIVED
By Imperial County Plannning & Development Services at 4:25 pm, Sep 30, 2024

Ms. Diana Robinson
Planning Division Manager
County of Imperial
801 Main Street
El Centro, CA 92243

Subject: Notice of Preparation of a Draft Environmental Impact Report
Big Rock 2 Cluster Solar and Storage Project
State Clearinghouse No. 2024090063

Dear Ms. Robinson:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the County of Imperial for the Big Rock 2 Cluster Solar and Storage Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

PC ORIGINAL PKG

need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The project will construct a photovoltaic (PV) solar energy generation facility, and one or more battery energy storage systems (BESS) comprised of up to 500 megawatts alternating current (MWac) of PV solar power and up to 500 MWac of BESS. Power generated would be collected using up to 66-kilovolt (kV) collector lines that would run overhead and/or underground to a dedicated Project substation, with a 230-kV overhead generation transmission (gen-tie) line, linking a Project substation to the Imperial Irrigation District Liebert Switchyard.

The proposed Project is in the unincorporated communities of County of Imperial, south of Interstate 8, approximately one mile southwest of the town of Seeley, and approximately six miles north of the United States International Borner with Mexico. The project site is west of Drew Road and northeast of Mandapa Road.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County of Imperial in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

CDFW recommends that the forthcoming environmental document address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the project, the environmental document should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats.

The CDFW recommends that the environmental document specifically include:

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed

PC ORIGINAL PKG

following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. CDFW's California Natural Diversity Database (CNDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDB@wildlife.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project.

   Please note that CDFW's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

   Species specific surveys for sensitive species that the Project footprint has the potential to support, include, but is not limited to:

   Burrowing Owl (*Athene cunicularia*)

   The Project site has the potential to provide suitable foraging and/or nesting habitat for burrowing owl. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513.

PC ORIGINAL PKG

Take is defined in Fish and Game Code section 86 as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill.”

CDFW recommends that the County of Imperial follow the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012); available for download from CDFW’s website: https://www.wildlife.ca.gov/conservation/survey-protocols. The Staff Report on Burrowing Owl Mitigation, specifies three steps for project impact evaluations:

a. A habitat assessment;
b. Surveys; and
c. An impact assessment

As stated in the Staff Report on Burrowing Owl Mitigation, the three progressive steps are effective in evaluating whether a project will result in impacts to burrowing owls, and the information gained from the steps will inform any subsequent avoidance, minimization, and mitigation measures. Habitat assessments are conducted to evaluate the likelihood that a site supports burrowing owl. Burrowing owl surveys provide information needed to determine the potential effects of proposed projects and activities on burrowing owls, and to avoid take in accordance with Fish and Game Code sections 86, 3503, and 3503.5. Impact assessments evaluate the extent to which burrowing owls, and their habitat may be impacted, directly or indirectly, on and within a reasonable distance of a proposed CEQA project activity or non-CEQA project.

Within the 2012 Staff Report, the minimum habitat replacement recommendation was purposely excluded as it was shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area. It hypothesized that mitigation for permanent impacts to nesting, occupied, and satellite burrows and burrowing owl habitat should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. If mitigation occurs offsite, it should include (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) be sufficiently large acreage with the presence of fossorial mammals. Furthermore, the report noted that suitable mitigation lands should be based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide.

PC ORIGINAL PKG

Yuma Ridgway's rail (Rallus obsoletus yumanensis)

The Project site has the potential to provide suitable foraging and/or nesting habitat for Yuma Ridgway's rail, a California fully protected species.

Water diversions can impact Yuma Ridgway's rails through dewatering of wetland habitats. Changes in flow rates can also increase the prevalence of invasive plant species which are a threat to Yuma Ridway's rails.

Vegetation clearing may impact Yuma Ridgway's rails as they require a dense cover of emergent wetland vegetation for protection from predators. Removal of vegetation can also make communities vulnerable to colonization by invasive plant species.

Noise from road use, generators, and other equipment may disrupt Yuma Ridgway's rail mating calls which could impact their reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). Noise has been shown to reduce the density of nesting birds (Francis et al. 2009).

Artificial light may disorient migrating Yuma Ridgway's rails and disrupt their navigation (Rowan 1925, Longcore and Rich 2016).

The EIR should address Project related impacts to Yuma Ridgway's rail. If Yuma Ridgway's rail are found within the Project area during surveys and complete avoidance is not possible, CDFW recommends the County of Imperial to require the Project proponents acquire a CESA Incidental Take Permit (ITP) according to California Fish and Game Code section 2081.15, prior to any vegetation or ground disturbing activities. Any take of California black rail without take authorization would be a violation of Fish and Game Code.

California black rail (*Laterallus jamaicensis coturniculus*)

The Project site has the potential to provide suitable foraging and/or nesting habitat for California black rail, a California fully protected species. California black rail populations have been documented as declining in California in recent decades primarily as a result of habitat loss and degradation, particularly in southern California (Evens et al. 1991, Conway and Sulzman 2007). Outside of the San Francisco Bay estuary, where the majority of the population occurs, the sub-species exists in smaller, disjunct sub-populations that may not be sustained without frequent immigration (Evens et al. 1991, Richmond et al. 2008). California black rail populations and their required habitat features are vulnerable to both human-caused and natural stressors.

Water diversions can impact California black rails through dewatering of wetland habitats that they rely on (Eddleman et al. 1994). California black rails are vulnerable to water level fluctuations, such as depth of the water and density of

PC ORIGINAL PKG

vegetation (Flores and Eddleman 1993). Diversions can lower the water level, while uncontained run-off can raise the water level, making habitat less suitable.

Grading, compacting, and filling aquatic habitat could cause direct habitat loss. Construction near a wetland or water feature supporting California black rail would impact the quality of the habitat if dust, debris, petroleum, or other contaminants are discharged off the construction site into the habitat.

Vegetation clearing may impact California black rails where they require a dense cover of upland vegetation for protection from predators (Eddleman et al. 1994, Evens and Thorne 2015).

Disturbance to nesting rails, such as humans or pets intruding in the marsh, have been reported to cause rails to abandon nests or to try to defend nests, exposing eggs (Flores and Eddleman 1993). Intrusion can alter habitat and cause mortality through crushing of rails that generally freeze in place and are hesitant to flush (Evens and Thorne 2015).

The EIR should address Project related impacts to California black rail. If California black rail are found within the Project area during surveys and complete avoidance is not possible, CDFW recommends the County of Imperial to require the Project proponents acquire a CESA Incidental Take Permit (ITP) according to California Fish and Game Code section 2081.15, prior to any vegetation or ground disturbing activities. Any take of California black rail without take authorization would be a violation of Fish and Game Code.

Crotch's Bumble Bee (*Bombus crotchii*)

The project may impact suitable habitat for Crotch's bumble bee (*Bombus crotchii*), a CESA candidate species, and has the potential for take pursuant to California Fish and Game Code Section 2081(b). Crotch's bumble bee primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014) (Hatfield, R., et al. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (CDFW 2017). Ground disturbance and vegetation removal associated with Project implementation during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas adjacent to the Project site. Indirect, permanent impacts include conversion of habitat through the introduction of invasive species. Without sufficient avoidance, minimization, or mitigation measures, the Project activities may result in unmitigated temporal or permanent loss of colonies, and suitable nesting and foraging habitat.

The California Fish and Game Commission accepted a petition to list Crotch bumble bee as endangered under CESA, determining the listing "may be warranted" and

PC ORIGINAL PKG

advancing the species to the candidacy stage of the CESA listing process. Crotch bumble bee is granted full protection of a threatened species under CESA. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). In addition, Crotch's bumble bee has a State ranking of S1/S2. This means that the Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often 5 or fewer populations). Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority.

The EIR should include site specific surveys for Crotch's bumble bee in accordance with any Crotch's bumble bee survey protocol provided by CDFW. If take or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the County of Imperial should require the Project proponent to obtain appropriate take authorization from CDFW pursuant to Fish and Game Code section 2081 subdivision (b).

Bats

The Project site has the potential to provide suitable habitat for several bat species (collectively, bats) potentially roosting (day, night and maternal) and foraging habitat, which may include some Species of Special Concern (SSC) including but not limited to:

- pallid bat (*Antrozous pallidus*) (SSC)
- Townsend's big-eared bat (*Corynorhinus townsendii*) (SSC)
- western mastiff bat (*Eumops perotis*) (SSC)
- western red bat (*Lasiurus blossevillii*) (SSC)
- western yellow bat (*Lasiurus xanthinus*) (SSC)
- hoary bat (*Lasiurus cinereus*) (SSC)
- California myotis (*Myotis californicus*)
- Arizona myotis (*Myotis occultus*) (SSC)
- Cave myotis (*Myotis velifer*) (SSC)
- Yuma myotis (*Myotis yumanensis*) (SSC)
- Pocketed free-tailed bat (*Myctinopops ferosaccus*) (SSC)

Project construction and activities may result in direct and indirect impacts to bats. Direct impacts include removal of structures occupied by roosting bats. This could result in injury or mortality to bats as well as loss of roosting habitat. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, dust, vegetation clearing, ground-disturbing activities (e.g., staging, mobilizing, excavating, and grading), and vibrations caused by heavy equipment.

Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs, §

PC ORIGINAL PKG

251.1). Several bat species are considered SSC. An SSC is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as ESA-, but not CESA-, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2022b).

The EIR should include results of specific surveys for bats over the Project are proposed to be directly or indirectly affected by Project activities and the results of the surveys included in the EIR, along with avoidance, minimization and mitigation measures, if appropriate. CDFW recommends if active hibernacula or day roosts are identified in the work area or within 500 feet of the work area, during pre-construction surveys, they be avoided to the extent feasible. For maternity roosts, Project construction will only occur between October 1 and February 28, outside of the maternity roosting season when young bats are present but are yet ready to fly out of the roost (March 1 to September 30). Maternity roosts shall not be evicted, excluded, removed, or otherwise disturbed.

Desert kit fox (*Vulpes macrotis*)

The Project occurs within the range of desert kit fox, a protected species pursuant to Title 14 of the California Code of Regulations Section 460, which prohibits the take of the species at any time. CDFW recommends surveys, following CDFW-approved protocols, be conducted over all areas proposed to be directly or indirectly affected by the Project to determine presence/absence and numbers of desert kit fox, and that this information be included in the EIR.

If desert kit fox is found, or have the potential to occupy the Project site, CDFW recommends the County of Imperial require species-specific mitigation to offset impacts and avoidance, minimization, and monitoring measures aimed at avoiding direct impacts to the desert kit fox be incorporated into the EIR. Avoidance and minimization measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be avoided or passively relocated, and the burrows or burrow complexes that would need to be collapsed to prevent re-occupancy. The measures should also include detailed

PC ORIGINAL PKG

monitoring requirements and methods of exclusion/passive relocation to be conducted, and methods and timing of den excavation.

American Badger (Taxidea taxus)

The Project occurs within the range of the American badger, a California species of special concern. CDFW recommends the Project complete surveys for American badger over the Project area proposed to be directly or indirectly affected by the Project activities and that the results of such surveys be included in the EIR, along with avoidance, minimization, and mitigation measures, if appropriate.

If American badger are found, or have the potential to occupy the Project site, CDFW recommends the County of Imperial require species specific mitigation to offset impacts and avoidance, minimization and monitoring measures aimed at avoiding direct impacts to American badger be incorporated into the EIR. Avoidance and minimization measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be avoided or passively relocated, and the burrows or burrow complexes that would need to be collapsed to prevent re-occupancy. The measures should also include detailed monitoring requirements and methods of exclusion/passive relocation to be conducted, and methods and timing of den excavation.

Ringtail (*Bassariscus astutus*)

The Project occurs within the range of the ringtail, a California species of special concern and fully protected species. CDFW recommends the Project complete surveys for ringtail over the Project area proposed to be directly or indirectly affected by the Project and that the results of such survey be included in the EIR, along with measures to avoid all impacts to the species.

If ringtail are found, or has the potential to occupy the Project site, CDFW recommends the County of Imperial require species-specific mitigation to avoid impacts to the ring-tailed cat be incorporated into the EIR. Avoidance measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be avoided. If complete avoidance is not possible, CDFW recommends the project proponent acquire a CESA Incidental Take Permit (ITP) prior to any vegetation or ground disturbing activities. Any take of ringtail without take authorization would be a violation of Fish and Game Code section 2081.15.A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://www.wildlife.ca.gov/Conservation/Plants).

PC ORIGINAL PKG

4. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

5. A full accounting of all open space and mitigation/conservation lands within and adjacent to the Project.

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

3. Additionally, the EIR should discuss Project impacts to wildlife connectivity on both a regional and local scale for both rare and common species. Impacts to wildlife connectivity are expected to be from the physical location and size of the project, noise generated by both construction and operation of the Project, and lighting needed for Project operation.

4. An evaluation of impacts to adjacent open space lands from both the construction of the Project and any long-term operational and maintenance needs.

5. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated

PC ORIGINAL PKG

future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Alternatives Analysis

CDFW recommends the DEIR describe and analyze a range of reasonable alternatives to the Project that are potentially feasible, would "feasibly attain most of the basic objectives of the Project," and would avoid or substantially lessen any of the Project's significant effects (CEQA Guidelines § 15126.6[a]). The alternatives analysis should also evaluate a "no project" alternative (CEQA Guidelines § 15126.6[e]).

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. The County of Imperial should assess all direct, indirect, and cumulative impacts that are expected to occur as a result of the implementation of the Project and its long-term operation and maintenance. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Fully protected species, such as California black rail (*Laterallus jamaicensis coturniculus*), ringtail (*Bassariscus astutus*) may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species. If complete avoidance is not possible, CDFW recommends the project proponent acquire a CESA Incidental Take Permit (ITP) prior to any vegetation or ground disturbing activities according to Fish and Game Code section 2081.15.

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.

3. *California Species of Special Concern* (CSSC): CSSC status applies to animals generally not listed under the federal Endangered Species Act or the CESA, but which nonetheless are declining at a rate that could result in listing, or historically

PC ORIGINAL PKG

occurred in low numbers and known threats to their persistence currently exist. CSSCs should be considered during the environmental review process. CSSC that have the potential or have been documented to occur within or adjacent to the project area include, but are not limited to, burrowing owl (*Athene cunicularia*) and northern harrier (*Circus hudsonius*), loggerhead shrike (*Lanius ludovicianus*), yellow warbler (*Setophaga petechia*), vermillion flycatcher (Pyrocephalus rubinus), western mastiff bat (*Eumops perotis californicus*), pocketed free-tailed bat (Nyctinomops femorosacca), American badger (*Taxidea taxus*), western yellow bat(Lasiurus xanthinus), flat-tailed horned lizard (Phrynosoma mcallii).

4. *Mitigation*: CDFW considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail. Where habitat preservation is not available onsite, offsite land acquisition, management, and preservation should be evaluated and discussed in detail.

   The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

   If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DEIR. CEQA Guidelines section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center* v. *County* of *Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete *(Sundstrom* v. *County* of *Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry* v. *City* of *Murrieta (1995)* 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc.* v. *County* of *Orange* (2005) 131 Cal. App. 4th 777).

   CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). The mitigation should provide long-term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, in order for mitigation measures to be effective, they need to be specific, enforceable, and feasible actions that will improve environmental conditions.

PC ORIGINAL PKG

5. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

   CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in advance of Project impacts in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

   Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

6. *Nesting Birds and Migratory Bird Treaty Act:* Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

   CDFW recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may

PC ORIGINAL PKG

include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed in the DEIR, the CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

7. *Moving out of Harm's Way:* To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise by injured or killed, and individuals should be moved only as far a necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting project impacts associated with habitat loss.

8. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats.

CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. The California Fish and Game Code requires that CDFW comply with CEQA for issuance of a CESA ITP. CDFW therefore recommends that the DEIR addresses all Project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of CESA.

Based on review of CNDDB, and/or knowledge of the project site/vicinity/general area, CDFW is aware that the following CESA-listed species has the potential to occur

PC ORIGINAL PKG

onsite/have previously been reported onsite: California black rail (*Laterallus jamaicensis coturniculus*) and ringtail (*Bassariscus astutus)*.

Lake and Streambed Alteration Program

Based on review of material submitted with the NOP and review of aerial photography, drainage features traverse or surround the Project site. Depending on how the Project is designed and constructed, it is likely that the Project applicant will need to notify CDFW per Fish and Game Code section 1602. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW’s issuance of an LSA Agreement is a “project” subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

ADDITIONAL COMMENTS AND RECOMMENDATIONS

A petition to list burrowing owls under the California Endangered Species Act (CESA) has been submitted to the California Fish and Game Commission. Since a determination has not yet been made on the petition, CDFW recommends that avoidance, minimization, and mitigation measures for burrowing owls consider both the potential for CESA listing and the retention of its current Species of Special Concern status. If the burrowing owl is listed as a candidate species under CESA, County of Imperial will need to either avoid impacts to the species or obtain an incidental take permit from CDFW and define mitigation.

PC ORIGINAL PKG

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). Information can be submitted online or via completion of the CNDDB field survey form at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a DEIR for the Big Rock 2 Cluster Solar and Storage Project (SCH No. 2024090063) and recommends that the County of Imperial address the CDFW's comments and concerns in the forthcoming DEIR. If you should have any questions pertaining to the comments provided in this letter, please contact Lily Mu, Senior Environmental Scientist (Specialist), at (909) 544-2521 or at Lily.Mu@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Brandy Wood
4D759253408941E...

Brandy Wood
Environmental Program Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento
state.clearinghouse@opr.ca.gov

PC ORIGINAL PKG

REFERENCES

California Department of Fish and Wildlife. 2017. California Terrestrial and Vernal Pool Invertebrates of Conservation Priority. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=148248&inline .

Conway, C. J., and C. Sulzman. 2007. Status and habitat use of the California black rail in the southwestern USA. Wetlands 27:987–998.

Eddleman, W. R., R. E. Flores, and M. Legare. 1994. Black Rail (*Laterallus jamaicensis*). A. Poole and F. B. Gill, editors. The Birds of North American Online. Cornell Lab of Ornithology, Ithica, NY, USA. <http://bna.birds.cornell.edu/bna/species/123>.

Evens, J. G., G. W. Page, S. A. Laymon, and R. W. Stallcup. 1991. Distribution, relative abundance, and status of the California black rail in Western North America. The Condor 93:952–966.

Evens, J., and K. Thorne. 2015. Appendix 5.1- Case Study- California black rail (*Laterallus jamaicensis corturniculus*). In Baylands Ecostem Habitat Goals Science Update (2015), Science Foundation Chapter 5.

Flores, R. E., and W. R. Eddleman. 1993. Nesting biology of the California black rail in southwestern Arizona. Western Birds 24:81–88.

Francis, C. D., C. P. Ortega, and A. Cruz. 2009. Noise pollution changes avian communities and species interactions. Current Biology 19:1415–1419.

Richmond, O. M., J. Tecklin, and S. R. Beissinger. 2008. Distribution of California black rails in the Sierra Nevada foothills. Journal of Field Ornithology 79:381–390.

Goulson, D. 2010. Bumblebees: Behavior, Ecology, and Conservation. Oxford University Press, New York. 317pp.

Hatfield, R., Jepsen, S., Foltz Jordan, S., Blackburn, M., Code, Aimee. 2018. A Petition to the State of California Fish and Game Commission to List Four Species of Bumblebees as Endangered Species.

Longcore, T., and C. Rich. 2016. Artificial night lighting and protected lands: Ecological effects and management approaches. Fort Collins, CO, USA.

Patricelli, G., and J. J. L. Blickley. 2006. Avian communication in urban noise: causes and consequences of vocal adjustment. Auk 123:639–649.

Richmond, O. M., J. Tecklin, and S. R. Beissinger. 2008. Distribution of California black

PC ORIGINAL PKG

rails in the Sierra Nevada foothills. Journal of Field Ornithology 79:381–390.

Rowan, W. 1925. Relation of light to bird migration and developmental changes. Nature 115:494–495.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/.

Williams, P. H., R. W. Thorp, L. L. Richardson, and S.R. Colla. 2014. Bumble bees of North America: An Identification guide. Princeton University Press, Princeton, New Jersey. 208pp.

PC ORIGINAL PKG

RECEIVED
By Imperial County Planning & Development Services at 8:45 am, Sep 20, 2024

SEPTEMBER 20, 2024

VIA EMAIL: DIANAROBINSON@CO.IMPERIAL.CA.US
IMPERIAL COUNTY
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
801 MAIN STREET
EL CENTRO, CA 92243

Dear Ms. Robinson:

INITIAL STUDY AND NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE BIG ROCK 2 CLUSTER SOLAR AND STORAGE PROJECT, SCH# 2024090063

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the Initial Study and Notice of Preparation of an Environmental Impact Report for the Big Rock 2 Cluster Solar and Storage Project (Project).

The Division monitors and maps farmland conversion on a statewide basis, provides technical assistance regarding the Williamson Act, and administers various agricultural land conservation programs. Public Resources Code, section 614, subdivision (b) authorizes the Department to provide soil conservation advisory services to local governments, including review of CEQA documents.

Protection of the state's agricultural land resources is part of the Department's mission and central to many of its programs. The CEQA process gives the Department an opportunity to acknowledge the value of the resource, identify areas of Department interest, and offer information on how to assess potential impacts or mitigation opportunities.

The Department respects local decision-making by informing the CEQA process, and is not taking a position or providing legal or policy interpretation.

We offer the following comments for consideration with respect to the project's potential impacts on agricultural land and resources within the Department's purview.

PROJECT ATTRIBUTES

The Project would allow for the construction and operation of a photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility comprised of up to 500 megawatts (MW) alternating current PV solar and up to 500 MW of BESS. Power generated by the project would be collected using collector lines which could run overhead and/or underground to a dedicated project substation, with an overhead generation transmission line or "gen-tie" line linking a project substation to the Imperial

PC ORIGINAL PKG

Irrigation District (IID) Liebert Switchyard. The Liebert Switchyard would then be connected to the San Diego Gas & Electric (SDG&E) Imperial Valley substation via an overhead gen-tie line. Two gen-tie line alternatives are proposed.

The project site contains Prime Farmland, Farmland of Statewide Importance, and Unique Farmland as designated by the DOC's Farmland Mapping and Monitoring Program.

PROJECT CONSIDERATIONS

The conversion of agricultural land represents a permanent reduction and impact to California's agricultural land resources. The Department generally advises discussion of the following in any environmental review for the loss or conversion of agricultural land:

- Type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the proposed project.
- Impacts on any current and future agricultural operations in the vicinity; e.g., land-use conflicts, increases in land values and taxes, loss of agricultural support infrastructure such as processing facilities, etc.
- Incremental impacts leading to cumulative impacts on agricultural land. This would include impacts from the proposed project, as well as impacts from past, current, and likely future projects.
- Implementation of any City or County Agricultural Mitigation Plans, Programs, or Policies.
- Proposed mitigation measures for impacted agricultural lands within the proposed project area.

MITIGATING AGRICULTURAL LAND LOSS OR CONVERSION

Consistent with CEQA Guidelines, the Department advises that the environmental review address mitigation for the loss or conversion of agricultural land. An agricultural conservation easement is one potential method for mitigating loss or conversion of agricultural land. (*See* Cal. Code Regs., tit. 14, § 15370 [mitigation includes "compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements."]; *see also King and Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814.)

Mitigation through agricultural conservation easements can take at least two forms: the outright purchase of easements or the donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural easements. The conversion of agricultural land may be viewed as an impact of at least regional significance. Hence, the search for replacement lands may not need to be limited strictly to lands within the project's surrounding area. A helpful source for regional and statewide agricultural mitigation banks is the California Council of Land Trusts. They provide helpful insight into farmland

PC ORIGINAL PKG

mitigation policies and implementation strategies, including a guidebook with model policies and a model local ordinance. The guidebook can be found at:

California Council of Land Trusts

Of course, the use of conservation easements is only one form of mitigation, and the Department urges consideration of any other feasible measures necessary to mitigate project impacts.

Thank you for giving us the opportunity to comment on the Initial Study and Notice of Preparation of an Environmental Impact Report for the Big Rock 2 Cluster Solar and Storage Project. Please provide the Department with notices of any future hearing dates as well as any staff reports pertaining to this project. If you have any questions regarding our comments, please contact Farl Grundy, Associate Environmental Planner via email at Farl.Grundy@conservation.ca.gov.

Sincerely,

Monique Wilber

Monique Wilber

Conservation Program Support Supervisor

PC ORIGINAL PKG

IID

www.iid.com

A century of service. *Since 1911*

October 7, 2024

RECEIVED
By Imperial County Plannning & Development Services at 11:31 am, Oct 07, 2024

Ms. Rocio Yee
Planner I
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: NOP of a DEIR for the Big Rock 2 Cluster Solar and Battery Storage Project

Dear Ms. Yee:

On September 4, 2024, the Imperial Irrigation District received from the Imperial County Planning & Development Services Department, the Notice of Preparation of a Draft Environmental Impact Report for the Big Rock 2 Cluster Solar and Battery Storage Project. The project proposes the construction and operation of a 500 MW solar generation and 500 MW battery energy storage facility on 1,849 acres of land located west of Drew Road and east north of Mandrapa Road, approximately one mile southwest of Seeley, California in unincorporated Imperial County. The project would connect to the IID electrical system with a 230 kV gen-tie line linking the project's substation to the IID Liebert Switching Station and from there would connect to the SDG&E Imperial Valley Substation via a subsequent 230 kV gen-tie line.

The Imperial Irrigation District has reviewed the information and has the following comments:

1. For electrical service for the future development of the resulting parcel, the applicant should be advised to contact Ignacio Romo, IID project development planner, at 760-482-3426 or e-mail Mr. Romo at IGRomo@IID.com to initiate the customer service application process. In addition to submitting a formal application (available at http://www.iid.com/home/showdocument?id=12923), the applicant will be required to submit an AutoCAD file of site plan, approved electrical plans, electrical panel size and panel location, operating voltage, electrical loads, project schedule, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to a project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to a project.

2. Electrical capacity is limited in the project area. A circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the

PC ORIGINAL PKG

provision of electrical service to the project shall be the financial responsibility of the applicant.

3. Applicant shall provide a surveyed legal description and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID as necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

4. There are several IID water facilities. The applicant may not use IID's canal or drain banks to access the project site. Any abandonment of easements or facilities shall be approved by IID based on systems (Irrigation, Drainage, Power, etc.) needs.

5. To insure there are no impacts to IID water facilities, applicant should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services section for review and comment prior to final project design and CUP approval. IID WDES can be contacted at (760) 339-9265 for further information on this matter.

6. The project may impact IID drains with project site runoff flows draining into IID drains. To mitigate impacts, the project may require a comprehensive IID hydraulic drainage system analysis. IID's hydraulic drainage system analysis includes an associated drain impact fee.

7. A construction storm water permit from the California Regional Water Quality Control Board is required before commencing construction and an industrial storm water permit from CRWQCB is required for the operation of the proposed facility. The project's Storm Water Pollution Prevention Plan and storm water permits from CRWQCB should be submitted to IID for review.

8. For information on procuring construction water, the applicant should contact IID South End Division at (760) 482-9800.

9. The impacts to the Salton Sea, due to loss or reduction of agricultural runoff caused by agricultural land conversion to urban use shall require discussion in the EIR. Due to the potential loss or reduction of inflow to the Salton Sea and to IID drains with its concurrent environmental impacts, the applicant should address this issue as well as provide analysis that the project does not negatively impact the IID Water Conservation and Transfer Draft Habitat Conservation Plan, the existing Section 7 Biological Opinion and the California Endangered Species Act Permit 2081. The documents are available at https://www.iid.com/water/library/qsa-water-transfer/environmental-assessments-permits.

PC ORIGINAL PKG

10. An assessment or discussion of cumulative impacts considering other non-agricultural facilities whose water use (or potential water use) would reduce the inflow conveyed to IID drains and the Salton Sea is necessary. It is advisable that the applicant present a cumulative impact analysis on inflow to IID drains and the Salton Sea.

11. In order to obtain a water supply from IID for a non-agricultural project, the project proponent will be required to comply with all applicable IID policies and regulations and may be required to enter into a water supply agreement. Such policies and regulations require, among other things, that all potential environmental and water supply impacts of the project be adequately assessed, appropriate mitigation developed if warranted, including any necessary approval conditions adopted by the relevant land use and permitting agencies.

12. If IID implements a water allocation or apportionment program pursuant to the IID Equitable Distribution Plan, or any amending or superseding policy for the same or similar purposes, during all or any part of the term of said water supply agreement, IID shall have the right to apportion the project's water as an industrial water user. Information on how to obtain a water supply agreement can be found at the IID website https://www.iid.com/water/municipal-industrial-and-commercial-customers or by contacting Justina Gamboa-Arce, Water Resources Planner at (760) 339-9085 or jgamboaarce@iid.com.

13. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains, and receive drainage service form IID. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards. A construction storm-water permit from the California Regional Water Quality Control Board is required before commencing construction. An industrial storm water permit from CRWQCB is required for operation of the proposed facility. The project's storm-water permit from CRWQCB are to be submitted to IID.

14. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). A copy of the IID encroachment permit application and instructions for its completion are available at https://www.iid.com/about-iid/department-directory/real-estate. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.

PC ORIGINAL PKG

15. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities

16. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains and receive drainage service from the district. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards.

17. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and distribution lines, water deliveries, canals, drains, etc.) need to be included as part of the project's CEQA and/or NEPA documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully analyzed. **Any and all mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent**.

18. Dividing a project into two or more pieces and evaluating each piece in a separate environmental document (Piecemealing or Segmenting), rather than evaluating the whole of the project in one environmental document, is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation strategies. In general, if an activity or facility is necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approving the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The project description should include all project components, including those that will have to be approved by responsible agencies. The State CEQA Guidelines define a project under CEQA as "the whole of the action" that may result either directly or indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. CEQA case law has established general principles on project segmentation for different project types. For a project requiring construction of offsite infrastructure, the offsite infrastructure

PC ORIGINAL PKG

must be included in the project description. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App. 4th 713.

19. When the project goes through the CEQA compliance process, it is important to bear in mind that to address the project impacts to the electrical utility (i.e., the IID electrical grid), considered under the environmental factor "Utilities and Services" of the Environmental Checklist/Initial Study, to determine if the project would require or result in the relocation or construction of new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects; a circuit study/distribution impact study, facility study, and/or system impact study must be performed.

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Power Dept.
Paul Rodriguez – Deputy Mgr. Power Dept.
Geoffrey Holbrook – General Counsel
Michael P. Kemp – Superintendent General, Fleet & Compliance Services
Laura Cervantes. – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

PC ORIGINAL PKG

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

RECEIVED
By Imperial County Planning & Development Services at 4:41 pm, Oct 03, 2024

October 3, 2024

Jim Minnick
Planning & Development Services Director
801 Main Street
El Centro, CA 92243

SUBJECT: Notice of Preparation of Draft Environmental Impact Report for General Plan Amendment 24-0002; Zone Change 24-0003; Conditional Use Permits 24-0006, 24-0007, 24-0008, & 24-0009; Variances 24-0002, 24-0003, 24-0004, 24-0005 – 90FI8me LLC

Dear Mr. Minnick:

The Imperial County Air Pollution Control District (Air District) appreciates the opportunity to review and comment on the Notice of Preparation of Draft Environmental Impact Report for General Plan Amendment (GPA) 24-0002; Zone Change (ZC) 24-0003; Conditional Use Permits (CUP) 24-0006, 24-0007, 24-0008, & 24-0009; Variances (V) 24-0002, 24-0003, 24-0004, 24-0005 (Project). The project proposes a photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility comprised of up to 500 megawatts (MW) PV solar generation and up to 500 MW BESS storage. The project is identified as Big Rock 2 and is located on a total of approximately 2,436 acres composed of 1,569 not previously entitled land and 867 acres currently entitled under active CUPs knows as Laurel Cluster 3, Laurel Cluster 2 North and Laurel Cluster 2 south. The project is located south of Interstate 8 and west of Drew Rd., and is composed of 19 parcels identified with Assessor's Parcel Numbers:

051-270-020	051-270-028	051-270-036	051-270-041	051-280-054	051-300-011
051-300-016	051-300-026	051-300-035	051-300-037	051-300-032	051-330-003
051-350-004	051-350-006	051-350-007	051-350-008	051-310-027	051-310-028
051-290-018	051-290-019	051-320-005	051-320-006	051-320-007	

The Air District provided comments for the project in a letter dated September 20, 2024 which are still applicable and will repeat them here: the Air District's established programs help to keep the quality of air in Imperial County from declining. The programs, Rules and Regulations of the Air District in conjunction with the California Environmental Quality Act (CEQA), the most current CEQA Air Quality Handbook for Imperial County (Handbook), and the Air District's State Implementation Plans (SIPs) for Ozone, $PM_{2.5}$ and PM_{10} work together to ensure that air quality improves or does not degrade. Currently, the non-attainment status of marginal for the 2015 ozone standard, moderate for $PM_{2.5}$ and the maintenance requirements for PM_{10} are the driving

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER
PC ORIGINAL PKG

criteria in establishing the thresholds for NOx, ROG, PM_{10}, SOx and CO found in the Handbook. These thresholds and their significance are explained under Section 6 of the handbook and The Air District strongly recommends referencing the Handbook during the generation of the EIR as the Handbook has helpful information regarding the development of an adequate air quality analysis and emission thresholds. The Air District also strongly recommends the applicant and/or their consultant(s) contact the Air District directly to coordinate with our office for the development of the EIR as the Air District will look closely at the potential impacts, both direct and indirect, as a result of the proposed project.

When exploring the impacts of renewable projects, it is a common misconception that these types of projects are not a significant source of air pollution. While it is true that renewable projects that do not employ fuel based combustion units as supplemental power are typically cleaner projects during their operational phases, in most cases construction and cumulative impacts have the potential to cause adverse air quality impacts. Specifically for solar field projects, PM10 and NOx emissions are the primary pollutants of concern during the construction and operational phases of these types of renewable projects. Historical experience has demonstrated that shortened construction periods not previously analyzed during the CEQA process create a potential for elevated levels of NOx emissions, as well as elevated levels of PM10 during earthmoving activities.

In order to identify NO_x emissions created during the construction phase of the renewable project, a Construction Equipment List detailing the equipment type, make, model, year, horsepower, hours of daily operation, date arrived onsite, and date removed from site should be provided to the Air District in Excel format.[1] This is to ensure NO_x emissions during the construction period remain under the CEQA thresholds of significance. Should it be determined the project exceeded these emission thresholds it may become subject to Policy 5 requirements.

With regards to cumulative impacts, which occur during the operational phase of renewable projects, PM_{10} is of main concern and an Operational Dust Control Plan (ODCP) may be required based on the permitting determination of the project. The ODCP details how dust emissions will be controlled and maintained during the operational phase of the project.[2] An initial site visit is required to confirm the elements of any draft ODCP before it can be finalized. Please note that an ODCP is intended to provide pertinent information specific to the operation and for the reduction of fugitive dust emissions created by the ongoing operations at the facility.

[1] The Equipment List submittal will require a written commitment by the applicant to a submittal schedule agreed upon between the applicant and the Air District

[2] The ODCP needs to be approved prior to the issuance of the Certificate of Occupancy.

PC ORIGINAL PKG

Should the project operate combustion equipment such as emergency generators, an Air District permit may be required for the project. In the event of such equipment being operated for the project, the Air District requests the applicant submit a permit application for engineering review of the project, pay the applicable review fees, and coordinate with the Air District Engineering and Permitting Division directly to discuss the permitting requirements of the project.

The following is a synopsis of the information pertinent to the development of a Comprehensive Air Quality analysis. A thorough analysis should include a description, impacts and health consequences of all air quality and associated emissions. The analysis must be conducted using the Air Districts approved modeling factors.[3] The analysis should include short- and long-term emissions as well as daily and yearly emission calculations. Project alternatives should be included along with a thorough emissions analysis per alternative. A description of the Air District attainment status, State and Federal, is required as is describing any regulatory restrictions to the project.

Existing and proposed projects must have a cumulative impact analysis. For each sub-analysis and risk assessment mitigation measures should be identified, quantified for effectiveness, and incorporated into the environmental document (i.e. Environmental Impact Report EIR or Environmental Impact Statement EIS). All mitigation measures must follow District Rules and Regulations including the most current Handbook. Consultation with the most recent Clean Air Plans (SIPs), District Rules and Regulations and other Air District approved programs is strongly recommended to achieve effective applicability of standards. When it becomes apparent that on-site mitigation is insufficient to reduce the impacts to insignificance then off-site mitigation should be discussed and appropriately applied.

Finally, in accordance with Assembly Bill 32 and the most recent amendments to the CEQA Guidelines, a discussion of the impacts from Green House Gas (GHG) emissions and its relation to Climate Change is required, however, given the court's Golden Door ruling (*Golden Door Properties, LLC v. County of San Diego*, 2020) coordination with the Air District is recommended to adequately address GHG analysis. Given the Air District has not currently developed its own GHG thresholds, using a threshold from an area similar in size, topography, climate, and population is preferred by the Air District. The Air District also recommends using the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Heath and Equity (GHG Handbook) which was developed by the California Air Pollution Control Officer's Association (CAPCOA) to assist in creating an adequate GHG analysis.

Finally, the Air District requests a copy of each draft CUP prior to recording for review.

[3]The most current modeling tool recently adopted is CalEEMod.

PC ORIGINAL PKG

All Air District rules and regulations can be found for review on our website at https://apcd.imperialcounty.org/rules-and-regulations/, the Handbook can be accessed at https://apcd.imperialcounty.org/wp-content/uploads/2020/01/CEQAHandbk.pdf, and the GHG Handbook can be found at https://www.caleemod.com/handbook/index.html. Please contact our office at (442) 265-1800 to set up discussions for the project or if you have any further questions or concerns. The Air District looks forward to coordinating to help ensure consistency and enforceability of the project.

Respectfully,

Ismael Garcia
Environmental Coordinator II

Monica N. Soucier
APC Division Manager

PC ORIGINAL PKG

California Department of Transportation

DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
(619) 709-5152 | FAX (619) 688-4299 TTY 711
www.dot.ca.gov

November 21, 2024

11-IMP-8
PM 28
September 2024 CUP# 24-0006
Big Rock 2 Cluster Solar

Ms. Rocio Yee
Imperial County,
Planning & Development Services
801 Main Street,
El Centro, CA 92243

Dear Ms. Yee:

Thank you for including the California Department of Transportation (Caltrans) in the development review process for the Conditional Use Permit of the proposed Big Rock 2 energy project located near Interstate 8 (I-8) and Drew Road. The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Safety is one of Caltrans' strategic goals. Caltrans strives to make the year 2050 the first year without a single death or serious injury on California's roads. We are striving for more equitable outcomes for the transportation network's diverse users. To achieve these ambitious goals, we will pursue meaningful collaboration with our partners. We encourage the implementation of new technologies, innovations, and best practices that will enhance the safety on the transportation network. These pursuits are both ambitious and urgent, and their accomplishment involves a focused departure from the status quo as we continue to institutionalize safety in all our work.

Caltrans has the following comments.

Glare
The proximity of the project site to I-8 raises some concerns regarding potential glare that could pose a potential risk to motorists traveling on I-8.

The California Code, Vehicle Code - VEH § 21466.5, states that "*no person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway.*"

Please provide a glint and glare analysis to confirm that there will be no visual impacts to the traveling public on I- 8.

PC ORIGINAL PKG

Traffic Analysis
According to the *April 2024 Traffic Study* by Dudek, the project expects high construction trips at I- 8 and Drew Road. Please provide a queuing analysis for the construction work trips for the eastbound and westbound exit ramps at I-8 and Drew Road. Also, please provide a copy of the synchro files.

Hauling
Should the energy project require the transport of oversize equipment, please see the hauling language below.

Caltrans has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway network.

Additional information is provided online at:
http://www.dot.ca.gov/trafficops/permits/index.html

Hydraulics
Caltrans generally does not allow development projects to impact hydraulics within the State's Right of- Way. Any modification to the existing Caltrans drainage and/or increase in runoff to State facilities will not be allowed.

Right-of-Way
Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.

Any work performed within Caltrans' Right-of-Way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans' R/W prior to construction.

If you have any questions or concerns, please contact Roger Sanchez, LDR Coordinator, at (619) 987-1043 or by e-mail sent to roger.sanchez-rangel@dot.ca.gov.

Sincerely,

Rogelio Sanchez for

KIMBERLY D. DODSON, GISP
Branch Chief
Local Development Review

Attachment: Caltrans January 2024 Previous Comments

PC ORIGINAL PKG

Visual Resources Report

Big Rock 2 Cluster Solar and Storage Project, Imperial County, California

MARCH 2025

Lead Agency:

IMPERIAL COUNTY
801 Main Street
El Centro, California 92243

Lead Agency:

90FI 8ME LLC
4370 Town Center Boulevard, Suite 110
El Dorado Hills, California 95762

Prepared by:
Josh Saunders, AICP

DUDEK

605 Third Street
Encinitas, California 92024

PC ORIGINAL PKG

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

1 Introduction 1

2 Project Background 3
- 2.1 Project Location 3
- 2.2 Project Characteristics 3
  - 2.2.1 PV Module Configuration 3
  - 2.2.2 Collection, Inverter and Transformer Systems 4
  - 2.2.3 Battery Energy Storage System 4
  - 2.2.4 Substation(s) 4
  - 2.2.5 Transmission Line and Interconnection 5
  - 2.2.6 Operations and Maintenance (O&M) Building 5
  - 2.2.7 Site Security and Fencing 6
  - 2.2.8 Lighting 6
  - 2.2.9 Project Construction 6
  - 2.2.10 Project Operation and Maintenance 8

3 Regulatory Setting 9
- 3.1 Federal 9
- 3.2 State 9
- 3.3 Local 10

4 Existing Conditions 11
- 4.1 Scenic Vistas 11
- 4.2 Project Site and Surrounding Area 11
- 4.3 Scenic Highways 12
- 4.4 Visual Character and Quality 12
  - 4.4.1 Key Observation Points 12
- 4.5 Light and Glare 14

5 Methods 15

6 Impact Analysis 17

7 Mitigation Measures 23

8 References 25

FIGURES

Figure 1 Key Observation Points 27

PC ORIGINAL PKG

Figure 2 KOP 1: Westbound Interstate 8 29
Figure 3 KOP 2: Eastbound Interstate 8 31
Figure 4 KOP 3: Southbound Derrick Road 33
Figure 5 KOP 4: Westbound Vaughn Road 35
Figure 6 KOP 5: Southbound Liebert Road 37
Figure 7 KOP 6: Eastbound Diehl Road 39

APPENDIX

A Glare Analysis Report

PC ORIGINAL PKG

1 Introduction

Dudek completed a visual impact assessment (VIA) for the Big Rock 2 Cluster Solar and Storage Project (Project) located in Imperial County, California (Figure 1). This letter report was prepared by Josh Saunders, AICP, in accordance with state California Environmental Quality Act (CEQA) guidelines.

The purpose of this technical memorandum is to provide a VIA that describes the existing environmental and regulatory setting and describes the potential impacts to aesthetic resources resulting from development of the Project in Imperial County, California. For purpose of this technical memorandum, aesthetic resources include resources considered in the aesthetics thresholds of Appendix G of the CEQA Guidelines (i.e., scenic vista, scenic resources within a state Scenic Highway, existing visual quality and character, and day and nighttime views).

90FI 8me LLC (Applicant) is seeking approval Conditional Use Permits (CUPs) for construction and operation of a utility-scale photovoltaic (PV) solar energy generation and Battery Energy Storage System (BESS) facility known as the Big Rock 2 Cluster Solar and Storage Project (Big Rock 2 or the Project). The Project would include up to a 500-megawatt alternating current (MWac) PV solar power capacity, and the associated BESS would have up to a 500 MWac power capacity. Energy generated by the Project would be collected using up to 66 kilovolt (kV) collector lines which could run overhead and/or underground to a dedicated Project substation. A 230kV overhead generation intertie (gen-tie) transmission line would then link the Project substation to the planned Liebert Switchyard, which will be connected via an overhead 230kV gen-tie line to the existing San Diego Gas and Electric (SDG&E) Imperial Valley Substation. The collection line corridors utilized to connect the various building blocks are within the Project study area. (Figure 1).

The Project may include an operations & maintenance (O&M) building and/or transmission facilities, as necessary and is anticipated to require up to fifteen (15) full-time employees to operate and maintain the facility when constructed areas (a total of 15 employees split between daytime and nighttime shifts).

For purpose of this technical memorandum, aesthetic resources include resources considered in the aesthetics thresholds of Appendix G of the CEQA Guidelines. Specifically, this analysis inventories existing resources and evaluates impacts to scenic vistas, scenic resources within a state Scenic Highway, existing visual quality and character, and day and nighttime views. Regarding visual quality and character, the Imperial County General Plan Conservation and Open Space Element strives to protect and enhance the natural beauty of the desert and mountain landscape and as such, construction and operation of the Project is evaluated through the context of potential effects to the desert and mountain landscape of Imperial County.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Project Background

2.1 Project Location

The proposed Project would be in unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The project comprises approximately 1,849 acres on 24 private parcels for proposed development of PV solar, BESS, and other associated infrastructure. The Project parcels are located west of Drew Road, east and north of Mandrapa Road, and south of Interstate 8 (Figure 1, Project Location).

2.2 Project Characteristics

PV solar energy generation and BESS facility within a 1,849-acre footprint, comprised of up to 500 MW ac of PV solar and up to 500 MW ac of BESS. Power generated by the Project would be collected using up to 66-kV collector lines which could run overhead and/or underground to a dedicated Project substation with a 230-kv gen-tie line linking the Project substation to the planned IID Liebert Switchyard, which will be connected to the SDG&E Imperial Valley substation via an overhead 230-kV transmission gen-tie line (Figure 2, KOP 1: Westbound Interstate 8). Note that this gen-tie line and interconnection to the Imperial Valley substation is a part of the applicants' approved and entitled Big Rock 1 BESS project, which is expected to be constructed and operational prior to the entitlement of the proposed Project.

In addition, and to avoid exposure of passing I-8 motorists to potential project-generated glare from single-axis tilt PV modules, the Project development footprint would be setback from the east-bound lanes of Interstate 8 along the northern project boundary, between approximately 1,100 feet to up to 2,000 feet, depending upon existing lot-lines on the parcels being developed.

2.2.1 PV Module Configuration

The Project would use PV panels on mounting frameworks to convert sunlight directly into electricity. Individual panels would be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they would be oriented toward the south. For tracking configurations, the panels would rotate to follow the sun over the course of the day. Although the panels could stand up to 15 feet in height (H), depending on the mounting system used, panels are expected to remain between six (6) and eight (8) feet in height.

The solar panel array would be arranged in groups called blocks, with inverter stations generally located centrally within the blocks. Blocks would produce direct electrical current (DC), which is converted to alternating current ("AC") at the inverter stations.

Each PV module would be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 10 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. A light-colored ground cover or palliative may be used to increase electricity production. Final solar panel layout and spacing would be optimized for the Project area characteristics and the desired energy production profile.

PC ORIGINAL PKG

2.2.2 Collection, Inverter and Transformer Systems

DC energy is delivered from the PV panels via cable to inverter stations, generally located near the center of each block. Inverter stations convert the DC energy to AC energy which can be dispatched to the transmission system. PV Inverter stations are typically comprised of one or more inverter modules with a rated power of up to 5-MW each, a unit transformer, and voltage switch gear. BESS units for the Project would be connected to bidirectional inverter stations, high-level control system(s), transformers, and ultimately the Project substation(s) bus bar via a series of overhead or underground electrical collector lines ranging from 66kV to 230kV. Utilizing these Project components, the DC onsite PV panel and battery energy would be converted to AC energy and dispatched to the regional transmission grid, and this process would be reversed to charge the batteries from electrical energy imported from the regional transmission grid for onsite energy storage. PV and BESS inverter stations are typically comprised of one or more inverter modules with a rated power of up to 10 MW each, and a unit transformer, and voltage switchgear. The unit transformer and voltage switch gear are housed in steel enclosures, while the inverter module(s) and control system(s) are housed in cabinets. Depending on the vendor selected for the Project, the inverter stations may be located within an enclosed or canopied metal structure, typically a skid or concrete pad.

Overhead and/or underground collector lines may be bundled together as they approach the substation(s), sharing common poles or trenches. Collector lines would then connect to the Project substation bus bar before being stepped up to 230kV for transmission. The 66kV collector lines would be connected from the various PV parcels and the BESS system to the step-up project substation. The final location(s) of each component, height, and structure type(s) would be determined before the issuance of building permits for the Project by Imperial County.

2.2.3 Battery Energy Storage System

The Project will include one or more BESS, up to 500 MWac capacity and located at or near the Project substation(s)/switchyard(s), the inverter stations, or elsewhere onsite. BESS' consist of modular and scalable battery packs and battery control systems that conform to California and U.S. national safety standards. The BESS modules, which could include commercially available lithium or flow batteries, and typically consist of ISO standard all-weather containers (approximately 40 feet long x 8 feet wide x 8 feet high) housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 25 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on off taker/power purchase agreement requirements for the Project.

The BESS would be in unmanned, remotely controlled containers that would be periodically inspected by Project personnel for maintenance purposes. The BESS would be designed to conform with Imperial County and national BESS fire standard NFPA 855 and/or other applicable national standards. The BESS would have all required UL9540A reports (or equivalent) and would be certified to UL9540 (or equivalent), if required. BESS' require additional components to be fully operational, and that allow the batteries to be connected to the regional transmission grid as discussed below.

2.2.4 Substation(s)

The proposed Project would have its own dedicated substation equipment located within the Project footprint. Dedicated equipment may incorporate several components, including high-voltage and auxiliary power transformers, distribution cabinets, revenue metering systems, a microwave transmission tower, voltage switch

PC ORIGINAL PKG

gear, transmission poles and racking, and bus bar(s) of various voltages for interconnection(s). The substation may also include telecommunications facilities, fiber optic communication cables, equipment, and associated structures for diverse path routing of communications. Substations typically occupy an area of up to approximately five (5) acres and are secured separately by a chain-link fence. The proposed Project substation location is shown in Figure 1, but as noted this proposed location is subject to change as the Project design progresses.

Substations typically include a small control building (approximately 500 square feet) standing approximately ten (10) feet tall. The building is either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Components of this building (e.g., control technology room and intrusion detection system) may instead be located at an O&M building.

2.2.5 Transmission Line and Interconnection

The Project 230kV step-up substation would connect to the 230kV Liebert Switchyard, via one of the proposed gen-tie line alternatives (Figure 1). The Liebert Switchyard will have a direct connection to the existing SDG&E Imperial Valley Substation via an existing overhead 230kV gen-tie line. Overhead transmission conductors may be mounted on tubular steel poles up to 200 feet in height and would include associated insulator and hardware assemblies, the appropriate number of spans of conductor and optical ground wiring, and dead-end structures at both the

Project substation and the Liebert Switchyard. Portions (or all) of the gen-tie line may be undergrounded as necessary. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

Alternative gen-tie routing(s) is depicted in Figure 1 and may utilize currently entitled lands and/or private easements; however, additional alternate routing may include gen-tie line(s) directly to the Imperial Valley substation, utilizing additional/other private and/or Bureau of Land Management (BLM) lands.

2.2.6 Operations and Maintenance (O&M) Building

The Project may include an O&M building of approximately 40 feet x 80 feet in size, with associated onsite parking. The O&M building would be steel framed, with metal siding and roof panels. The O&M building may include the following:

- Office
- Repair building/parts storage
- Control room
- Restroom
- Septic tank and leach field
- Water supply
- Heating, ventilation, and air conditioning (HVAC)

Roads, driveways, and parking lot entrances would be constructed in accordance with Imperial County standards. Parking spaces and walkways would be constructed in conformance with all California Accessibility Regulations.

PC ORIGINAL PKG

Any unused O&M areas onsite may be covered by solar panels. The structure type(s), height, and final location(s) of each component would be determined before the issuance of building permits by Imperial County.

2.2.7 Site Security and Fencing

The Project area would be enclosed within chain link fence measuring up to seven (7) feet in height from finished grade. Note, a 7-foot-tall screening fence (i.e., chain link fence with slats) would be erected along the northern project boundary to assist with glare mitigation.

An intrusion alarm system comprised of sensor cables integrated into the perimeter fence, intrusion detection cabinets placed approximately every 1,500 feet along the perimeter fence, and an intrusions control unit, located either in the substation control room or at the O&M building, or similar technology, may be installed. Additionally, the Project may include additional security measures including, but not limited to, low voltage fencing with warning reflective signage, controlled access points, security camera systems, and security guard vehicle patrols to deter trespassing and/or unauthorized activities that could interfere with operation of the Project.

Controlled access gates would be maintained at the main entrances to the Project. Project area access would be provided to offsite emergency response teams that respond in an after-hours emergency. Enclosure gates would be manually operated with a code or key provided in an identified key box location.

2.2.8 Lighting

Outdoor lighting for the Project would be the minimum required for safety and will be directed away from public rights-of-way and adjacent private property. All outdoor lighting used onsite would be of the lowest intensity necessary to provide suitable light for site security and safe ingress and egress, in compliance with any applicable regulations, measured at the property line after dark. Outdoor lighting is anticipated to be necessary for the access gates, substation(s), O&M building, control room, and inverters to allow for safe access and emergency maintenance. Site lighting may also include motion sensor lights installed within the solar fields in proximity to the inverters for security purposes.

2.2.9 Project Construction

2.2.9.1 Construction Activities and Duration

The construction period for the Project is expected to occur for approximately 18 to 24 months.

Construction would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Panel installation
- Electrical/instrumentation work

PC ORIGINAL PKG

- Collector line installation
- Battery unit installation
- Stormwater management facilities
- Gen-tie line poles and conductor stringing

Roadways would only be temporarily affected, and only during the Project's construction period. Construction traffic would access the Project site from the north or south via Derrick Road, Jessip Road, Westside Road, and Hyde Road, and from the east via Diel Road and Wixom Road (or other nearby local roads). Large trucks would likely utilize Interstate 8 and S29 (Drew Road) for materials deliveries. It is anticipated that traffic would entirely avoid the town of Seely.

Noise generated during construction activities would comply with the Imperial County noise ordinances (Title 9 Land Use Code, Division 7). Heavy construction is expected to occur between 6:00 am and 5:00 pm, Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities may continue 24 hours per day, seven days per week. Low level noise activities may potentially occur between the hours of 10:00 pm and 7:00 am. Nighttime activities could potentially include, but are not limited to, refueling equipment, concrete pours, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies would be delivered to the Project Area by truck. Truck deliveries would normally and primarily occur during daylight hours. However, there would be occasional offloading and/or transporting to the Project on weekends and during evening hours.

Earthmoving activities are expected to be limited to the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), and any storm water protection or storage (detention) facilities. The Project is not anticipated to pave, remove, or significantly alter existing agricultural soil(s). Rather the solar panels would be installed atop the relatively flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface.

Site preparation would be planned and designed to minimize the amount of earth movement required for the Project, to the extent feasible. The hydrology design would be given priority to protect the Project's facility components, as well as adjacent IID canals/drains and County roads from erosion during large storm events. The existing on-site drainage patterns would be maintained to the greatest extent feasible. Compaction of the soil to support the building and traffic loads as well as the PV module and BESS supports may be required and is dependent on final geotechnical investigations and engineering designs. These final engineering designs would be reviewed by IID and the County prior to Imperial County issuing building permits.

2.2.9.2 Laydown Areas

At full build-out, most of the Project development footprint would be disturbed by construction of the Project. Therefore, temporary construction lay down and materials staging areas, construction trailer locations, and construction parking areas will all be provided within the Project disturbance footprint. Due to the relatively large size of the Project, the lay down areas may be relocated periodically within the solar field acreage as the project is built out.

PC ORIGINAL PKG

2.2.9.3 Workforce

It is estimated that up to 500 workers per day (during peak construction periods) would be required to construct the Project.

2.2.10 Project Operation and Maintenance

The PV solar and BESS facility would operate seven days a week, 24 hours a day. Maintenance activities may occur seven days a week, 24 hours a day to ensure PV panel output when solar energy is available, while the BESS could dispatch energy at any time during the day or night.

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to the following:

- Cleaning of PV panels
- Monitoring PV panel and BESS electricity generation
- Providing site security
- Maintenance of stormwater facilities
- Maintenance of PV solar and BESS facilities including replacing or repairing inverters, wiring, or electrical components, and maintaining, repairing, or replacing substation components.

It is expected that the Project would require an operational staff of up to 15 full-time employees. It is possible that the proposed project could share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the project's on-site staff.

PC ORIGINAL PKG

3 Regulatory Setting

3.1 Federal

Federal Highway Administration

While the Project is not under the jurisdiction of the federal government, the Federal Highway Administration (FHWA) *Guideline for the Visual Impact Assessment of Highway Project* is referenced in this report and is used as a model for the assessment of visual impacts. Per the FHWA guidelines, the aesthetic quality of an area is determined through the variety and contrast of the area's visual features, the character of the features, and the scope and scale of the visible landscape.

An area's aesthetic quality is dependent on the relationship between it features and their significance/importance in the available view. The method for evaluating resource change requires consideration of visual character and an assessment of the attributes of visual quality (vividness, intactness, and unity). Viewer response is informed by viewer exposure and viewer sensitivity. The change in resource combined with viewer response is evaluated to determine the overall visual impact.

3.2 State

Caltrans Scenic Highways Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highway Code, Section 260 et seq. The Scenic Highways Program is comprised of officially designated scenic highways (i.e., highways for which corridor protection programs have been adopted and the highways are listed in the Streets and Highway Code) and eligible scenic highways (i.e., highways designated as scenic by the local planning department).

The nearest state scenic highway, State Route 111 (SR-111; an eligible state scenic highway) between Bombay Beach and State Route 195 near Mecca, is over 40 miles away from the project site. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles away from the project site.

California Environmental Quality Act

The CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to aesthetic resources. Aesthetic resources including scenic vistas and views (both day and night), views from state scenic highways, and existing visual character are recognized as part of the environment under these state guidelines.

PC ORIGINAL PKG

3.3 Local

Imperial County General Plan

The Imperial County General Plan includes policies aimed at protecting and conserving the County's scenic resources and open spaces. The following goal and policy of the Conservation and Open Space Element of the General Plan are relevant to aesthetics and the project:

- **Goal 7:** The aesthetic character of the region shall be protected and enhanced to provide a pleasing environment for residential, commercial recreational, and tourist activity.
- **Objective 7.1:** Encourage the preservation and enhancement of the natural beauty of the desert and mountain landscape.

County of Imperial Land Use Ordinance, Title 9

The County's Land Use Ordinance Code provides specific direction for lighting requirements.

Division 17: Renewable Energy Resources, Section 91702.00 – Specific Standards for All Renewable Energy Projects

- R. Lights should be directed or shielded to confine direct rays to the Project site and muted to the maximum extent consistent with safety and operational necessity.

PC ORIGINAL PKG

4 Existing Conditions

4.1 Scenic Vistas

Scenic vistas are generally broad and expansive views that may or may not be sited at elevated areas. They may or may not be located at a designated scenic overlook or other area that offers a static, scenic view of a landscape. Lands within the Project Boundary are located in an agricultural area of the County and do not encompass lands containing a scenic vista designated as such by the State or the County General Plan. Scenic vistas are not specifically discussed in the Final Program EIR for the Imperial County General Plan; however, natural and developed areas including deserts, sand hills, mountains, the Salton Sea, agricultural lands, and urban areas are identified as County visual resources (County of Imperial 1993). Due to the general lack of dominant vertical development in the immediate Project area (and presence of agricultural lands), broad and long views to regional mountains including the Jacumba Mountains (located west of the Project area) and pyramidal El Centinela (also known as "Weeishpa" by local tribes; located south of the Project area) are generally available from Interstate 8 and local roads near the Project site.

Available views from Interstate 8 and local roads are further explored below in Section 4.4.

4.2 Project Site and Surrounding Area

The entire Project area is designated Agricultural in the Imperial County General Plan. The Project parcels are zoned Agricultural lands and/or Rural lands. Current land use of the Project parcels includes cropland and irrigated grain and hayfields.

The Project parcels occur adjacent and proximal to both Agricultural and Agricultural/Rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved and entitled by Imperial County but have not yet constructed. In addition, one fully operational PV project and one proposed BESS project undergoing entitlement with Imperial County are located adjacent to the proposed Project parcels.

Nearby land uses include residential, commercial, transportation, military, electric utility, and renewable energy production. Nearby residential land uses include the town of Seely, and commercial land uses include the Rio Bend Golf Course (and associated Specific Plan Area) to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project, and further north the Department of Defense (DOD) Naval Air Facility El Centro. To the south of the Project utility land uses include the SDG&E 230/500 kV Imperial Valley Substation, as well as additional agricultural lands that have been designated for geothermal, PV solar and BESS renewable energy projects.

Existing character and viewing conditions present in the Project area (i.e., on the Project site and in the surrounding area) are further explored and documented through the use of representative vantage points offering views to the Project site (also referred to as Key Observation Points). See Section 4.1.3, below, for additional detail regarding Key Observation Points and description of existing visual character.

PC ORIGINAL PKG

4.3 Scenic Highways

There are no designated State scenic highways in Imperial County (County of Imperial 2016). Lands within the Project Boundary are not located within a state scenic highway corridor, nor are there any state scenic highways located near the Project site. The nearest state scenic highway, SR-111 (an eligible state scenic highway) between Bombay Beach and State Route 195 near Mecca, is over 40 miles away. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles away.

Due to distance and intervening topography and development, views to the Project site are not available from a designated scenic highway.

4.4 Visual Character and Quality

The existing visual character and quality of the Project site and surrounding area is described above in Section 4.1. Generally, the site and immediate surrounding area comprise a relatively flat agricultural landscape that supports low, green grasses and other agricultural crops, irrigation canals, electrical transmission infrastructure, and solar development. The Project's valley landscape is generally indistinct from other locations in the agricultural belt of Imperial Valley and is submissive to prominent mountain terrain that provides a scenic backdrop of visual interest.

As detailed previously, existing visual character and quality of site and surrounding area was further explored through the use of Key Observation Points (KOPs). As an initial step in this process, aerial imagery was reviewed to identify locations from which the Project would potentially be visible from public accessible vantage points. Following this review, preliminary representative viewpoints for site photography were established. A photographic field survey occurred in September 2023 during which representative viewpoints were visited and existing conditions and views towards the Project site were photo-documented. A subset of five photographed viewpoints were selected as Key Observation Points (KOPs). Assessments of existing visual conditions were made based on professional judgment that took into consideration sensitive receptors and sensitive viewing areas in the project area.

The location of KOPs is depicted on Figure 1, Key Observation Points.

4.4.1 Key Observation Points

Key Observation Point 1: Westbound Interstate 8

Located on the shoulder of the eastbound travel lanes of Interstate 8 approximately 200 feet from the northern boundary of the Project site. The view from KOP 1 is oriented to the southwest and looks across the paved interstate travel lanes, active agricultural lands marked by low and green, grass-like vegetation (likely alfalfa), the low, raised berm of irrigation canals and drainage ditches, clumped trees that have been erected as windbreaks, and more distant desert lands of western Imperial County. See Figure 2, KOP 1: Westbound Interstate 8. The dark and hazy silhouettes of distant hills and mountains are visible and the long mountain range forms the westerly horizon. The visual character of the scene is influenced by the grass-like vegetation of foreground lands and the lack of prominent vertical development. Electrical transmission infrastructure (i.e., lattice transmission towers) are present in the landscape but due to distance and lattice construction/materials, the structures are not visually dominant.

PC ORIGINAL PKG

Key Observation Point 2: Eastbound Interstate 8

Situated 0.6 mile to the east of KOP 1, KOP 2 approximates the view to the project site available from the eastbound travel lanes of Interstate 8. See Figure 3, KOP 2: Eastbound Interstate 8. Located on the interstate shoulder, KOP 2 looks to the southeast across the project site and a landscape dominated by flat terrain and agricultural uses. The northern project boundary is situated approximately 125 feet away (i.e., beyond the existing post and wire fencing in the foreground) the visible reach of the project site is characterized by a wide, dirt roadway that abuts an expansive field of low, green, grass-like vegetation. The elevated profile of Derrick Road is visible to the west as is a collection of matures trees that are located along Derrick Road to the south of the interstate. A series of thin poles supporting electrical distribution lines run north-south along Derrick Road and then scatter in the landscape to the southeast of KOP 2. Lastly, a collection of rectangular hay bale stacks (also referred to as "dumps") covered with white tarps/fabric material is located to the southeast (the white of the tarps slightly stand out in a landscape dominated by brown and green tones).

Key Observation Point 3: Southbound Derrick Road

KOP 3 is located atop the elevated bridge profile of Derrick Road as it spans Interstate 8. The view is oriented to the south-southwest and due to an elevated vantage point, the landscape is somewhat expansive and visibility extends to prominent albeit somewhat hazy landforms to the south (mounded and pyramidal El Centinela) and southwest (Jacumba Mountains). In the foreground and beyond the deck and railing of the Derrick Road bridge, the landscape is marked by north-south alignment of wood poles supporting a local electrical distribution line. A concrete lined canal generally parallels the distribution line (and Derrick Road) and fronts active agricultural lands covered with low, green, grass-like vegetation. Rectangular hale bay stacks covered with white tarps occur off-center in the KOP 3 scene (see Figure 4, KOP 3: Southbound Derrick Road) and isolated or small clustered tree groupings are scattered throughout the landscape. Visible electrical infrastructure rises from the valley floor to the southwest and congregates at the existing Imperial Valley Substation that is located nearly 3.7 miles to the south-southwest of KOP 3 (in the KOP 3 view, the substation is marked by a collection of dark and thin, overlapping vertical lines near the northwesterly base of El Centinela). Despite the presence of multiple electrical transmission lines and a large substation, EL Centinela and the distant mountain range to the southwest-west are the dominant features in the landscape.

Key Observation Point 4: Westbound Vaughn Road

Located on westbound Vaughn Road adjacent to the Project boundary and the Westside Drain, KOP 4 looks southwest towards the southwestern corner of the Project site that is currently occupied by low, green, grass-like vegetation (likely alfalfa hay). See Figure 5, KOP 4: Westbound Vaughn Road is an unmarked, paved, east-west road (approximately 20 feet wide) that in the KOP 4 landscape, abuts the Westside Drain, rural residential lands, and agricultural lands to the north, and additional irrigation drains, and agricultural fields to the south. Beyond the Project site and agricultural lands, a visible, north-south line of mature trees (a planted windbreak) occurs to the west-southwest and several tall and vertical steel lattice towers supporting transmission lines extend from the desert floor and above the tree line. Lastly and as at other KOPs, the background of the KOP 4 landscape is marked by dark, slightly hazy, and rugged hill and mountain terrain.

Key Observation Point 5: Southbound Liebert Road

Situated adjacent to the concrete lined Fern Canal and on the dirt shoulder of Liebert Road (a paved road), KOP 5 view is oriented to the southeast and looks across active agricultural lands and undeveloped yet vegetated lands

PC ORIGINAL PKG

occurring to the north and south of the nearby All-American Canal. See Figure 6: KOP 5: Southbound Liebert Road. The vegetation to the south of the All-American Canal presents as taller and more untamed than the agricultural grasses in the foreground of the KOP 5 view. A small, modest residential structure (assumed to be vacant) is visible to the southwest near the small cluster of palm trees and an assortment of numerous thin, dark, and vertical structures/lines occurs to the south and marks the Imperial Valley Substation (and lines terminating/originating at the substation). A transmission line is aligned along Liebert Road and while located nearly 6 miles away, the dark and mounded form of El Centinela dominates the southern horizon. Additional mountainous terrain is visible to the southeast but due to distance and apparent scale, these features are not visually dominant.

Lastly and while not visible in the KOP 5 view, an existing operational solar facility ("Campo Verde Solar Facility") that includes a project substation is located approximately 200 feet to the west of KOP 5 and Liebert Road.

Key Observation Point 6: Eastbound Diehl Road

Located at the intersection of Diehl Road and Jessup Road near the Wixom Drain, KOP 6 is located within 150 feet of the nearest project boundary that is located north of Diehl Road. As experienced from KOP 6, the local landscape is comprised of flat terrain with visible bermed land in the foreground that parallel Diehl Road and Jessup Road (and obscured irrigation drains). At the time of the field visit to obtain photographs of the view from KOP 6 the project site was partially inundated with water. See Figure 7: KOP 6: Eastbound Diehl Road. The remainder of the site appears to have been recently tilled or otherwise disturbed. Beyond the project site, several indeterminant, light-colored, boxy structures appear on the low horizon as do pockets of tall, dark green vegetation/trees. Lastly. thin and narrow poles supporting electrical transmission infrastructure dot the low horizon and are visible along the Diehl Road corridor in the distance.

4.5 Light and Glare

While glare is considered a continuous source of brightness (relative to diffused light), glint is a direct redirection of the sun beam in the surface of a PV solar module. Glint is highly directional, since its origin is purely reflective, whereas glare is the reflection of diffuse irradiance; it is not a direct reflection of the sun.

The Project site consists of active agricultural lands and thus, does not include existing sources of light or glare. Most existing light and glare in the project area is associated with motor vehicles traveling on surrounding roadways, air traffic, and farm vehicles/equipment. Local roadways generate glare both during the night hours when cars travel with lights on, and during daytime hours because of the sun's reflection from cars and pavement surfaces. Additional potential sources of glare include the operational solar farms in the immediate project vicinity. Overall, existing light and glare sources are muted and do not contribute significantly to the existing night or day environment.

PC ORIGINAL PKG

5 Methods

Scenic Vistas

For purposes of this report, scenic vistas are considered formally designated public vantage points offering views of primarily natural settings containing recognized scenic features or landscapes of special importance. As stated in Section 4.1.1 above, they are no known designated scenic vistas in Imperial County.

The concepts of view blockage, interrupted, and degradation are used to determine the severity of potential impacts to scenic vista. If views from public vantage points across the Project site include recognized scenic features, Project components are examined to determine the likelihood for view obstruction (i.e., view blockage), view interruption (i.e., intrusion on available view due to contrasting features), or degradation (i.e., decline in scenic quality).

Scenic Highways

Scenic highways include those state facilities that have been officially designated or nominated for official designation through eligible status by Caltrans. If the Project site is located within the viewshed of a scenic highway, then the potential for impacts to scenic highways is informed by the presence of existing scenic resources on the Project site, project plans to avoid/protect or disturb existing scenic resources, and the visibility of scenic resource disturbance from an officially designated or eligible state scenic highway. Pursuant to CEQA Appendix G guidelines, scenic resources include trees, rock outcroppings, and historic buildings and may also include locally recognized scenic resources including oak trees, vineyards, and rolling hills.

No views of the Project site are available from a state scenic highway.

Visual Character and Quality

Impacts to existing visual character and quality are determined through a comparison of pre- and post-development conditions on the Project site. Specifically, the project is examined for potential contrast with existing onsite feature and features in the surrounding area.

Lighting and Glare

The potential for lighting and glare impacts are evaluated based on a comparative review of pre- and post-development lighting and glare sources operating in the project area. If a project in an urban or developed area currently contains existing nighttime lighting and glare sources, then the likelihood for a project with comparable lighting to result in significant lighting and glare impacts is low (assuming the installation of standard control measures). On the other hand, if a dissimilar project in a low-lighting rural environment with excessive or unusually bright lighting is implemented, then the likelihood for potentially significant lighting and glare impacts would be high.

A Project-specific glare analysis was prepared, and the results of the analysis are summarized below in Section 6; the Project specific glare analysis is included as Appendix A to this report.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

6 Impact Analysis

In accordance with significance thresholds for aesthetics established in Appendix G of the CEQA Guidelines, a significant impact would occur if the Project:

1. *Would have a substantial adverse effect on a scenic vista?*
2. *Would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
3. *Would substantially degrade the existing visual character or quality of the site and its surroundings?*
4. *Would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Analysis

Impact AES-1: Would the Project have a substantial adverse effect on a scenic vista?

There are no designated scenic vistas near the Project site the County's General Plan (or General Plan EIR) does not identify specific scenic vistas. The Project site is located adjacent to Interstate 8 and local roads and thus, construction and operational activities associated with Project would be visible from and experienced by motorists and the limited residents in the immediate area. As previously discussed in Section 4.1, broad and long views to regional mountains including the Jacumba Mountains (located west of the Project area) and pyramidal El Centinela (also known as "Weeishpa" by local tribes; located south of the Project area) are generally available from Interstate 8 and local roads near the Project site. Since the County generally identifies mountains as "County visual resources," views to area mountains are considered scenic vistas for purposes of this analysis.

During construction, typical equipment including, but not limited to, tractors, graders, compactors, scrapers, loaders, forklifts, and cranes would be present and operate on site. Combined with a temporary influx of construction personnel and equipment/vehicles, and the visual effects of vegetation removal, construction within the project area would alter views of the existing agricultural fields to an active construction site. However, during construction, effects to existing views would be short-term, temporary, and be experienced by a limited number of permanent residents in the immediate surrounding area. A larger volume of viewers on nearby I-8 would experience construction activities as they approach and pass the Project (the northern boundary of the Project site parallels the eastbound I-8 travel lanes for approximately 2.1 miles); however, views to construction activities would be fleeting (and limited to the landscape to the south of the interstate). In addition, the visual effects of construction activities on the Project site as experienced from Interstate 8 would be diminished by the incorporation of development setbacks from the interstate. Specifically, project development would be pulled back between approximately 1,100 feet to up to 2,000 feet from the eastbound lanes of Interstate 8 and thus, project elements including solar arrays, perimeter fencing, and the visual effects of vegetation removal would not be visually prominent and would not detract from existing available views. Further and as westbound motorists and passengers travel alongside the Project site, views to distant mountains to the southwest and west would be maintained over the 18-to-24-month construction schedule and would not be substantially blocked by equipment/vehicles or the installation of project components.

PC ORIGINAL PKG

During operations, mobile views to the prominent visual resources in the Project area landscape (i.e., rugged hills and distant mountain ranges) would remain available to motorists Interstate 8 and most local roads and would not be blocked or otherwise encumbered by project components. In addition, views to regional mountains from Interstate 8 would not be blocked by the installation of 7-foot-high perimeter fencing or other project components. As previously discussed, project development would be pulled back between approximately 1,100 feet to up to 2,000 feet from Interstate 8 and thus, solar arrays, perimeter fencing, and all other permanent features would appear small in the landscape and would not block or interrupt existing available views. While perimeter fencing would be visible from the interstate (see Figure 2, KOP 1 and Figure 3, KOP 2), the degree of visual change on the project site as experienced from the interstate would be minimal and overall effects to existing views would be minor. As shown in the figure, the existing, interrupted view to distant mountains would be maintained and no blockage or significant interruption of existing views from the interstate to regional mountains would occur. As such, impacts would be **less than significant**.

Impact AES-2: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no designated State scenic highways in Imperial County. The nearest state scenic highway, SR-111 (an eligible state scenic highway) between Bombay Beach and State Route 195 near Mecca, is over 40 miles from the Project site. The nearest officially designated state scenic highway, SR-78 through Anza Borrego Desert State Park, is over 35 miles from the Project site. Due to distance, and intervening development and topography, construction and operation of the Project would not be visible from a state scenic highway and thus, construction and operation would not result in substantial damage to scenic resources within a state scenic highway. Accordingly, **no impacts** to scenic resources within a state scenic highway would occur.

Impact AES-3: Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

The Project site is located in a nonurbanized, agricultural area of Imperial County. As proposed, the Proposed would convert existing active agricultural lands to a photovoltaic solar facility. Components to be installed on the Project site include rows of PV solar panels up to between 6 feet and 8 feet in height, up to 500 MW ac of BESS that would typically consist of ISO standard all-weather containers (approximately 40'L x 8'W x 8'H), 66-kV collector lines, and a dedicated approximately 5-acre Project substation. Temporary and permanent access roads would also be constructed. Slatted chain-link fencing would be installed along the northern perimeter of the Project site and non-slatted chain-link fencing would be installed around the remainder of the Project perimeter. Lastly, and to reduce the potential for glare exposure along Interstate 8, project development would be pulled back between approximately 1,100 feet to up to 2,000 feet from the eastbound lanes of interstate 8.

Construction

During construction of the Project, visual effects would be temporarily and intermittently experienced by most receptors/viewed over the phased 18-to-24-month construction period. Short-term visual impacts associated with Project construction would occur as construction equipment, materials delivery and movement, and additional traffic is drawn to the Project Site and utilizes roadways in the surrounding area. Additional changes occurring on the site including removal of existing vegetation, preparation of the site to accommodate components/facilities, and installation of those components/facilities previously identified in Section 2.2, above. These short-term impacts would be experienced by local motorists and by the limited number of residences in the immediate area. As

PC ORIGINAL PKG

experienced from Interstate 8, construction activities would be visible but would not be visually prominent due to provided development setbacks from the interstate. As further described in the light and glare analysis presented below, there would also be potential for light and glare impacts during the construction period.

As individual construction phases are completed, the overall amount of equipment onsite would be reduced and/or moved to other areas of the Project Site to initiate other phases and activities. As such, the visual characteristics of construction would be spread out across a large area and difficult to fully experience from any single vantage point in the surrounding area. Due to the temporary and intermittent nature of construction activities, impacts to existing visual character and public views available in the surrounding area would be of a short-term duration, varied, and spread over distinct locations across a large geographical area (i.e., the nearly 1,500-acre Project footprint), thereby reducing the overall severity of visual impacts as experienced by most viewer groups in the area. While construction of the Project would result in noticeable change to the existing character of the site and existing site qualities/features would be removed to accommodate construction equipment and vehicles (and the installation/construction of Project components), construction impacts to existing visual character would be less than significant.

Operations

Project components to be installed across the Project Site are identified in Section 2 and summarized above under the Impact AES-3 heading. As previously disclosed, the assessment of visual character and view quality considered existing aesthetic conditions and anticipated visual change associated with Project development as experienced from five selected KOPs that include west- and eastbound Interstate 8, Derrick Road, Vaughn Road, and Liebert Road.

As experienced from KOPs 1 and 2 (west- and eastbound Interstate 8), the introduction of solar panels and slatted, chain-link fencing, and the transformation of the grass covered site to one surfaced with exposed local soils, would produce minimal visual change from existing conditions. See Figures 2 and 3. As previously discussed, project development would be pulled back from the interstate and intervening vegetation and terrain on the project site (i.e., vegetation and terrain between the interstate and development footprint) would be retained/would not be altered. As such, the foreground landscape as experienced from the interstate would retain its existing character and open qualities and existing views to regional mountains would remain largely unchanged. See Figure 2.

Similar to anticipated visual change at KOPs 1 and 2, the overall visual change at KOP 3 would be relatively minor as the low, grass-like covered fields in the foreground would be retained and unaltered. See Figure 4, KOP 3. As shown in the KOP 3 visual simulation, the tan slatted chain-link fence and solar arrays would be visible in the distance but would be contained to a relatively small portion of the seen landscape. The installation of rows of dark solar panels would be evident from the elevated vantage point available; however, the existing landscape character would remain and would continue to exude existing agricultural qualities.

The introduction of solar panels and removal of existing vegetation from the Project site would produce noticeable visual change as experienced from KOP 4 and KOP 6. See Figure 5, KOP 4 and Figure 7, KOP 6. The transformation of the site from active agricultural lands to an operational energy facility (and more specifically, the introduction of chain-link fencing in the immediate foreground), would produce strong visual change when viewed absent context; however, the anticipated severity of change would be like that associated with development of the approved but not yet constructed Big Rock Cluster (Laurel Solar 3 and 4) Energy Project (located to the immediate south and east of KOP 4) and the operational Campo Verde Solar Facility (located to immediate west of KOP 5 and west and south of KOP 6). Big Rock Cluster (Laurel Solar 4) Energy and Campo Verde Solar Facility Project components are not

PC ORIGINAL PKG

visible in the specific views selected for KOPs 4 6 but will and have noticeably altered the existing landscapes near these KOPs. Given the proximity of approved and existing energy development that includes similar components as those anticipated to be installed on the Project site (Big Rock 2 Cluster Solar and Storage Project site), overall severity of visual change would be lessened as the Project would bear a resemblance to existing features (i.e., solar development) in the immediate landscape.

Lastly, the anticipated visual change associated with the development of the Project substation and gen-tie line as experienced from Liebert Street (KOP 5) is illustrated in Figure 6. As shown in the figure, the introduction of multiple vertical structures (e.g., bays and racks) within the footprint of the Project substation would create noticeable visual change and would alter the existing quality of the southeasterly view to distant mountain terrain. And while the existing grass-like covered footprint of the Project substation would be replaced by a fenced. electrical substation with a greyish gravel covered surface, overall visual change would be dampened by existing solar and electrical transmission/substation development in the immediate area. In addition to the transmission lines in the foreground and structures of the Imperial Valley Substation that are visible in the KOP 5 view, the existing Campo Verde Solar Facility (located across a 1,400-acre site) and Project substation are located approximately 200 feet to the west of KOP 5 and Liebert Road. While not visible in the specific view selected for KOP 5, an electrical substation and multiple rows of PV modules associated with the Campo Verde Solar Facility have permanently altered the local landscape. As such, the introduction of the Project substation to the KOP 5 landscape would result in overall minor visual change when considered in the context of the existing visual landscape that includes prominent electrical transmission and substation infrastructure and large, utility-scale solar development.

Conclusion

Project operations would convert existing agricultural fields across approximately 1,482 acres to a solar facility with BESS. The primary visual change that would be experienced by viewers in the surrounding area is the introduction of numerous rows of orderly solar panels, and installation of slatted/non-slatted chain-link fencing along the site perimeter. As illustrated in the Project visual simulations, proposed PV module frames are expected to be approximately 6 to 8 feet in height and as such, the introduction of solar panels would not result in substantial obstruction of views to distant mountain ranges such as those available from Interstate 8 and Derrick Road (i.e., KOPs 1 and 3). Furthermore, Project components would have an overall minor effect on existing visual character and quality as experienced from the interstate and from local roads, the visual change associated with development of a solar facility would be similar to development of the approved but not yet constructed Big Rock Cluster (Laurel Solar 3 and 4) Energy Project and existing operational Campo Verde Solar Facility that have altered the existing project area landscape. For these reasons, the introduction of a solar facility to the project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, impacts are considered **less than significant.**

Impact AES-4: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Light

Construction activities would generally occur between the hours of 6:00 am and 5:00 pm and therefore, construction would not generally require the use of mobile light fixtures/sources that could potentially illuminate the evening or night sky. However, additional hours beyond 5:00 p.m. may be necessary to make up schedule deficiencies and nighttime activities including but not limited to refueling equipment, concrete pours, staging

PC ORIGINAL PKG

material for the following day's construction activities may potentially occur between the hours of 10:00 pm and 7:00 a.m.

While limited construction activities could require the use of mobile light fixtures/sources for general illumination of work areas, their frequency would be irregular and duration would be limited/short. In addition, public views to the Project site are mostly limited to Interstate 8 (views are also available from oft-travelled local roads in the immediate project area). Due to the anticipated infrequent use and short duration of nighttime lighting during construction, the limited presence of sensitive receptors in the immediate surrounding area, and because lighting sources would generally be hooded and directed downward onto the active area of construction, Project construction would not create a new source of substantial light and glare that would adversely affect nighttime views in the area. Accordingly, impacts associated with Project use of lighting during construction would be less than significant.

Lighting installed for use during Project operations would be minimal. For example, site lighting may include motion sensor lights for security purposes and these sources may be installed at site entrance gates or at the onsite O&M building (if an onsite building is constructed). Despite the inclusion of lighting on site and use during operations, the total number of lighting sources to be installed would be limited and occurrences of use/illumination would be infrequent due to motion sensor activation. Furter, lighting installed on the Project site (i.e., within the Project boundary) would be of the lowest intensity foot candle level available while still providing for safe working conditions/adequate deterrence and compliant with applicable local regulations (e.g., County Ordinance, Division 17: Renewable Energy Resources, Section 91702.00 – Specific Standards for All Renewable Energy Projects concerning shielding and directing of light to confine to the Project site to the maximum extent). Lastly, installed site lighting would be directed away from public right-of-way to avoid unsafe driving conditions during periods of lighting activation. For these reasons, the low number of fixtures and anticipated infrequent use of lighting on the Project site during operations would not create a new source of substantial light and glare that would adversely affect nighttime views in the area. Impacts would be less than significant.

Glare

The presence of heavy equipment and vehicles on the Project site during construction may momentarily generate glare that could be experienced from vantage points in the surrounding area. due to the presence of reflective construction equipment and materials. However, and as previously stated, public views of the project site are mostly limited to Interstate 8 and given the regular presence of construction vehicles in the landscape, construction-related glare associated with equipment and vehicle presence is not anticipated to adversely affect daytime views. The duration of equipment and vehicle-generated glare that may be experienced by viewers in the surrounding area during project construction would also be short-term. Therefore, constructed-generated glare is considered a less than significant impact.

The project would involve the installation of PV solar arrays which have low reflectivity. Solar PV modules are specifically designed to reduce reflection as any reflected light cannot be converted into energy. Research has shown that reflectivity from PV panels is similar to reflections from water (Appendix A of this report). Further and with the incorporation of development setbacks from Interstate 8 and the construction of 7-foot-high slatted chain-link fencing around the Project site northern perimeter, the PV panels would not create a significant source of glare that could impact views during daylight hours. Additionally, public views of the project site are relatively limited and, as such, operation-related glare and glint are not anticipated to adversely affect day or nighttime views. The project would not use other reflective materials such a fiberglass, aluminum or vinyl/plastic siding, galvanized products,

PC ORIGINAL PKG

and brightly painted steel roofs that have the potential to create on- and off-site glare. Based on the rationale provided above, project-related glare impacts would be **less than significant**.

PC ORIGINAL PKG

7 Mitigation Measures

Impacts would be less than significant and thus, mitigation measures are not required.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

8 References

Caltrans (California Department of Transportation). 2023. Scenic Highway System. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed October 2023.

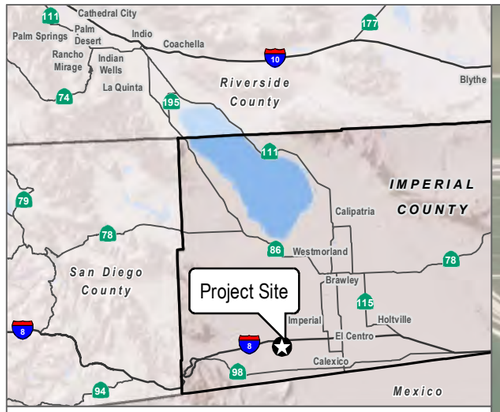
County of Imperial. 1993. Program Environmental Impact Report for the Imperial County General Plan Update.

County of Imperial. 2016. Conservation and Open Space Elements, Imperial County General Plan.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



- Key Observation Points (KOP)
- Project Boundary
- Proposed Photovoltaic Panels
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

SOURCE: Maxar 2022; Open Street Map 2023; Avantus 2023

DUDEK 0 1,000 2,000 Feet

FIGURE 1

Key Observation Points

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Existing View from westbound Interstate 8 towards the Project site (approximately 200 feet away)



Visual Simulation of Project (visible segments of project fence line setback between approximately 1,700 to 2,000 feet from Interstate 8)

FIGURE 2

KOP 1: Westbound Interstate 8

P# 15207

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Existing View from eastbound Interstate 8 towards the Project site (approximately 125 feet away)



Visual Simulation of Project (visible segments of project fence line setback approximately 1,100 feet from Interstate 8)

FIGURE 3

KOP 2: Eastbound Interstate 8

P# 15207

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Existing View from southbound Derrick Road over Interstate 8



Visual Simulation of Project

FIGURE 4

KOP 3: Southbound Derrick Road

P# 15207

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Existing view from westbound Vaughn Road adjacent to Project site



Visual Simulation of Project

FIGURE 5

KOP 4: Westbound Vaughn Road

P# 15207

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Existing view from southbound Liebert Road (approximately 0.25 mile north of All-American Canal)



Visual Simulation of Project

FIGURE 6

KOP 5: Southbound Liebert Road

P# 15207

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Existing view from eastbound Diehl Road at Jessup Road intersection (approximately 150 feet from nearest project boundary)



Visual Simulation of Project

FIGURE 7

KOP 6: Eastbound Diehl Road

P# 15207

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix A
Glare Analysis Report

PC ORIGINAL PKG

DRAFT

Glare Analysis Report

Big Rock 2 Energy Project, Imperial County, California

MAY 2024

Lead Agency:

IMPERIAL COUNTY
801 Main Street
El Centro, California 92243

Client:

90FI 8ME LLC
4370 Town Center Boulevard, Suite 110
El Dorado Hills, California 95762

Prepared by:

DUDEK

38 North Marengo Avenue,
Pasadena, California 91101

PC ORIGINAL PKG

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

Acronyms and Abbreviations iii

1 Introduction 1
1.1 Purpose and Scope 1

2 Project Description 3
2.1 Project Location 3
2.2 Project Characteristics 3

3 Regulations and Regulatory Requirements 5
3.1 Federal 5
3.2 State 6
3.3 Local 6

4 Glare Impacts 7
4.1 General Concepts of Solar Technologies and Glare 7
4.2 Methodology 8
4.2.1 Airport Receptor Identification 8
4.2.2 Dwelling and Route Receptor Identification 9
4.2.3 Geometric Glare Analysis 11
4.2.4 Limitations of the Geometric Analysis 11
4.2.5 Baseline Glare Conditions 12
4.3 Glare Analysis Results 12
4.3.1 Results for Airport Receptors 12
4.3.2 Results for Point and Route Receptors 12
4.3.3 Comparison of Results to Other Sources of Glare 15

5 References 17

6 Document Preparers 19

TABLES

Table 1. Flight Path Receptor Parameters 9
Table 2. Observation Point Descriptions 10
Table 3. Highway/Road Observation Route Descriptions 10
Table 4. Solar Array Model Inputs 11
Table 5. Green and Yellow Glare Results for Airport Receptors 12
Table 6. Green Glare Results for Point and Route Receptors 13
Table 7. Yellow Glare Results for Point and Route Receptors 14

PC ORIGINAL PKG

FIGURES

Figure 1 Project Location 21
Figure 2 Comparison of Photovoltaic Tracking Systems 23
Figure 3 Project Layout and Receptor Locations 25
Figure 4 Existing Solar Projects Within Study Area 27

APPENDIX

A Detailed Modeling Results

PC ORIGINAL PKG

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BESS	battery energy storage systems
CEQA	California Environmental Quality Act
FAA	Federal Aviation Administration
I	Interstate
kV	kilovolt
MW	megawatt
NJK	Naval Air Facility El Centro
OP	observation point
Project	Big Rock 2 Energy Project
PV	photovoltaic
report	Glare Analysis Report
SDG&E	San Diego Gas & Electric

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

1 Introduction

1.1 Purpose and Scope

The purpose of this Glare Analysis Report (report) is to assess the potential glare impacts associated with implementation of the Big Rock 2 Energy Project (project). The analysis was conducted per U.S. Federal Aviation Administration's (FAA) recommended procedures described in the Technical Guidance for Evaluating Selected Solar Technologies on Airports (FAA 2018); the geometric glare modeling software used adheres to FAA policy regarding solar energy system projects on federally obligated airports (86 FR 25801–25803).

This report focuses on the potential for glare on sensitive receptors within a 5-mile glare study area as well as the four runway approach paths associated with Naval Air Facility El Centro (NJK), which is a U.S. Navy facility.

This report includes an introduction to the photovoltaic (PV) technologies proposed to be implemented on the project site and their potential to result in glare. Chapter 2, Project Description, provides a description of the project and the project location; Chapter 3, Regulations and Regulatory Requirements, describes the criteria that must be met for solar energy systems on airport property and relevant glare policies or standards adopted by Imperial County; and Chapter 4, Glare Impacts, describes the methodology used to perform the glare analysis and provides a summary of the analysis results. Chapter 5, References, provides a list of the references cited in this report, and Chapter 6, Document Preparers, provides a list of those involved in the preparation of this report. Lastly, the complete detailed glare results generated by the modeling software are provided in Appendix A.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Project Description

2.1 Project Location

The proposed Project would be in unincorporated Imperial County, immediately south of Interstate (I) 8, approximately 1 mile southwest of the town of Seeley, California, and approximately 6 miles north of the United States international border with Mexico. The project comprises approximately 1,849 acres on 24 private parcels for proposed development of PV solar, battery energy storage systems (BESS), and other associated infrastructure. The project parcels are located west of Drew Road, east and north of Mandrapa Road, and south of Interstate 8 (Figure 1, Project Location).

2.2 Project Characteristics

The project would develop PV solar energy generation and a BESS facility within a 1,849-acre footprint, comprised of up to 500 megawatts alternating current (MW ac) of PV solar and up to 500 MW ac of BESS. Power generated by the project would be collected using up to 66 kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated project substation with a 230 kv gen-tie line linking the project substation to the planned IID Liebert Switchyard, which will be connected to the San Diego Gas and Electric Imperial Valley substation via an overhead 230 kV transmission gen-tie line. Note that this gen-tie line and interconnection to the Imperial Valley substation is a part of the applicants' approved and entitled Big Rock 1 BESS project, which is expected to be constructed and operational prior to the entitlement of the proposed project.

In addition, and to avoid exposure of passing I-8 motorists to potential project-generated glare from single-axis tilt PV modules, the project development footprint would be setback from the eastbound lanes of I-8 along the northern project boundary. between approximately 1,100 feet to up to 2,000 feet, depending upon existing lot-lines on the parcels being developed. In addition to this setback, a 7-foot-tall screening fence will be erected along the norther project boundary to assist with glare mitigation.

This report considers the impacts of the PV solar arrays and their potential to generate glare on nearby sensitive receptors. The project would include other components that do not have potential for significant glare and are therefore not analyzed in this report, including:

- BESS facilities
- Internal roads
- Project substation(s)
- Access roads
- Generation tie line (gen-tie line)
- Meteorological station
- Site security, fencing, and lighting

All of the project components are located off NJK airport property; outside of navigable airspace; and outside of the Runway Protection Zone (RPZ), Runway Safety Area (RSA), Object Free Area (OFA), and Clearway as defined by the FAA (FAA 2018).

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

3 Regulations and Regulatory Requirements

3.1 Federal

U.S. Federal Aviation Administration

To understand and model glare, Dudek used FAA standards, which has approved the use of Sandia National Laboratories' Solar Glare Hazard Analysis Tool. With the Solar Glare Hazard Analysis Tool, standardized safety metrics define the anticipated glare intensity that would cause unwanted visual impacts to air traffic control towers and airplane pilots. Glare intensity is described according to potential for after-image and is illustrated on FAA's Solar Glare Ocular Hazard Plot. Low potential for after-image is referred to as "Green" glare, and potential for after-image is referred to as "Yellow" glare. "Red" glare is representative of glare conditions with potential for permanent eye damage.

The Solar Glare Hazard Analysis Tool and ForgeSolar (ForgeSolar 2019) are also able to evaluate the potential of a particular PV array to produce glare intensity, predicting when and where glare would occur from a proposed PV array at discrete observation points (e.g., from the air traffic control tower or runway approach). In instances where glare may be a concern, the tools can prescribe minor adjustments to the tilt, direction, and location of the panels to alleviate issues.

For this analysis, Dudek staff used the industry standard ForgeSolar 3-D geometric glare analysis software tool to disclose potential glare impacts associated with operation of the project. See Section 4.2.3, Geometric Glare Analysis, and Section 4.2.4, Limitations of the Geometric Analysis, for more information about the modeling parameters and limitations. Per FAA Policy 86 FR 25801–25803, the following criteria must be met for solar energy systems on airport property:

- No glare of any kind for Air Traffic Control Tower(s) at cab height

This policy only applies to proposed solar energy systems on federally obligated airport property and only those airports with control towers. NJK is not a federally obligated airport, and the project does not fall on airport property. For these reasons, this policy does not apply to the project, but was included in this report to describe the standard methodologies used to assess solar glare near operating airports.

PV glare for pilots on final landing approach is no longer a major concern for the FAA. Dudek has included the final approach paths as receptors in this analysis to comply with Department of Defense (DoD) guidance requiring a glare analysis for projects near DoD aviation operations.

U.S. Department of Defense

On June 11, 2014, the DoD issued guidance requiring the use of the Solar Glare Hazard Analysis Tool for renewable energy projects near DoD aviation operations.

- Solar renewable energy projects using the authority found in 10 U.S.C., 2922a or in 10 U.S.C., 2667 (Enhanced Use Lease) will require the Solar Glare Hazard Analysis Tool analysis for Office of the Secretary of Defense review/approval/certification.

PC ORIGINAL PKG

3.2 State

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires an analysis of aesthetic impacts when an agency or individual proposes an activity that may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. In Appendix G, Environmental Checklist Form, the 2021 CEQA Statute and Guidelines contains the following impact threshold related to glare:

- Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Other than the CEQA Guidelines, there are no state regulations pertaining to potential glare effects associated with the operation of solar facilities.

3.3 Local

Imperial County General Plan

The Imperial County General Plan includes policies aimed at protecting and conserving the County's scenic resources and open spaces. The following goal and policy of the Conservation and Open Space Element of the General Plan (County of Imperial 2016) are relevant to aesthetics and glare:

- **Goal 7:** The aesthetic character of the region shall be protected and enhanced to provide a pleasing environment for residential, commercial recreational, and tourist activity.
- **Objective 7.1:** Encourage the preservation and enhancement of the natural beauty of the desert and mountain landscape.

PC ORIGINAL PKG

4 Glare Impacts

4.1 General Concepts of Solar Technologies and Glare

The project would involve the installation of PV panels to convert the sun's light into electrical energy. To increase the efficiency of this conversion process, designers of solar systems strive to maximize the amount of solar energy that can be absorbed by solar cells. This work towards increasing efficiency has the added benefit of reducing the amount of light that could potentially reflect off the solar panels. Reflected light can cause glint (a quick reflection) and glare (reflection that lasts for a longer duration), which can create hazards for air-traffic-control personnel, motorists, and other potential receptors. For the purpose of this report, any light reflected off of the solar panels or any other reflective surface is referred to as "glare."

There are several key design considerations that can reduce glare from solar panels. One of the main factors of reflectance is the position of the PV modules relative to the sun. A panel that has been designed to absorb 90% of the sunlight that directly meets the face of the panels (perpendicular to the sun's rays) may have that absorption significantly reduced if the panel is not directly facing the sun (ForgeSolar 2019). Because the sun tracks across the sky over the course of a day, fixed-mount stationary panels can only maximize its efficiency for a few minutes out of the day when the sunlight is directly perpendicular to the face of the panel. To maximize the amount of solar energy generated from the solar array, some PV systems employ tracking mechanisms that adjust to track the sun's trajectory as it crosses the sky. Figure 2, Comparison of Photovoltaic Tracking Systems, provides an illustrative example of a fixed-mount panel system, single-axis tracking system, and dual-axis tracking system.

In addition to panel orientation, the materials used in the panel construction play an important role in reducing glare and maximizing efficiency. For example. different glass textures can be used to absorb light beams into the solar array, and anti-reflective coatings can be added to the glass to further reduce reflectivity at high-incidence angles (the angle at which the light hits the solar array).

The project is anticipated to employ a single-axis tracking system, as illustrated by the middle panel system in Figure 2. The axis of rotation would be aligned north–south with a maximum tracking angle of 60°. The surface of the panels would be constructed out of light textured glass and would include an anti-reflective coating, as further described in Section 4.2.3.

Glare can result in visual hazards and temporary loss of vision (also known as flash blindness). The hazard level of glare depends on the ocular impact to the observer. Generally, an ocular impact is calculated as a function of the size of the glare spot and the intensity of the light. For the purpose of this report, an ocular impact is classified in one of three categories, as follows:

- **Green:** Low potential for the glare to cause an after-image
- **Yellow:** Potential to cause a temporary after-image
- **Red:** Potential to cause retinal burn and permanent eye damage

PC ORIGINAL PKG

4.2 Methodology

In order to determine where and when glare might occur as a result of development of the project, Dudek staff utilized a multi-step process that included a combination of spatial analysis, 3D geometric modeling, and aerial imagery interpolation. A typical 5-mile study radius was used because that distance approximates the maximum distance that an observer standing at ground-level could see the proposed photovoltaic panels before the curvature of the Earth would intervene (assuming a perfect sphere, no built environmental obstruction, and flat topography). Because of the project's vicinity to NJK (located approximately 3 miles to the northeast), the presence of I-8, and potential dwellings with direct view of the project, the 5-mile-radius study area was determined to be adequate for this analysis, as shown on Figure 3, Project Layout and Receptor Locations.

Dudek performed a visibility analysis on the surrounding terrain to predict where the project would be visible at any location within the study area. Using publicly available terrain data from the U.S. Geological Survey, Dudek staff created a detailed elevation model that covered the 5-mile study area. Results of the visibility analysis can be seen on Figure 3, which illustrates that much of the surrounding land uses will have a potential view of less than 20% of the project PV array modules. This estimate should be considered worst-case, as the visibility study does not consider aboveground features such as vegetation or structures. For information about technical limitations of the visibility analysis, please refer to section 4.2.4, Limitations of the Geometric Analysis.

Based on the visibility analysis, Dudek determined the location of potential receptors within the study area. All runway approach path receptors associated with NJK were included in this analysis regardless of visibility or distance. Areas within the Glare Study Area that were not predicted to have a direct line of site view of the project were not included in the glare analysis.

A geometric glare analysis was then conducted for the identified potential receptors to determine where and when glare might be encountered. Upon completion of the geometric analysis, Dudek reviewed the results for potential glare hazards and provided recommendations.

For compatibility with the modeling software, the project's PV arrays (shown on Figure 3) had to be grouped together to create 39 analysis groups, labeled "PV01" through "PV39." These analysis groups were analyzed in batches of up to 20, resulting in two separate geometric analyses referred to in this report as Analysis Batches A and B. The two analysis batches shared the same project parameters and potential receptors. The analysis batches are shown on Figure 3, and the detailed modeling results are presented according to these batches in Appendix A.

4.2.1 Airport Receptor Identification

Each modeled airport receptor type shown in Figure 3 is described in the following list, and the receptor's precise modeling parameters are provided in Appendix A:

- Air Traffic Control Tower Receptor – There is currently one operating air traffic control tower at NJK. The control tower's location was mapped using aerial photography, and its cab elevation was estimated to be at 90 feet above ground level. This height estimation was performed using triangulation of shadow lengths from aerial imagery with known fly dates.
- Airport Flight Approach Observation Route – Four flight approach observation routes were selected to simulate an aircraft following a straight-line approach toward each runway at the airport. Flight approach

PC ORIGINAL PKG

routes use glide slopes, elevation parameters, and cockpit visibility angles. Modeled flight approaches extended out 2 miles from each runway threshold.

Table 1 shows the flight approach parameters used for Runways 8/26, and 12/30 at NJK. The locations of the flight approach paths are depicted on Figure 3.

Table 1. Flight Path Receptor Parameters

Runway Name	Threshold Crossing Height	Glide Slope	Direction (True Course)
Approach 8 (NJK08)	50 feet	3.0°	90.0°
Approach 12 (NJK12)	50 feet	3.0°	135.0°
Approach 26 (NJK26)	55 feet	3.0°	270.0°
Approach 30 (NJK30)	55 feet	3.0°	315.0°

4.2.2 Dwelling and Route Receptor Identification

Using the visibility analysis results in conjunction with aerial imagery, road centerline data, and land use data, Dudek staff selected potential receptors based on their distance from the project, orientation to the project, and the percentage of the project visible from the receptor's location. To avoid false positives in the glare results, only receptors that were predicted to be able to see the project from their location were selected for the analysis. Receptors to the north, west, and east of the project were prioritized because, in the northern hemisphere, these are the locations most likely to receive glare from a single-axis tracking system on flat terrain. Figure 3 shows the locations of analyzed receptors as well as the modeled array locations. Each modeled receptor type shown on Figure 3 is described below and the receptor's precise modeling parameters can be found in Appendix A:

- Observation Point (OP) – Analysis of the project included 19 existing potentially sensitive structures that were located adjacent to the project or more distant dwellings within direct line of sight of the project. Because modeling every dwelling within the 5-mile study area would not be feasible, Dudek staff selected representative dwellings from neighborhoods within the study area, making sure to include a variety of directions and distances from the project. The eye-level height of all point observers was set to 5.5 feet. Descriptions of each observation point can be found in Table 2, Observation Point Descriptions.

- Highway/Road Observation Route – Analysis of the project site included a combination of 11 developed road and highway observation routes, which were selected based on visibility, sensitivity, distance to the project site, and level of traffic expected on the roadways. To keep the number of receptor routes within the allowed limit by the geometric modeling software, Dudek staff selected routes that would be representative of each road type and road direction of travel within view of the project. Per the American Association of State Highway and Transportation Officials (AASHTO), the eye-level height of observers on the highway/road observation routes was set to 7.6 feet, the average height for observers in large trucks (AASHTO 2001). Descriptions of each route can be found in Table 3, Highway/Road Observation Route Descriptions.

PC ORIGINAL PKG

Table 2. Observation Point Descriptions

Observation Point ID	Description
OP 1	Dwelling at 1802 Jeffery Road, El Centro
OP 2	2599-2593 W. Hardy Road, El Centro
OP 3	Dwelling at 1301 Hyde Road, Ocotillo
OP 4	Dwelling at 2358-2598 W. Vaughn Road, El Centro
OP 5	Dwelling Adjacent to Canal, Ocotillo
OP 6	Dwelling at 1651 Westside Road, El Centro
OP 7	Westside Elementary Schoolyard (vacant), El Centro
OP 8	Westside Elementary School (vacant), El Centro
OP 9	Dwelling at 2250 W. Vaughn Road, El Centro
OP 10	Representative Dwelling at 2213 W. Evan Hewes Highway, Imperial
OP 11	Dwelling at 1600 Jessup Road, El Centro
OP 12	Potential Dwelling at 1704 Jessup Road, El Centro
OP 13	Representative Dwelling at 1985 Highway 80, Seeley
OP 14	Potential Dwelling at 1706 Derrick Road, El Centro
OP 15	Rio Bend Golf Course, El Centro
OP 16	Potential Dwelling at 1859 W. Evan Hewes Highway, Seeley
OP 17	Representative Dwelling on Mountain View, Rio Bend RV & Golf Resort, El Centro
OP 18	Representative Dwelling on Willow Lane, Storm's Crossing Mobile Estates, El Centro
OP 19	Glen Haskell Sports Complex, Seeley

Table 3. Highway/Road Observation Route Descriptions

Route ID	Description
Route 1	Derrick Road A
Route 2	Derrick Road B
Route 3	*No route was analyzed using this ID.*
Route 4	Drew Road
Route 5	Interstate 8 Eastbound A
Route 6	Interstate 8 Eastbound B
Route 7	Interstate 8 Westbound B
Route 8	Jeffery Road and Hyde Road
Route 9	W. Vaughn Road
Route 10	Westside Road A
Route 11	Westside Road B
Route 12	Westside Road C

PC ORIGINAL PKG

4.2.3 Geometric Glare Analysis

Dudek staff used an industry standard 3-D geometric glare analysis software tool developed by Sandia National Laboratories and licensed by ForgeSolar. Though initially developed for solar projects on airports, this software has been validated as effective for projects of this type. By inputting the solar panel locations and characteristics, and the locations and elevations of the receptors, the software can simulate the sun's progression across the sky over the course of a year and model the potential glare caused by the proposed solar arrays. If glare is detected, the software can quantify the level of ocular impact hazard (green, yellow, or red), and pinpoint the exact time of year the glare would occur. This analysis is automatically performed for every minute of the calendar year, for each module array analysis group, and for each potential receptor defined in the model.

Dudek staff consulted the project applicant to obtain the precise characteristics of the proposed solar array system. Data gathered included the physical location, orientation, build material, tilt angle, and tracking technology. All of these characteristics were entered into the modeling software, as provided in Table 4.

Table 4. Solar Array Model Inputs

Solar Array Characteristics	Proposed Project Configuration
Tracking method	Single-axis
Module surface material	Light textured glass with anti-reflective coating
Tracking axis orientation	North–south
Maximum tracking angle	60°
Resting angle (when sun leaves maximum tracking angle)	0°
Backtracking method	Shade

As described in Table 4, the project is anticipated to utilize a single-axis tracking system. This tracking system would be oriented running north–south with the panel faces rotating from east to west. The system would be able to track the sun's progression across the sky, within the system's 120° range of motion (60° to the east and 60° to the west). When the sun is not within the range of motion, the panels would backtrack and rest at 0° (flat).

To reflect the planned fence screening along the northern boundary of the project, Dudek staff used ForgeSolar's obstruction features that can model obstructions such as trees or fences. In total, six fences with upper edge heights of 7 feet were modeled; their precise locations and component characteristics can be found in Appendix A.

4.2.4 Limitations of the Geometric Analysis

The glare modeling software used in this analysis does not consider existing vegetation, structures, or terrain that might obscure the view of the panels from the receptor locations. Though the visibility analysis was performed to help mitigate this software limitation, there is still a possibility that glare could be predicted at receptors that are unable to clearly see the panels, which would exaggerate the level of predicted glare discussed in Section 4.3, Geometric Analysis Results.

The following features could partially conceal the solar panels from the receptors:

- Buildings and other structures between the receptors and the project site
- Trees, shrubs and other vegetation between the receptors and the project site
- Atmospheric conditions such as clouds, fog, dust, or haze

PC ORIGINAL PKG

4.2.5 Baseline Glare Conditions

There are currently several sources of potentially impactful glare in the vicinity of the project, which this analysis will refer to as "baseline conditions." While the level of glare caused by these sources was not assessed in this analysis, the potential glare caused by the project should be considered in the context of the existing baseline conditions. The following list describes existing humanmade features in the vicinity of the project that could create potential for hazardous glare (also, see Figure 4 for their locations):

- **Existing Utility-Scale Photovoltaic Systems:** Figure 4, Existing Solar Projects Within Study Area, shows the locations of several existing utility-scale solar facilities within the study area. Like the project, these facilities have the potential to produce glare in the "Green" or "Yellow" ocular impact categories.

4.3 Glare Analysis Results

This glare analysis was conducted per the FAA's recommended procedures described in the Technical Guidance for Evaluating Selected Solar Technologies on Airports (FAA 2018), and the geometric glare modeling software used adheres to FAA policy regarding solar energy system projects on federally obligated airports (86 FR 25801–25803). This policy does not apply to the project but was included in this reporting to describe the standard methodologies used to assess solar glare near operating airports. Specifically, the glare analysis and software quantify the level of ocular impact hazard (reported as green or yellow glare) and pinpoints the exact time of year the glare would occur.

4.3.1 Results for Airport Receptors

Dudek determined that, according to the results of the geometric analysis, the project would likely not result in any glare in the "Green" or "Yellow" ocular hazard levels to any of the receptors associated with airport operations at NJK. The results for airport receptors can be found in Table 5,

Table 5. Green and Yellow Glare Results for Airport Receptors

Airport Receptor	Daily Average Minutes of Green or Yellow Glare	Daily Maximum Minutes of Green or Yellow Glare	Days Per Year With Green or Yellow Glare
Approach 8 (NJK08)	0	0	0
Approach 12 (NJK12)	0	0	0
Approach 26 (NJK26)	0	0	0
Approach 30 (NJK30)	0	0	0
Air Traffic Control Tower	0	0	0

4.3.2 Results for Point and Route Receptors

The results of the analysis indicate that, under the proposed project parameters described in Section 4.1, most of the point and route receptors analyzed will receive some "green" glare (low potential for after image) and some will receive "yellow" glare (potential for after image). The summarized results can be found in Table 6, Green Glare Results for Point and Route Receptors, and Table 7, Yellow Glare Results for Point and Route Receptors, and the detailed modeling output can be found in Appendix A.

PC ORIGINAL PKG

Interstate 8 Receptors

According to the analysis results, the eastbound and westbound lanes of I-8 (Route IDs 5, 6, and 7) will receive a small duration of "green" glare and no "yellow" glare from the proposed PV arrays. This "green" glare will occur around 6 minutes per day, on average, during the fall and winter months, and only when the sun is low in the sky (in the early mornings and early evenings). There are currently no thresholds for acceptable levels of glare towards road receptors, but because this low-hazard glare is predicted to occur at a time when there will be considerable baseline levels of glare from the rising or setting sun, it is not anticipated that the project will have a significant impact on motorists traveling on I-8.

Dwelling Receptors

A total of 13 of the 19 dwellings analyzed are predicted to receive some amount of "green" glare (low potential for after image), with 2 of the dwellings predicted to also receive "yellow" glare (potential for after image). The average daily duration of glare is predicted to occur for less than 7 minutes, with maximum daily durations less than 14 minutes. All the glare predicted towards dwelling receptors is anticipated to occur when the sun is around 1° above the horizon, in the very early mornings and very early evenings. There are currently no thresholds for acceptable levels of glare towards dwelling receptors, but because the glare predicted towards these receptors occurs for less than 15 minutes per day and is coincident with the glare from the rising and setting sun, it is not anticipated that the project will have a significant impact on nearby dwelling receptors.

Other Route Receptors

Of the non-interstate routes analyzed, four were predicted to receive glare in the "green" (low potential for after image) or "yellow" (potential for after image) ocular impact categories. These routes are identified in this report as Routes 8, 9, 11, and 12. As shown on Figure 3, all four of these routes are located south of I-8 and west of New River. After the completion of the project, all the affected portions of these routes will likely be used primarily as access roads for the operation and maintenance of the various solar facilities in the area.

The results of the analysis predict that these four routes will receive, on average, between 4 and 12 daily minutes of "green" glare, and between 1 and 16 daily minutes of "yellow" glare. This glare could occur on most days of the year and would be limited to times when the sun is less than 1° above the horizon, in the early mornings and early evenings. During these times, the glare will be aligned coincident with the glare from the rising/setting sun, which is a significantly more intense source of glare. Because of this and the fact that these routes will be traveled at relatively low speeds by vehicles associated with the operation and maintenance of the solar facilities, it is not anticipated that the project will have a significant effect on these route receptors.

Table 6. Green Glare Results for Point and Route Receptors

Point and Route Receptors	Daily Average Minutes of Green Glare	Daily Maximum Minutes of Green Glare	Days Per Year With Green Glare
OP 1	0	0	0
OP 2	3	5	51
OP 3	4	7	88
OP 4	4	8	177
OP 5	6	12	86
OP 6	1	3	37

PC ORIGINAL PKG

Table 6. Green Glare Results for Point and Route Receptors

Point and Route Receptors	Daily Average Minutes of Green Glare	Daily Maximum Minutes of Green Glare	Days Per Year With Green Glare
OP 7	6	11	278
OP 8	6	12	276
OP 9	7	14	276
OP 10	0	0	0
OP 11	6	12	290
OP 12	0	0	0
OP 13	0	0	0
OP 14	1	2	19
OP 15	5	5	43
OP 16	0	0	0
OP 17	4	11	197
OP 18	4	6	83
Route 1	0	0	0
Route 2	0	0	0
Route 3	*No route was analyzed using this ID.*		
Route 4	0	0	0
Route 5	6	9	177
Route 6	5	6	169
Route 7	3	6	102
Route 8	4	7	352
Route 9	12	19	366*
Route 10	0	0	0
Route 11	5	9	243
Route 12	5	10	363

Note: * Analysis included an extra day due to 2024 being a leap year.

Table 7. Yellow Glare Results for Point and Route Receptors

Point and Route Receptors	Daily Average Minutes of Yellow Glare	Daily Maximum Minutes of Yellow Glare	Days Per Year With Yellow Glare
OP 1	0	0	0
OP 2	0	0	0
OP 3	0	0	0
OP 4	2	3	21
OP 5	0	0	22
OP 6	0	0	0
OP 7	0	0	0
OP 8	0	0	0
OP 9	0	0	0
OP 10	0	0	0
OP 11	2	3	92

PC ORIGINAL PKG

Table 7. Yellow Glare Results for Point and Route Receptors

Point and Route Receptors	Daily Average Minutes of Yellow Glare	Daily Maximum Minutes of Yellow Glare	Days Per Year With Yellow Glare
OP 12	0	0	0
OP 13	0	0	0
OP 14	0	0	0
OP 15	0	0	0
OP 16	0	0	0
OP 17	0	0	0
OP 18	0	0	0
Route 1	0	0	0
Route 2	0	0	0
Route 3	*No route was analyzed using this ID.*		
Route 4	0	0	0
Route 5	0	0	0
Route 6	0	0	0
Route 7	0	0	0
Route 8	1	3	64
Route 9	16	33	350
Route 10	0	0	0
Route 11	9	14	247
Route 12	4	6	366*

Note: * Analysis included an extra day due to 2024 being a leap year.

4.3.3 Comparison of Results to Other Sources of Glare

Nearly all the glare predicted towards receptors will occur when the sun is less than 1° above the horizon, during sunrise and sunset. From the observer's point of view, this glare will be aligned with the setting/rising sun, similar to what would be seen over a lake or ocean during these times, but less intense (Riley and Olson 2011) due to the implementation of antireflective coatings on the project's PV modules.

The results indicate that the glare produced by the project will not result in more ocular impact than a smooth water body under conservative assumptions (Riley and Olson 2011) and will result in far less impact than the hazards posed due to viewing the unfiltered sun (ForgeSolar 2019).

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

5 References

86 FR 25801–25803. Notification of Policy: Federal Aviation Administration Policy: Review of Solar Energy System Projects on Federally-Obligated Airports. May 11, 2021.

AASHTO (American Association of State Highway and Transportation Officials). 2001. *A Policy on Geometric Design of Highways and Streets*4th ed. Washington, D.C.: AASHTO.

County of Imperial. 2016. *Imperial County Conservation and Open Space Element.* Prepared by County of Imperial Planning and Development Services Department. Adopted March 8, 2016. Accessed January 9, 2024. https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf.

FAA (Federal Aviation Administration). 2018. *Technical Guidance for Evaluating Selected Solar Technologies on Airports.* Version 1.1. Washington, DC: FAA, Office of Airports, Office of Airport Planning and Programming. April 2018.

ForgeSolar (ForgeSolar: PV Planning & Glare Analysis). 2019. "ForgeSolar Help." https://www.forgesolar.com/help/.

Riley, E., and S. Olson. 2011. "A Study of the Hazardous Glare Potential to Aviators from Utility-Scale Flat-Plate Photovoltaic Systems." *ISRN Renewable Energy* 2011, no. 651857. December 11, 2011. doi:10.5402/2011/651857.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

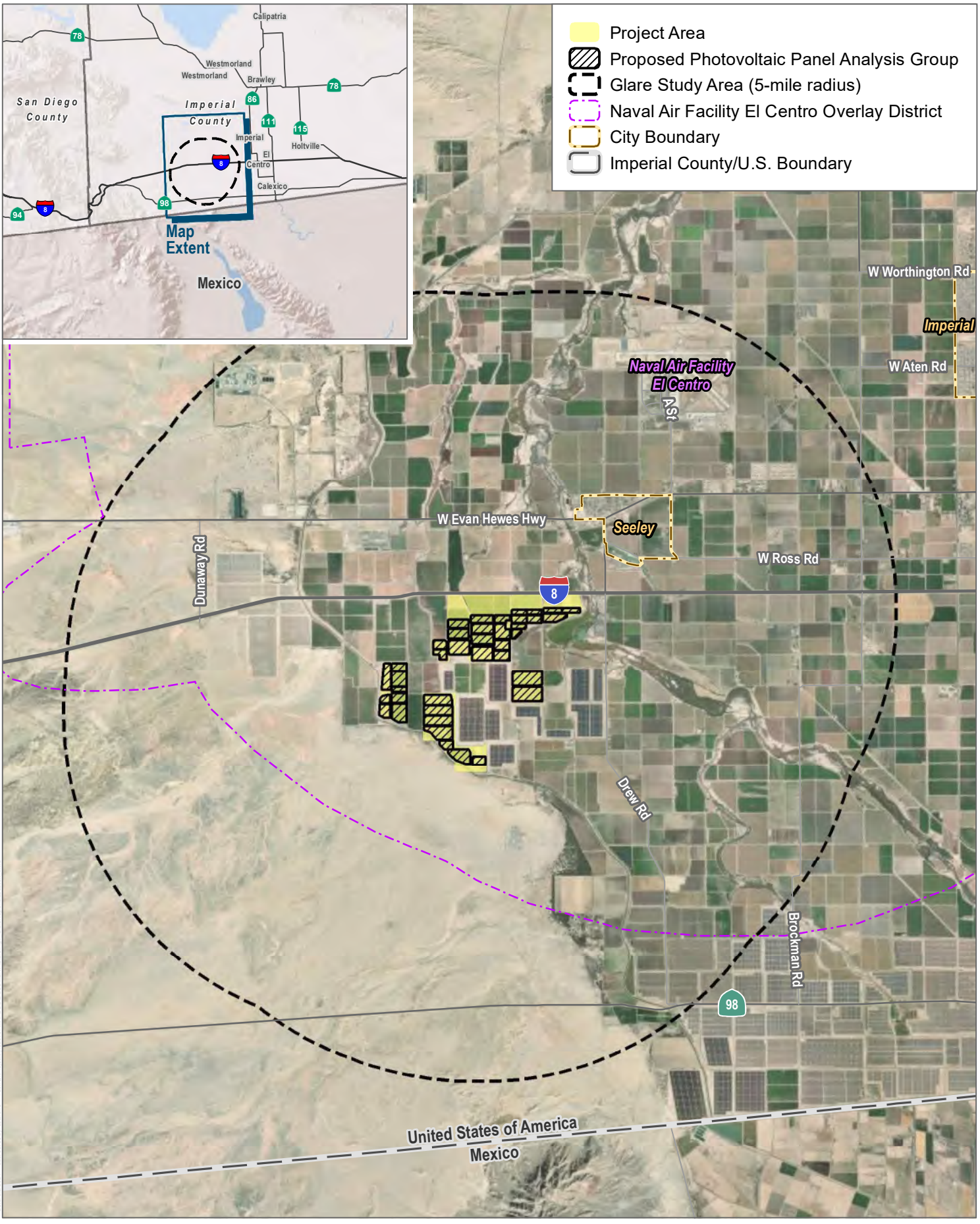
6 Document Preparers

This Glare Analysis Report was prepared by Christopher Starbird.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Esri 2020

FIGURE 1

Project Location

Big Rock 2 Energy Project Glare Analysis Report

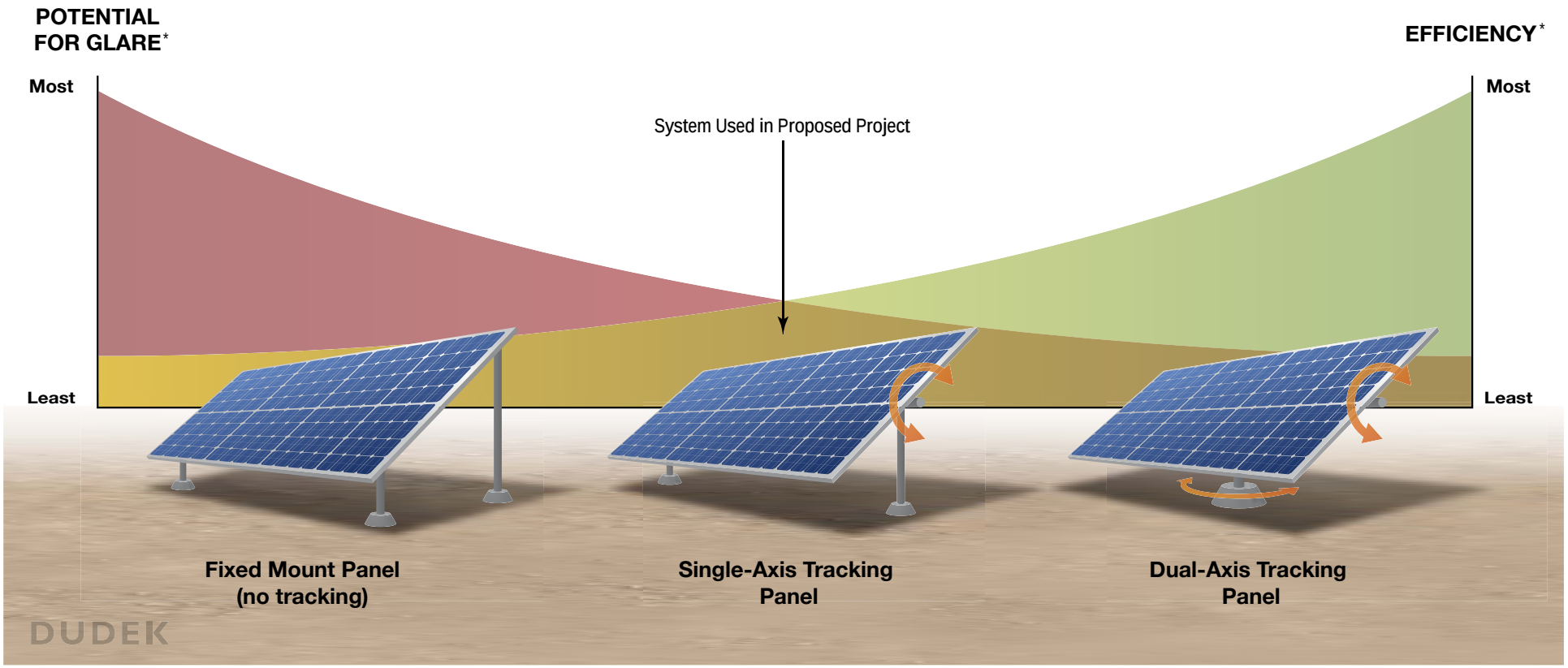
DUDEK

0 1 2 Miles

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



** Efficiency and glare relationships represented in this graphic have been exaggerated and are for illustrative purposes only.*

SOURCE: DUDEK 2023

FIGURE 2

Comparison of Photovoltaic Tracking Systems

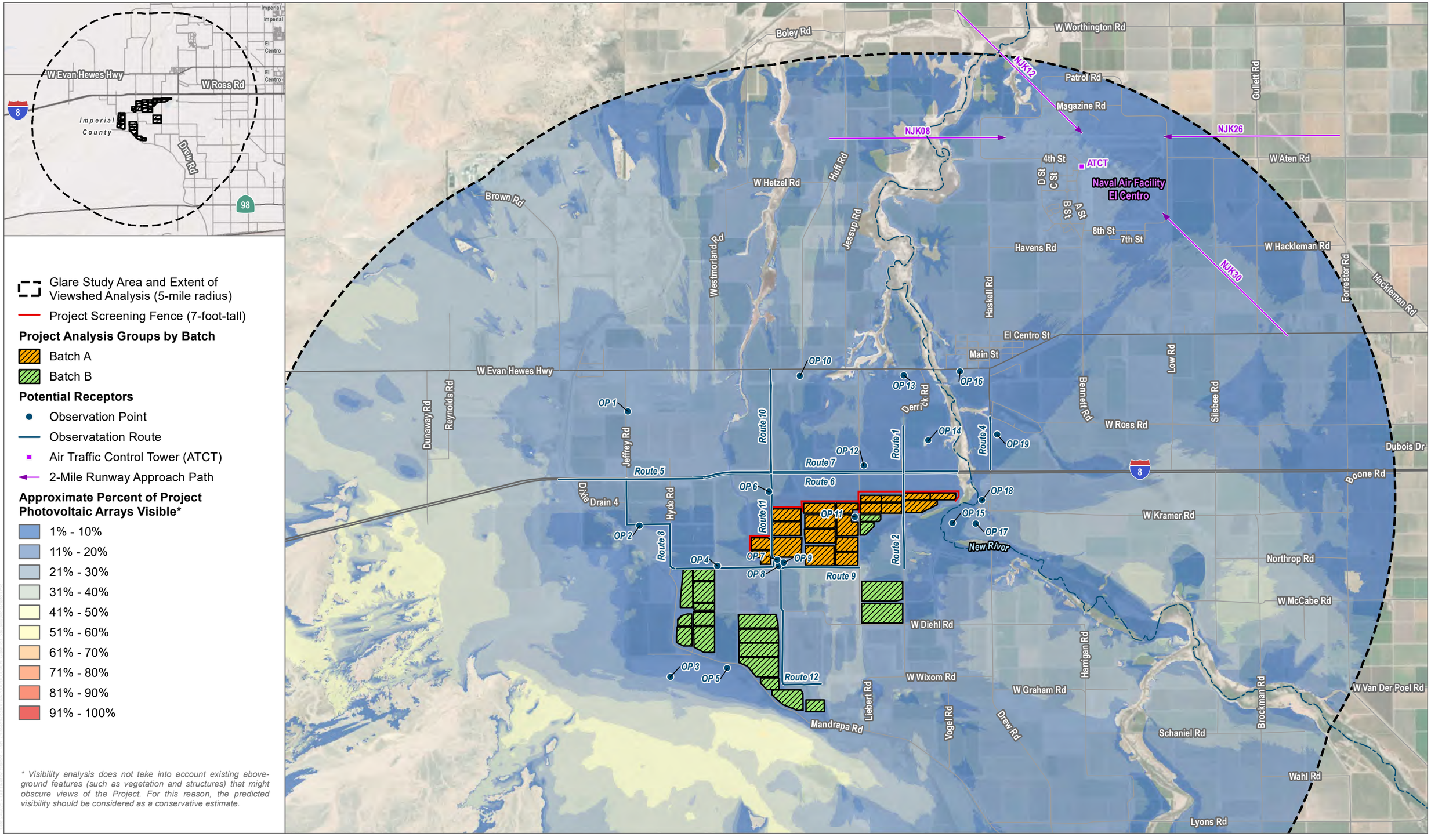
Big Rock 2 Energy Project Glare Analysis Report

DUDEK

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Esri Imagery (Accessed 2023)

DUDEK

0 0.7 1.4 Miles

FIGURE 3

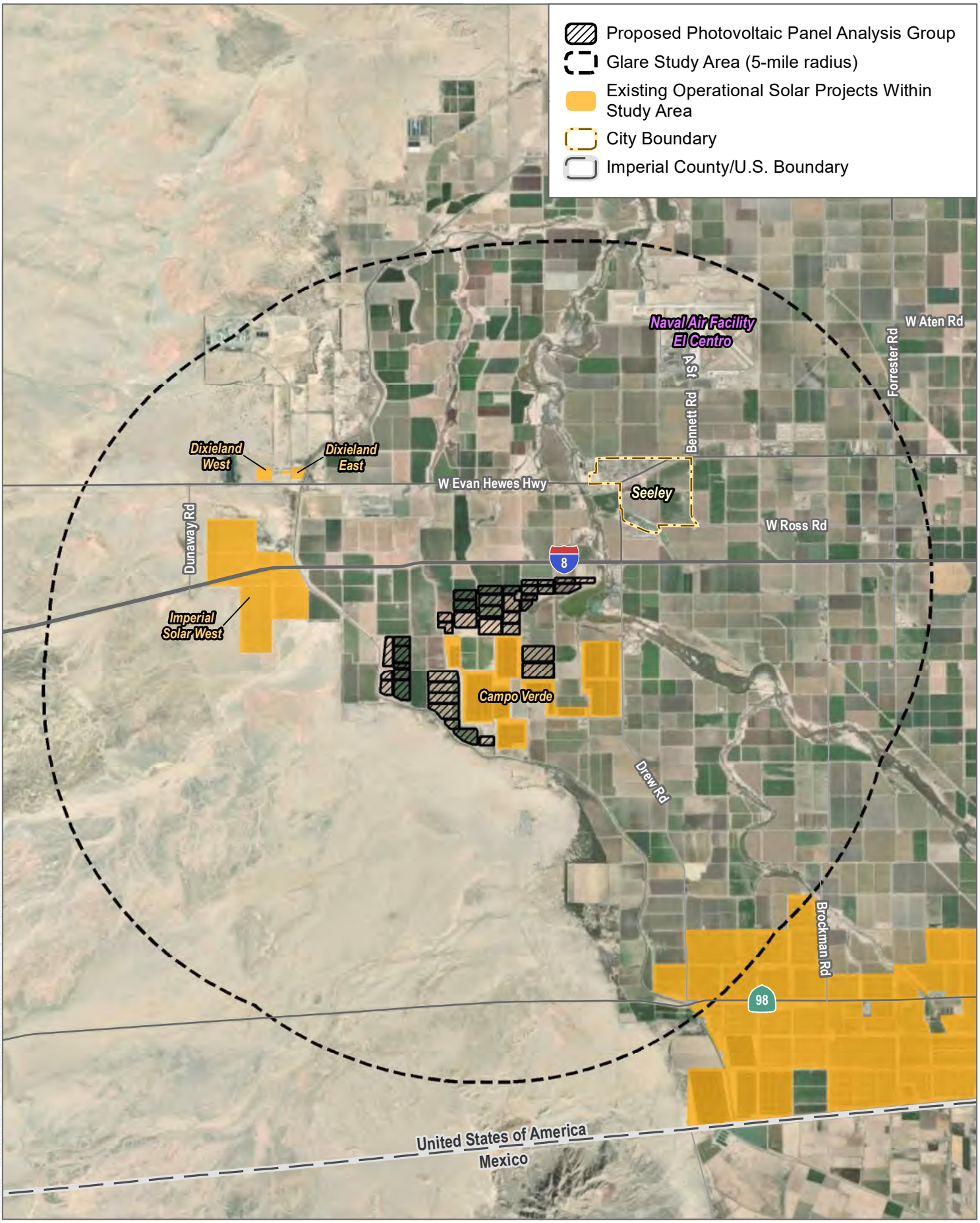
Project Layout and Receptor Locations

Big Rock 2 Energy Project Glare Analysis Report

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Esri 2020

FIGURE 4

Existing Solar Projects Within Study Area

Big Rock 2 Energy Project Glare Analysis Report

DUDEK

0 1 2 Miles

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix A
Detailed Modeling Results

PC ORIGINAL PKG

FORGESOLAR GLARE ANALYSIS

Project: **Big Rock Solar Nov 2023**
Site configuration: **Big Rock Solar May 2024 Group A**

Created 02 May, 2024
Updated 02 May, 2024
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 100 MW to 1 GW
Site ID 118221.18188

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

PC ORIGINAL PKG

Summary of Results

Glare with potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV01	SA tracking	SA tracking	1,219	20.3	0	0.0	-
PV02	SA tracking	SA tracking	861	14.3	0	0.0	-
PV03	SA tracking	SA tracking	360	6.0	0	0.0	-
PV04	SA tracking	SA tracking	359	6.0	0	0.0	-
PV05	SA tracking	SA tracking	879	14.7	0	0.0	-
PV06	SA tracking	SA tracking	1,979	33.0	135	2.2	-
PV07	SA tracking	SA tracking	303	5.0	0	0.0	-
PV08	SA tracking	SA tracking	839	14.0	0	0.0	-
PV09	SA tracking	SA tracking	604	10.1	1	0.0	-
PV10	SA tracking	SA tracking	1,040	17.3	0	0.0	-
PV11	SA tracking	SA tracking	258	4.3	0	0.0	-
PV12	SA tracking	SA tracking	531	8.8	0	0.0	-
PV13	SA tracking	SA tracking	454	7.6	0	0.0	-
PV14	SA tracking	SA tracking	1,621	27.0	250	4.2	-
PV15	SA tracking	SA tracking	3,458	57.6	2,314	38.6	-
PV16	SA tracking	SA tracking	2,074	34.6	922	15.4	-
PV17	SA tracking	SA tracking	377	6.3	0	0.0	-
PV18	SA tracking	SA tracking	3,058	51.0	3,204	53.4	-
PV19	SA tracking	SA tracking	897	14.9	120	2.0	-
PV20	SA tracking	SA tracking	502	8.4	1,515	25.2	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0

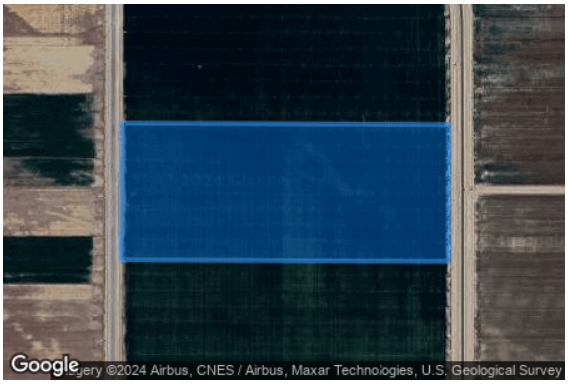
PC ORIGINAL PKG

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route04	0	0.0	0	0.0
Route05	2,003	33.4	0	0.0
Route06	2,031	33.9	0	0.0
Route07	474	7.9	0	0.0
Route08	1,399	23.3	0	0.0
Route09	6,314	105.2	5,811	96.8
Route10	0	0.0	0	0.0
Route11	758	12.6	2,514	41.9
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	149	2.5	0	0.0
OP 3	0	0.0	0	0.0
OP 4	313	5.2	0	0.0
OP 5	0	0.0	0	0.0
OP 6	55	0.9	0	0.0
OP 7	1,755	29.2	0	0.0
OP 8	1,342	22.4	0	0.0
OP 9	2,336	38.9	0	0.0
OP 10	0	0.0	0	0.0
OP 11	1,946	32.4	136	2.3
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	24	0.4	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	671	11.2	0	0.0
OP 18	103	1.7	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

Component Data

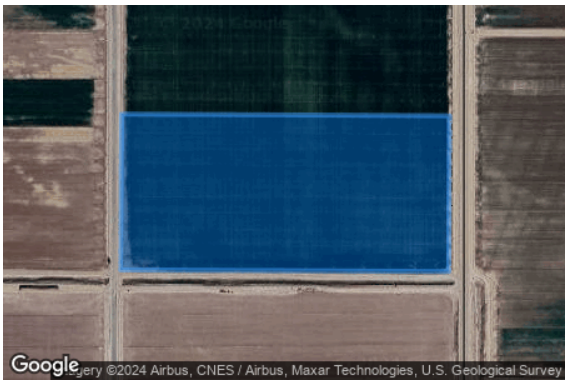
PV Arrays

Name: PV01
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.768052	-115.733092	-39.53	5.00	-34.53
2	32.768029	-115.727456	-37.21	5.00	-32.21
3	32.766058	-115.727468	-36.08	5.00	-31.08
4	32.766082	-115.733103	-40.90	5.00	-35.90

Name: PV02
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.765918	-115.733104	-40.95	5.00	-35.95
2	32.765894	-115.727469	-37.86	5.00	-32.86
3	32.763645	-115.727482	-37.02	5.00	-32.02
4	32.763669	-115.733117	-39.82	5.00	-34.82

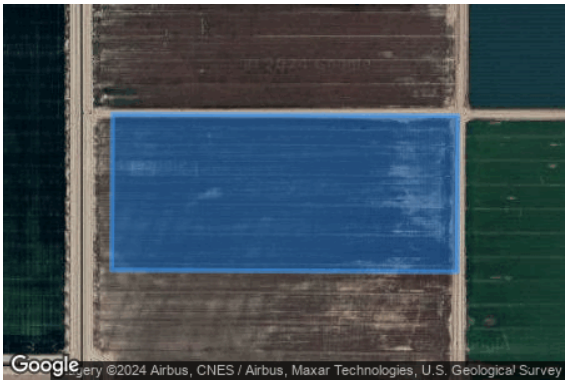
PC ORIGINAL PKG

Name: PV03
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



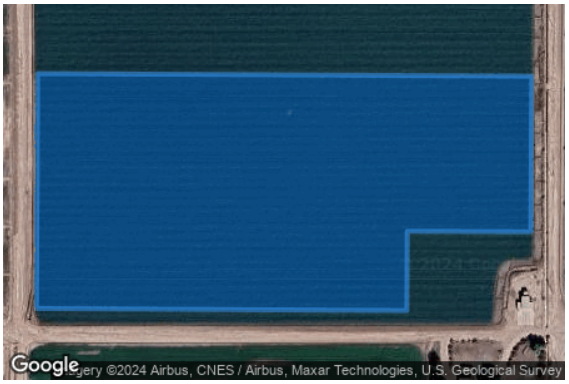
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.768981	-115.726917	-38.81	5.00	-33.81
2	32.768955	-115.720826	-42.15	5.00	-37.15
3	32.767263	-115.720837	-41.55	5.00	-36.55
4	32.767289	-115.726927	-37.02	5.00	-32.02

Name: PV04
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.767082	-115.726694	-37.28	5.00	-32.28
2	32.767057	-115.720755	-41.22	5.00	-36.22
3	32.764808	-115.720769	-40.83	5.00	-35.83
4	32.764833	-115.726707	-37.93	5.00	-32.93

Name: PV05
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



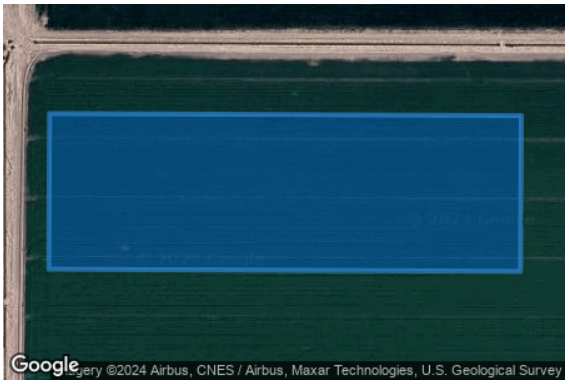
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.768953	-115.720547	-40.17	5.00	-35.17
2	32.768935	-115.716303	-36.48	5.00	-31.48
3	32.767814	-115.716310	-38.25	5.00	-33.25
4	32.767819	-115.717371	-38.50	5.00	-33.50
5	32.767248	-115.717375	-38.11	5.00	-33.11
6	32.767262	-115.720558	-41.50	5.00	-36.50

Name: PV06
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



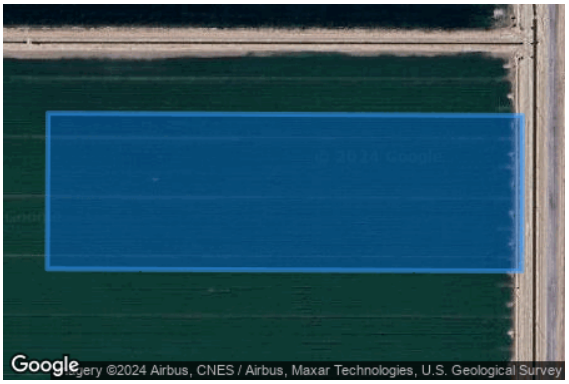
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.767056	-115.720476	-40.27	5.00	-35.27
2	32.767043	-115.717594	-37.00	5.00	-32.00
3	32.765809	-115.717601	-38.84	5.00	-33.84
4	32.765804	-115.716312	-37.73	5.00	-32.73
5	32.763589	-115.716326	-37.85	5.00	-32.85
6	32.763572	-115.720497	-39.30	5.00	-34.30

Name: PV07
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



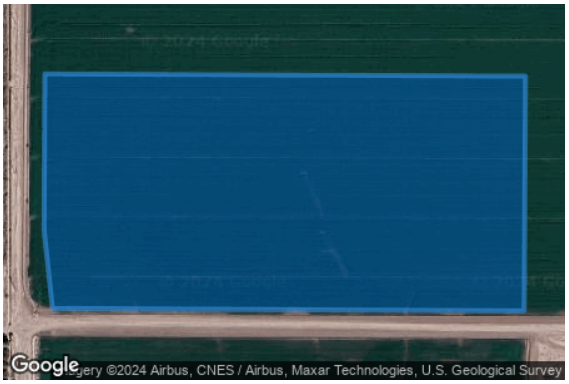
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.769082	-115.711742	-36.09	5.00	-31.09
2	32.769097	-115.715796	-36.04	5.00	-31.04
3	32.770218	-115.715789	-36.84	5.00	-31.84
4	32.770202	-115.711735	-36.75	5.00	-31.75

Name: PV08
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.769082	-115.711742	-36.09	5.00	-31.09
2	32.770202	-115.711735	-36.75	5.00	-31.75
3	32.770186	-115.707658	-33.84	5.00	-28.84
4	32.769066	-115.707665	-33.38	5.00	-28.38

Name: PV09
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.767227	-115.711753	-35.65	5.00	-30.65
2	32.767245	-115.715807	-38.23	5.00	-33.23
3	32.767813	-115.715879	-37.72	5.00	-32.72
4	32.768933	-115.715872	-36.86	5.00	-31.86
5	32.768917	-115.711743	-36.01	5.00	-31.01

Name: PV10
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.767227	-115.711753	-35.65	5.00	-30.65
2	32.768917	-115.711743	-36.01	5.00	-31.01
3	32.768902	-115.707742	-34.45	5.00	-29.45
4	32.767210	-115.707752	-33.81	5.00	-28.81

Name: PV11
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.770562	-115.702224	-44.35	5.00	-39.35
2	32.769442	-115.702231	-45.26	5.00	-40.26
3	32.769464	-115.707274	-33.52	5.00	-28.52
4	32.770585	-115.707241	-33.60	5.00	-28.60

Name: PV12
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



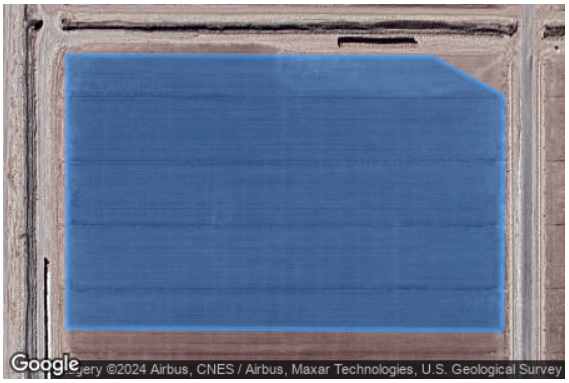
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.769442	-115.702231	-45.26	5.00	-40.26
2	32.770562	-115.702224	-44.35	5.00	-39.35
3	32.770540	-115.697207	-39.71	5.00	-34.71
4	32.769698	-115.697212	-40.26	5.00	-35.26
5	32.769420	-115.697466	-39.58	5.00	-34.58

Name: PV13
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



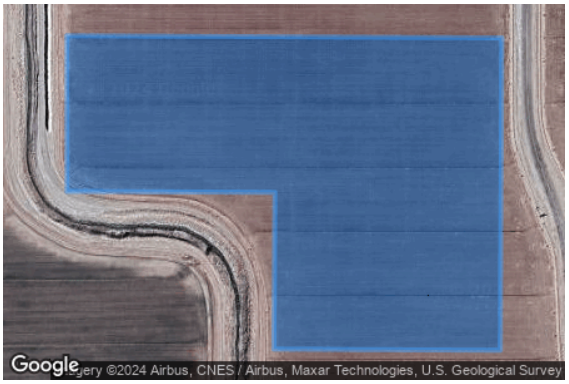
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.769271	-115.700855	-50.60	5.00	-45.60
2	32.768592	-115.700859	-54.98	5.00	-49.98
3	32.767314	-115.703924	-35.29	5.00	-30.29
4	32.767329	-115.707337	-33.50	5.00	-28.50
5	32.769300	-115.707279	-33.43	5.00	-28.43

Name: PV14
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.761343	-115.737183	-42.67	5.00	-37.67
2	32.763314	-115.737184	-41.79	5.00	-36.79
3	32.763301	-115.734041	-38.62	5.00	-33.62
4	32.763019	-115.733436	-38.75	5.00	-33.75
5	32.761328	-115.733446	-39.00	5.00	-34.00

Name: PV15
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.758922	-115.735404	-38.49	5.00	-33.49
2	32.760051	-115.735397	-38.61	5.00	-33.61
3	32.760058	-115.737182	-38.71	5.00	-33.71
4	32.761179	-115.737183	-41.71	5.00	-36.71
5	32.761163	-115.733447	-39.10	5.00	-34.10
6	32.758914	-115.733460	-36.79	5.00	-31.79

Name: PV16
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



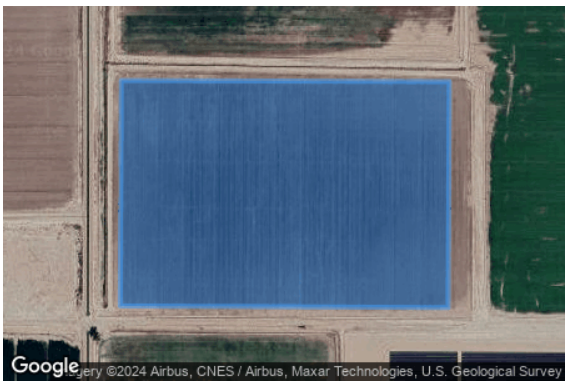
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.763318	-115.733055	-38.51	5.00	-33.51
2	32.763294	-115.727334	-36.45	5.00	-31.45
3	32.760038	-115.727429	-36.51	5.00	-31.51
4	32.760061	-115.732779	-35.00	5.00	-30.00
5	32.760620	-115.733061	-36.49	5.00	-31.49

Name: PV17
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



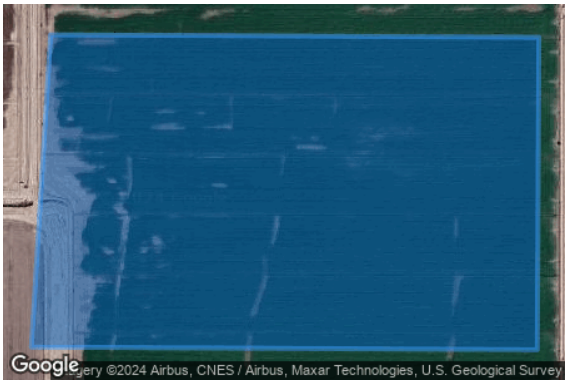
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.764669	-115.726784	-37.86	5.00	-32.86
2	32.764644	-115.720770	-40.71	5.00	-35.71
3	32.762394	-115.720783	-40.98	5.00	-35.98
4	32.762419	-115.726646	-36.30	5.00	-31.30
5	32.763827	-115.726789	-37.46	5.00	-32.46

Name: PV18
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



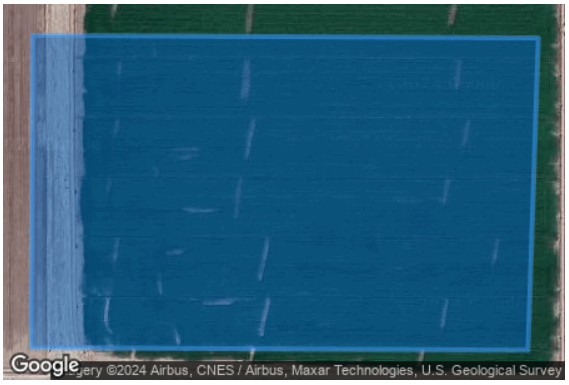
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.758609	-115.721034	-38.02	5.00	-33.02
2	32.758633	-115.726669	-38.43	5.00	-33.43
3	32.761888	-115.726649	-39.72	5.00	-34.72
4	32.761872	-115.721013	-38.10	5.00	-33.10
5	32.761864	-115.721014	-38.14	5.00	-33.14

Name: PV19
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.761002	-115.716394	-38.01	5.00	-33.01
2	32.761021	-115.720740	-37.68	5.00	-32.68
3	32.763270	-115.720575	-41.69	5.00	-36.69
4	32.763252	-115.716380	-37.64	5.00	-32.64

Name: PV20
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.760857	-115.720741	-37.60	5.00	-32.60
2	32.760838	-115.716395	-39.10	5.00	-34.10
3	32.758589	-115.716485	-37.79	5.00	-32.79
4	32.758608	-115.720755	-38.03	5.00	-33.03

Route Receptors

Name: Route01
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.781612	-115.707405	-38.47	7.60	-30.87
2	32.779286	-115.707392	-38.01	7.60	-30.41
3	32.777115	-115.707405	-37.41	7.60	-29.81
4	32.775659	-115.707400	-29.17	7.60	-21.57
5	32.773996	-115.707407	-31.94	7.60	-24.34

Name: Route02
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773996	-115.707407	-31.94	7.60	-24.34
2	32.773325	-115.707405	-31.14	7.60	-23.54
3	32.772457	-115.707405	-33.93	7.60	-26.33
4	32.771565	-115.707399	-33.56	7.60	-25.96
5	32.770066	-115.707397	-33.74	7.60	-26.14
6	32.769041	-115.707420	-33.24	7.60	-25.64
7	32.768296	-115.707425	-34.29	7.60	-26.69
8	32.767714	-115.707440	-33.75	7.60	-26.15
9	32.767032	-115.707455	-34.51	7.60	-26.91
10	32.766545	-115.707498	-36.12	7.60	-28.52
11	32.765400	-115.707499	-39.73	7.60	-32.13
12	32.764266	-115.707468	-37.65	7.60	-30.05
13	32.761319	-115.707359	-36.54	7.60	-28.94
14	32.758160	-115.707340	-36.79	7.60	-29.19

Name: Route04
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.783056	-115.690449	-41.67	7.60	-34.07
2	32.782746	-115.690423	-42.03	7.60	-34.43
3	32.781994	-115.690357	-39.42	7.60	-31.82
4	32.781386	-115.690332	-38.20	7.60	-30.60
5	32.778869	-115.690348	-38.34	7.60	-30.74
6	32.776376	-115.690364	-36.39	7.60	-28.79
7	32.774419	-115.690363	-31.14	7.60	-23.54

Name: Route05
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773078	-115.774795	-27.24	7.60	-19.64
2	32.773104	-115.770524	-32.45	7.60	-24.85
3	32.773070	-115.765509	-34.95	7.60	-27.35
4	32.773064	-115.760189	-37.51	7.60	-29.91
5	32.773086	-115.747972	-38.34	7.60	-30.74
6	32.773138	-115.746684	-36.78	7.60	-29.18

Name: Route06
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773138	-115.746684	-36.78	7.60	-29.18
2	32.773403	-115.745039	-36.46	7.60	-28.86
3	32.773741	-115.743478	-37.37	7.60	-29.77
4	32.773907	-115.742155	-37.18	7.60	-29.58
5	32.773956	-115.740207	-37.16	7.60	-29.56
6	32.773954	-115.736309	-34.96	7.60	-27.36
7	32.773954	-115.732802	-33.40	7.60	-25.80
8	32.773940	-115.729532	-33.54	7.60	-25.94
9	32.773946	-115.724211	-40.50	7.60	-32.90
10	32.773923	-115.718857	-38.49	7.60	-30.89
11	32.773926	-115.716214	-36.70	7.60	-29.10
12	32.773910	-115.709131	-32.79	7.60	-25.19
13	32.773905	-115.704844	-32.87	7.60	-25.27
14	32.773894	-115.699185	-44.61	7.60	-37.01
15	32.773858	-115.697037	-58.11	7.60	-50.51

Name: Route07
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.774083	-115.696832	-59.25	7.60	-51.65
2	32.774088	-115.698627	-45.62	7.60	-38.02
3	32.774107	-115.702779	-34.99	7.60	-27.39
4	32.774117	-115.707932	-32.78	7.60	-25.18
5	32.774130	-115.710912	-32.86	7.60	-25.26
6	32.774140	-115.715797	-36.25	7.60	-28.65
7	32.774140	-115.721276	-40.57	7.60	-32.97
8	32.774138	-115.726543	-39.60	7.60	-32.00
9	32.774148	-115.731711	-35.85	7.60	-28.25
10	32.774141	-115.735834	-34.52	7.60	-26.92
11	32.774143	-115.739166	-35.71	7.60	-28.11
12	32.774139	-115.740903	-37.02	7.60	-29.42
13	32.774121	-115.741765	-37.32	7.60	-29.72
14	32.774025	-115.742816	-36.43	7.60	-28.83
15	32.773843	-115.743935	-36.54	7.60	-28.94
16	32.773576	-115.745174	-36.50	7.60	-28.90
17	32.773409	-115.746208	-36.90	7.60	-29.30
18	32.773340	-115.746937	-37.58	7.60	-29.98
19	32.773289	-115.748463	-36.70	7.60	-29.10

Name: Route08
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773178	-115.761580	-36.92	7.60	-29.32
2	32.770429	-115.761544	-37.91	7.60	-30.31
3	32.767709	-115.761543	-36.11	7.60	-28.51
4	32.765576	-115.761554	-34.20	7.60	-26.60
5	32.765603	-115.757420	-35.66	7.60	-28.06
6	32.765643	-115.753049	-37.07	7.60	-29.47
7	32.764727	-115.753071	-36.33	7.60	-28.73
8	32.762035	-115.753069	-33.79	7.60	-26.19
9	32.760003	-115.753047	-35.47	7.60	-27.87
10	32.758657	-115.753037	-32.40	7.60	-24.80
11	32.758470	-115.752767	-33.34	7.60	-25.74
12	32.758299	-115.752313	-35.56	7.60	-27.96

Name: Route09
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.758299	-115.752313	-35.56	7.60	-27.96
2	32.758343	-115.744757	-37.43	7.60	-29.83
3	32.758411	-115.737144	-37.62	7.60	-30.02
4	32.758477	-115.732757	-33.98	7.60	-26.38
5	32.757971	-115.731483	-36.52	7.60	-28.92
6	32.758230	-115.731186	-35.61	7.60	-28.01
7	32.758360	-115.730838	-38.69	7.60	-31.09
8	32.758407	-115.729442	-37.83	7.60	-30.23
9	32.758400	-115.726483	-37.57	7.60	-29.97
10	32.758379	-115.722417	-37.95	7.60	-30.35
11	32.758347	-115.718509	-36.69	7.60	-29.09
12	32.758321	-115.716148	-37.86	7.60	-30.26

Name: Route10
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.791073	-115.733319	-41.31	7.60	-33.71
2	32.789227	-115.733304	-40.88	7.60	-33.28
3	32.788997	-115.733263	-39.46	7.60	-31.86
4	32.788783	-115.733222	-39.13	7.60	-31.53
5	32.788475	-115.733198	-39.14	7.60	-31.54
6	32.786957	-115.733224	-39.67	7.60	-32.07
7	32.783765	-115.733277	-40.79	7.60	-33.19
8	32.781554	-115.733315	-39.89	7.60	-32.29
9	32.778619	-115.733324	-40.33	7.60	-32.73
10	32.776451	-115.733303	-35.94	7.60	-28.34
11	32.775169	-115.733276	-37.93	7.60	-30.33
12	32.774030	-115.733242	-33.91	7.60	-26.31

Name: Route11
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.774030	-115.733242	-33.91	7.60	-26.31
2	32.771081	-115.733188	-35.92	7.60	-28.32
3	32.769728	-115.733204	-38.14	7.60	-30.54
4	32.767681	-115.733225	-40.05	7.60	-32.45
5	32.765727	-115.733228	-41.13	7.60	-33.53
6	32.764582	-115.733226	-40.60	7.60	-33.00
7	32.763165	-115.733226	-38.65	7.60	-31.05
8	32.761111	-115.733247	-36.97	7.60	-29.37
9	32.760624	-115.733224	-36.73	7.60	-29.13
10	32.760316	-115.733150	-33.77	7.60	-26.17
11	32.760022	-115.733007	-34.79	7.60	-27.19
12	32.759750	-115.732907	-35.86	7.60	-28.26
13	32.759284	-115.732868	-36.20	7.60	-28.60
14	32.758783	-115.732837	-36.44	7.60	-28.84
15	32.758633	-115.732778	-36.35	7.60	-28.75
16	32.758477	-115.732757	-33.98	7.60	-26.38

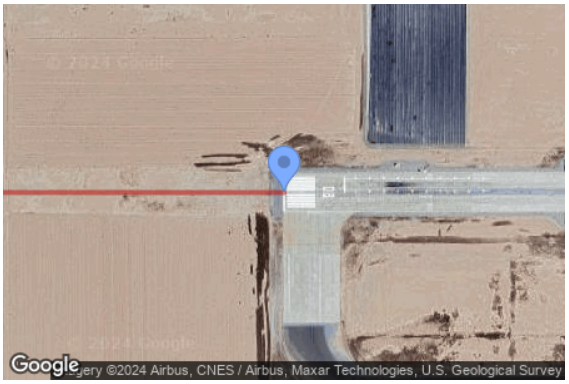
Name: Route12
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.757971	-115.731483	-36.52	7.60	-28.92
2	32.752093	-115.731458	-36.36	7.60	-28.76
3	32.751576	-115.731456	-36.20	7.60	-28.60
4	32.751220	-115.731121	-33.46	7.60	-25.86
5	32.749496	-115.731138	-38.51	7.60	-30.91
6	32.747645	-115.731170	-39.30	7.60	-31.70
7	32.744820	-115.731219	-38.75	7.60	-31.15
8	32.741767	-115.731273	-37.42	7.60	-29.82
9	32.739648	-115.731310	-36.41	7.60	-28.81
10	32.739328	-115.731264	-35.81	7.60	-28.21
11	32.739119	-115.731065	-35.56	7.60	-27.96
12	32.739044	-115.730899	-36.58	7.60	-28.98
13	32.739042	-115.727491	-36.74	7.60	-29.14
14	32.739039	-115.727061	-36.13	7.60	-28.53
15	32.739088	-115.725130	-35.32	7.60	-27.72
16	32.739158	-115.723752	-33.49	7.60	-25.89

Flight Path Receptors

Name: NJK08
Description: None
Threshold height: 50 ft
Direction: 90.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



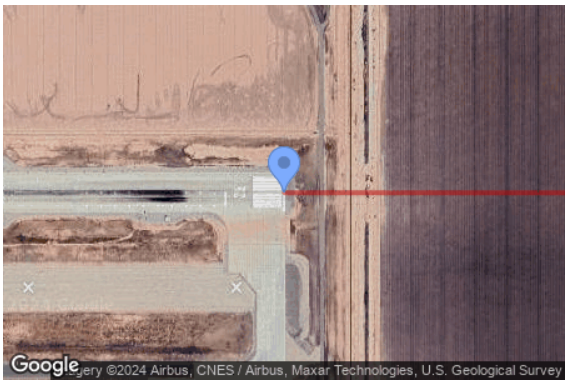
Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.829135	-115.687092	-50.00	50.00	0.00
Two-mile	32.829135	-115.721540	-42.90	596.30	553.40

Name: NJK12
Description: None
Threshold height: 50 ft
Direction: 135.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.829764	-115.672093	-48.80	50.00	1.20
Two-mile	32.850208	-115.696452	-52.30	606.90	554.60

Name: NJK26
Description: None
Threshold height: 55 ft
Direction: 270.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.829156	-115.656186	-49.00	55.00	6.00
Two-mile	32.829156	-115.621738	-48.10	607.50	559.40

Name: NJK30
Description: None
Threshold height: 55 ft
Direction: 315.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.816530	-115.656494	-42.50	55.00	12.50
Two-mile	32.796089	-115.632135	-35.60	601.60	566.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	32.784232	-115.761123	-37.55	5.50
OP 2	2	32.765361	-115.759028	-27.47	5.50
OP 3	3	32.740398	-115.753116	-2.82	5.50
OP 4	4	32.758689	-115.743834	-28.81	5.50
OP 5	5	32.741795	-115.741975	-13.53	5.50
OP 6	6	32.770851	-115.733700	-30.33	5.50
OP 7	7	32.759604	-115.732076	-35.55	5.50
OP 8	8	32.758638	-115.731863	-32.10	5.50
OP 9	9	32.759149	-115.730843	-29.05	5.50
OP 10	10	32.789932	-115.727501	-41.53	5.50
OP 11	11	32.766648	-115.716886	-34.91	5.50
OP 12	12	32.775113	-115.715136	-39.10	5.50
OP 13	13	32.789968	-115.707252	-41.08	5.50
OP 14	14	32.779210	-115.702460	-34.14	5.50
OP 15	15	32.765555	-115.697826	-65.36	5.50
OP 16	16	32.790545	-115.696241	-37.01	5.50
OP 17	17	32.765415	-115.693275	-38.29	5.50
OP 18	18	32.769290	-115.692077	-41.60	5.50
OP 19	19	32.780102	-115.689035	-37.60	5.50
20-ATCT	20	32.824282	-115.672259	-46.30	90.00

Map image of 20-ATCT



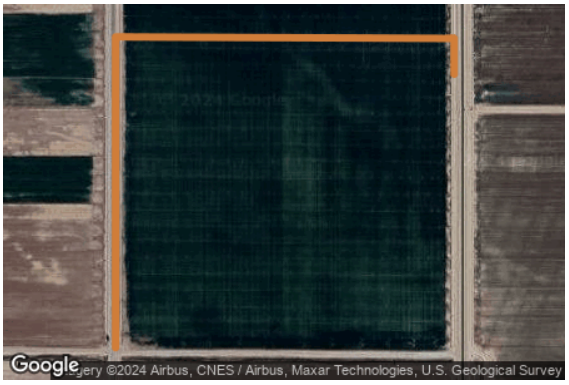
Obstruction Components

Name: Fence01
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.760064	-115.737290	-40.83
2	32.761688	-115.737291	-42.47
3	32.763409	-115.737292	-41.61
4	32.763408	-115.736213	-40.35
5	32.763407	-115.734803	-37.36
6	32.763407	-115.734000	-38.74
7	32.763406	-115.733370	-38.60

Name: Fence02
Top height: 7.0 ft



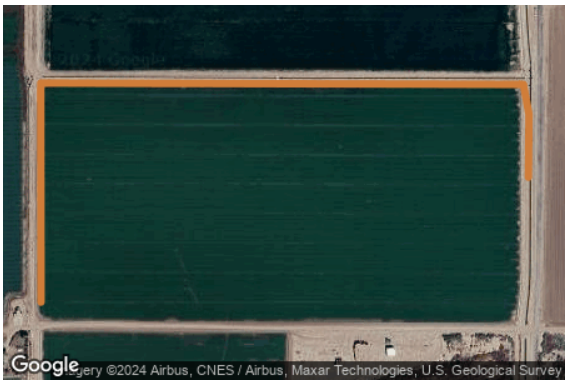
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.763663	-115.733184	-39.07
2	32.765888	-115.733185	-41.04
3	32.768137	-115.733186	-39.42
4	32.768133	-115.732034	-39.66
5	32.768127	-115.730534	-39.33
6	32.768122	-115.729043	-38.72
7	32.768117	-115.727959	-37.82
8	32.768115	-115.727368	-36.36
9	32.767600	-115.727366	-36.96

Name: Fence03
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.767598	-115.727076	-37.24
2	32.768343	-115.727075	-37.01
3	32.769085	-115.727077	-37.55
4	32.769077	-115.724853	-39.24
5	32.769064	-115.721295	-41.52
6	32.769053	-115.718423	-37.82
7	32.769045	-115.716243	-36.68
8	32.768318	-115.716247	-38.26
9	32.767459	-115.716252	-37.38

Name: Fence04
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.767479	-115.715969	-38.20
2	32.768732	-115.715971	-36.84
3	32.769999	-115.715973	-36.91
4	32.770642	-115.715974	-35.24
5	32.770637	-115.714084	-36.20
6	32.770631	-115.711407	-36.03
7	32.770625	-115.709145	-35.63
8	32.770622	-115.707681	-33.53
9	32.770189	-115.707586	-33.81
10	32.769283	-115.707595	-33.38

Name: Fence05
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.769300	-115.707324	-33.43
2	32.769949	-115.707329	-33.72
3	32.770625	-115.707327	-33.62
4	32.770620	-115.705965	-36.59
5	32.770613	-115.704108	-40.17
6	32.770603	-115.701256	-46.01
7	32.770597	-115.699392	-45.83
8	32.770588	-115.696893	-38.57
9	32.769980	-115.696901	-39.07
10	32.769339	-115.697486	-38.67

Glare Analysis Results

Summary of Results

Glare with potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV01	SA tracking	SA tracking	1,219	20.3	0	0.0	-
PV02	SA tracking	SA tracking	861	14.3	0	0.0	-
PV03	SA tracking	SA tracking	360	6.0	0	0.0	-
PV04	SA tracking	SA tracking	359	6.0	0	0.0	-
PV05	SA tracking	SA tracking	879	14.7	0	0.0	-
PV06	SA tracking	SA tracking	1,979	33.0	135	2.2	-
PV07	SA tracking	SA tracking	303	5.0	0	0.0	-
PV08	SA tracking	SA tracking	839	14.0	0	0.0	-
PV09	SA tracking	SA tracking	604	10.1	1	0.0	-
PV10	SA tracking	SA tracking	1,040	17.3	0	0.0	-
PV11	SA tracking	SA tracking	258	4.3	0	0.0	-
PV12	SA tracking	SA tracking	531	8.8	0	0.0	-
PV13	SA tracking	SA tracking	454	7.6	0	0.0	-
PV14	SA tracking	SA tracking	1,621	27.0	250	4.2	-
PV15	SA tracking	SA tracking	3,458	57.6	2,314	38.6	-
PV16	SA tracking	SA tracking	2,074	34.6	922	15.4	-
PV17	SA tracking	SA tracking	377	6.3	0	0.0	-
PV18	SA tracking	SA tracking	3,058	51.0	3,204	53.4	-
PV19	SA tracking	SA tracking	897	14.9	120	2.0	-
PV20	SA tracking	SA tracking	502	8.4	1,515	25.2	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

PC ORIGINAL PKG

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	2,003	33.4	0	0.0
Route06	2,031	33.9	0	0.0
Route07	474	7.9	0	0.0
Route08	1,399	23.3	0	0.0
Route09	6,314	105.2	5,811	96.8
Route10	0	0.0	0	0.0
Route11	758	12.6	2,514	41.9
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	149	2.5	0	0.0
OP 3	0	0.0	0	0.0
OP 4	313	5.2	0	0.0
OP 5	0	0.0	0	0.0
OP 6	55	0.9	0	0.0
OP 7	1,755	29.2	0	0.0
OP 8	1,342	22.4	0	0.0
OP 9	2,336	38.9	0	0.0
OP 10	0	0.0	0	0.0
OP 11	1,946	32.4	136	2.3
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	24	0.4	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	671	11.2	0	0.0
OP 18	103	1.7	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV: PV01 low potential for temporary after-image

Receptor results ordered by category of glare

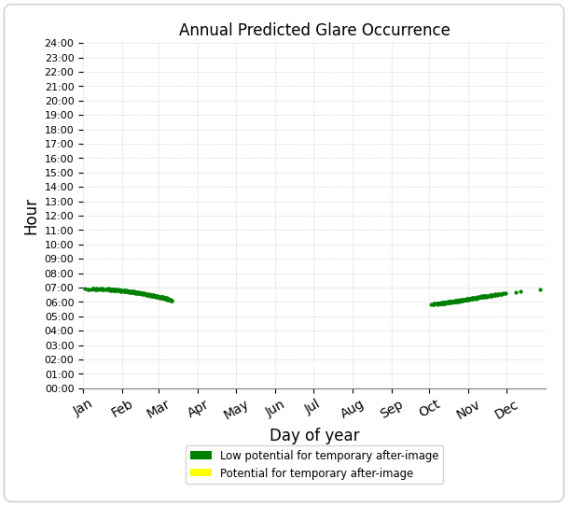
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route05	355	5.9	0	0.0
Route06	450	7.5	0	0.0
Route08	222	3.7	0	0.0
Route09	192	3.2	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

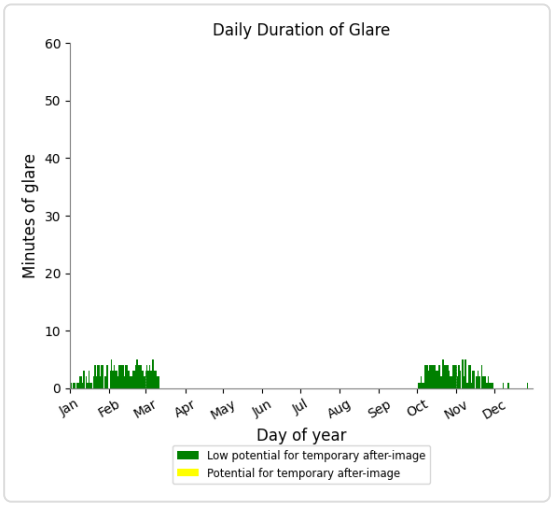
PC ORIGINAL PKG

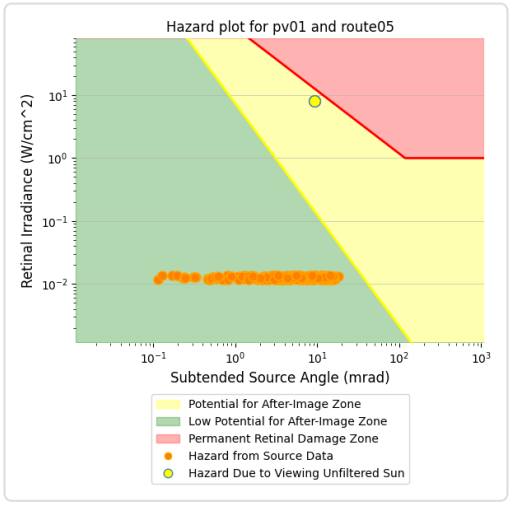
PV01 and Route: Route05

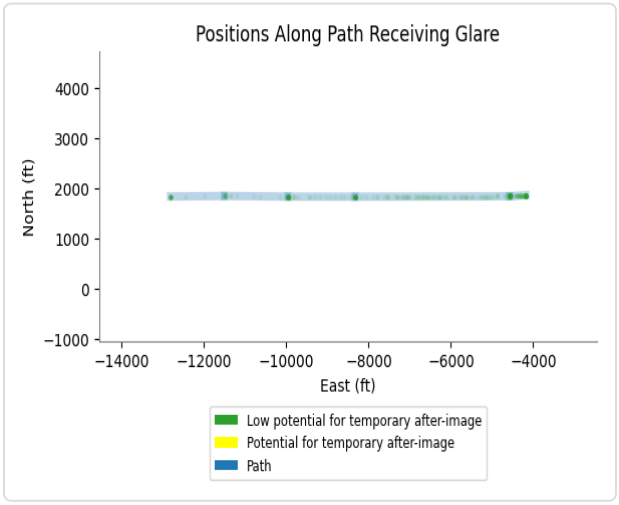
Yellow glare: none

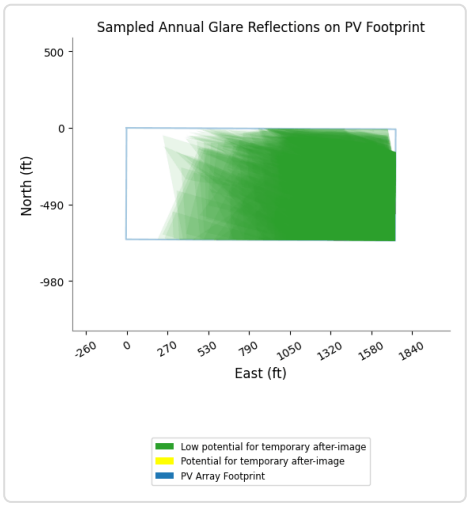
Green glare: 355 min.







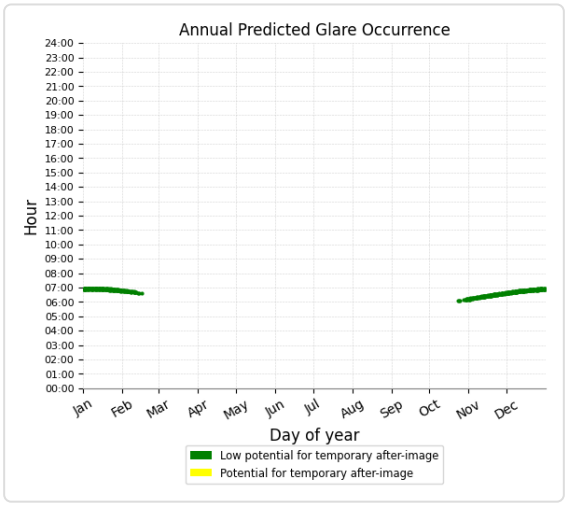


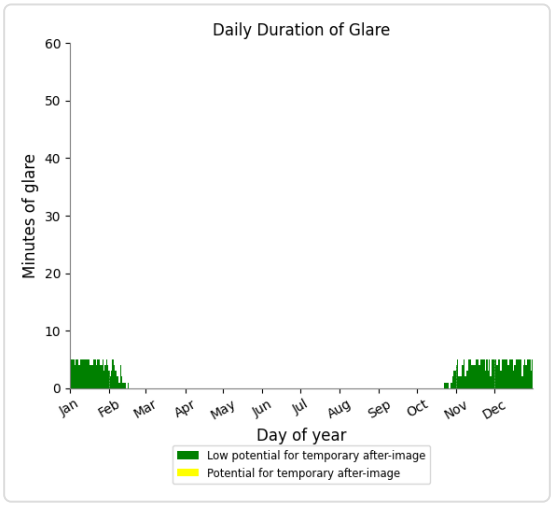


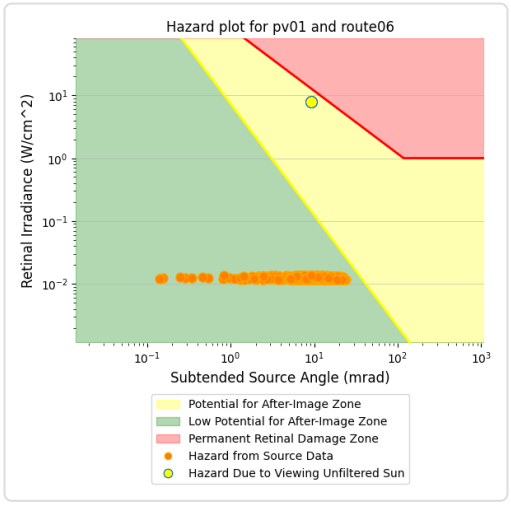
PV01 and Route: Route06

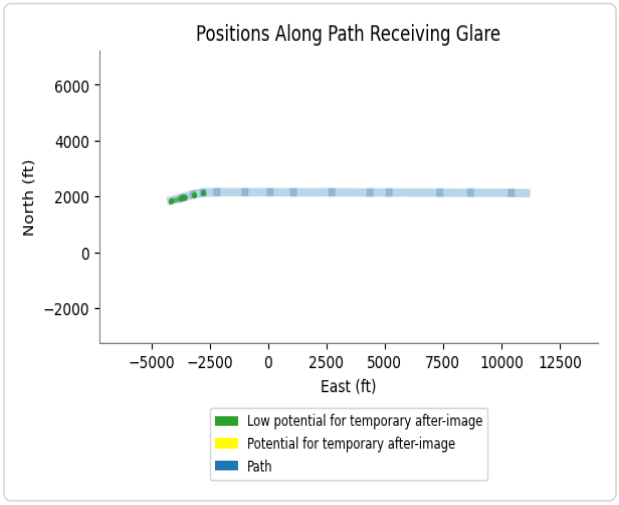
Yellow glare: none

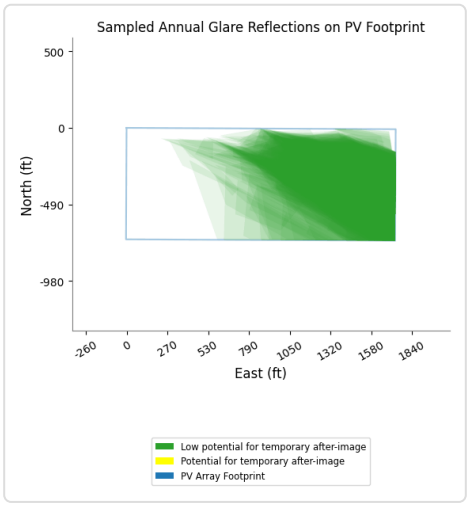
Green glare: 450 min.







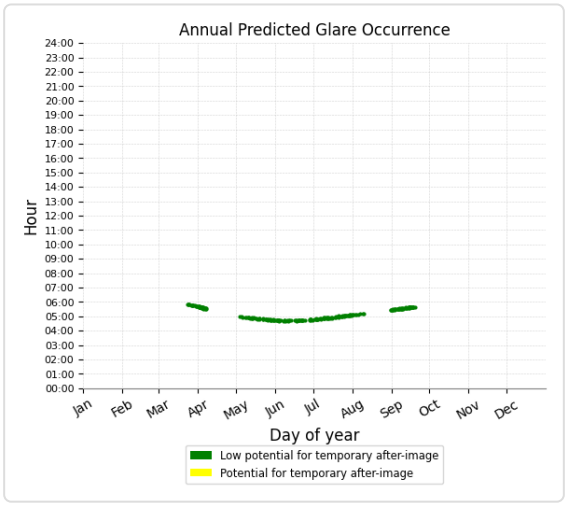


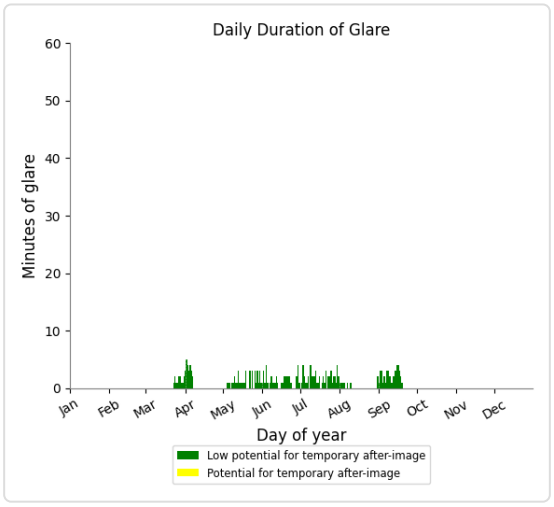


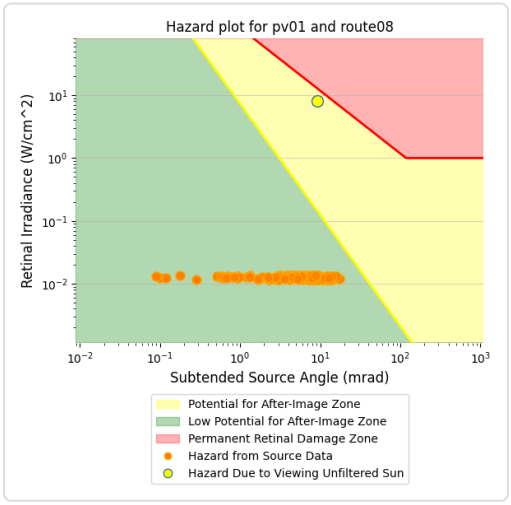
PV01 and Route: Route08

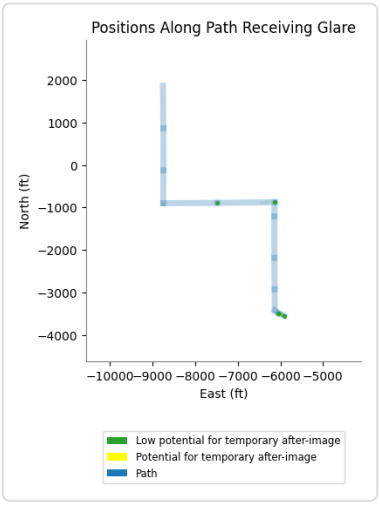
Yellow glare: none

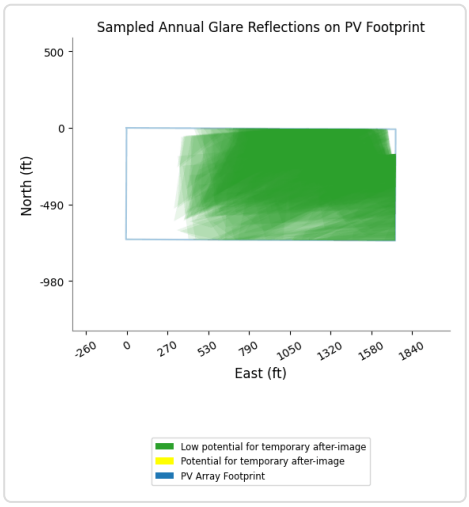
Green glare: 222 min.







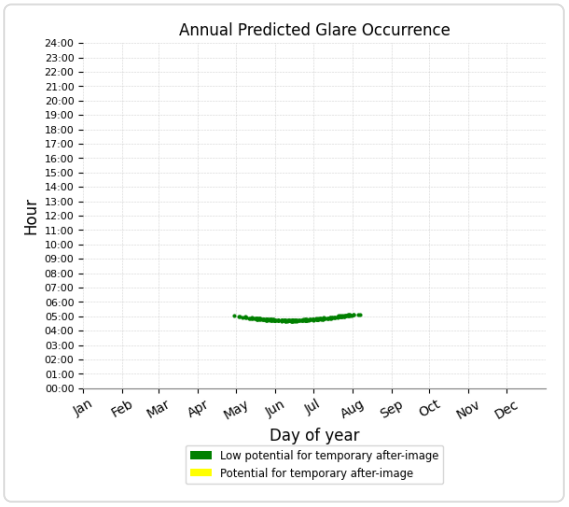


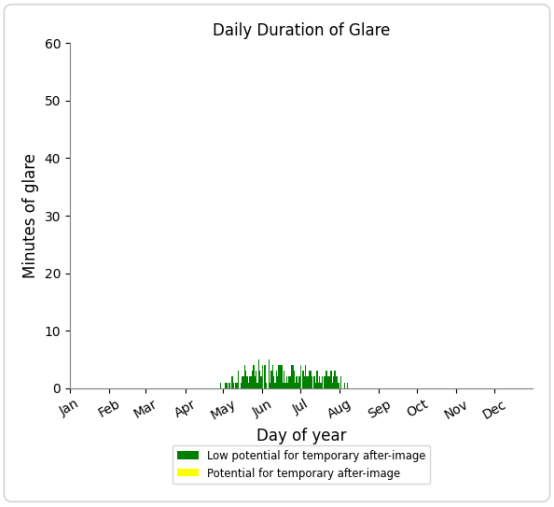


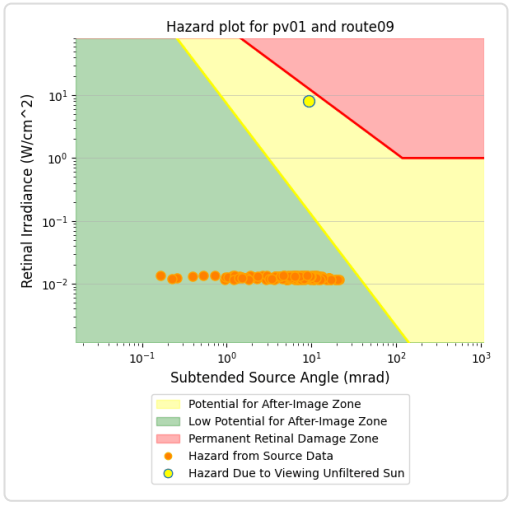
PV01 and Route: Route09

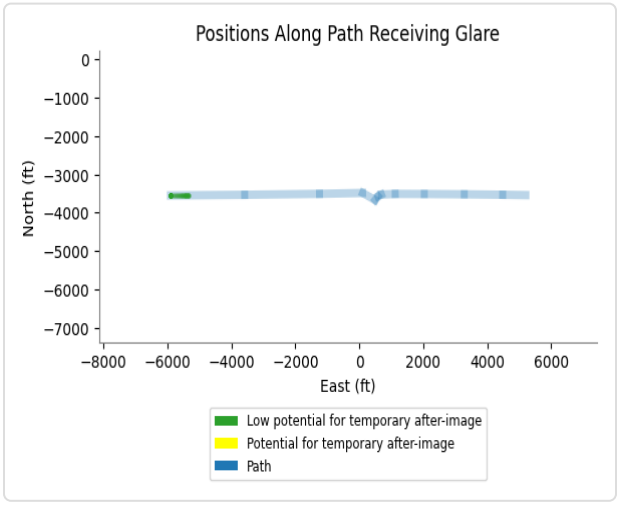
Yellow glare: none

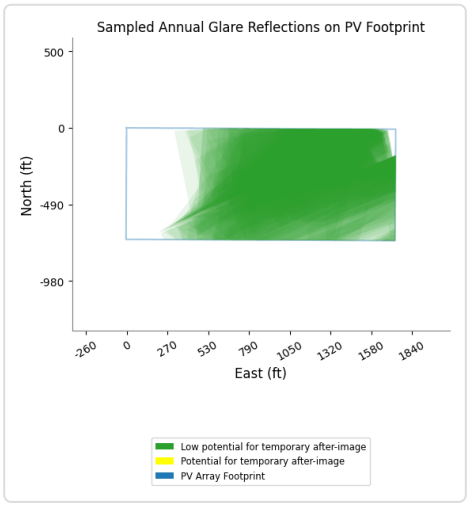
Green glare: 192 min.











PV01 and Route: Route01

No glare found

PV01 and Route: Route02

No glare found

PV01 and Route: Route04

No glare found

PV01 and Route: Route07

No glare found

PV01 and Route: Route10

No glare found

PV01 and Route: Route11

No glare found

PV01 and Route: Route12

No glare found

PV01 and FP: NJK08

No glare found

PV01 and FP: NJK12

No glare found

PV01 and FP: NJK26

No glare found

PV01 and FP: NJK30

No glare found

PV01 and OP 1

No glare found

PV01 and OP 2

No glare found

PV01 and OP 3

No glare found

PV01 and OP 4

No glare found

PC ORIGINAL PKG

PV01 and OP 5

No glare found

PV01 and OP 6

No glare found

PV01 and OP 7

No glare found

PV01 and OP 8

No glare found

PV01 and OP 9

No glare found

PV01 and OP 10

No glare found

PV01 and OP 11

No glare found

PV01 and OP 12

No glare found

PV01 and OP 13

No glare found

PV01 and OP 14

No glare found

PV01 and OP 15

No glare found

PV01 and OP 16

No glare found

PV01 and OP 17

No glare found

PV01 and OP 18

No glare found

PC ORIGINAL PKG

PV01 and OP 19

No glare found

PV01 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV02 low potential for temporary after-image

Receptor results ordered by category of glare

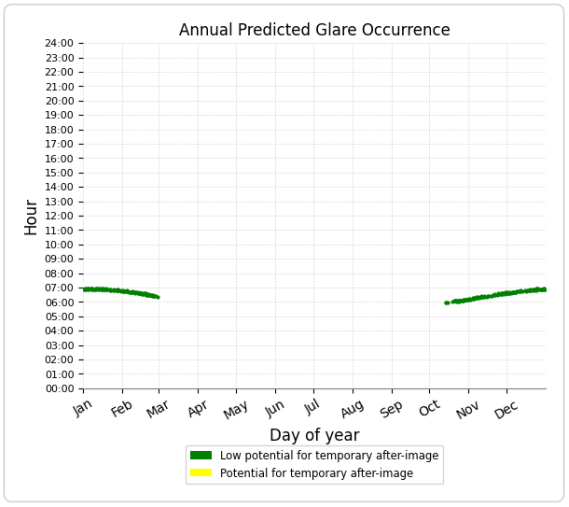
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route05	251	4.2	0	0.0
Route06	85	1.4	0	0.0
Route08	85	1.4	0	0.0
Route09	362	6.0	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	78	1.3	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

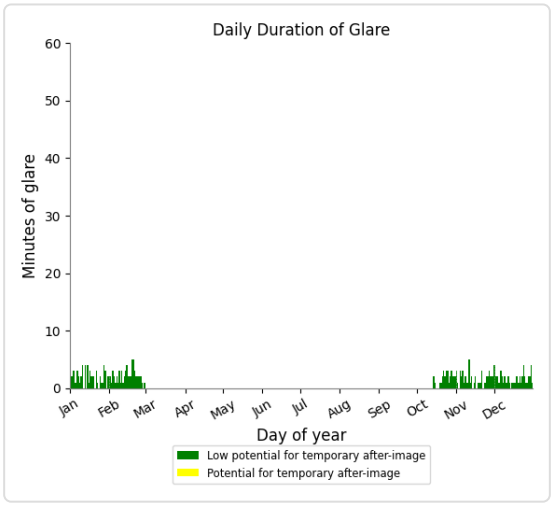
PC ORIGINAL PKG

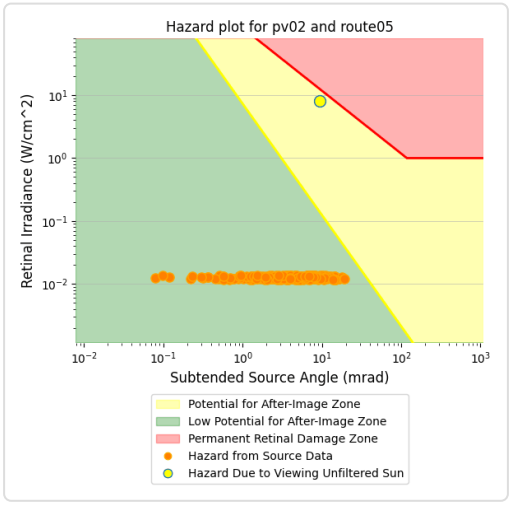
PV02 and Route: Route05

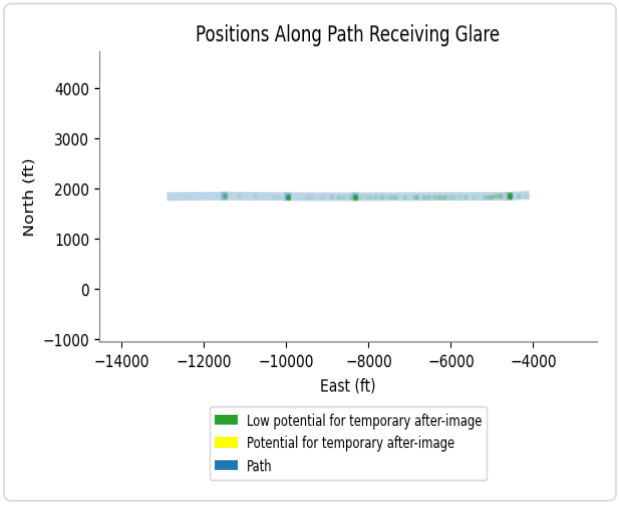
Yellow glare: none

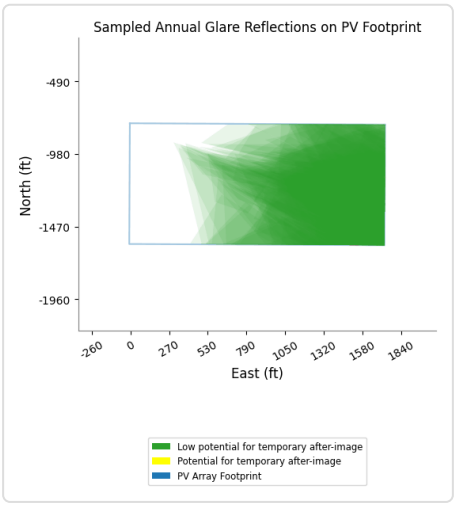
Green glare: 251 min.







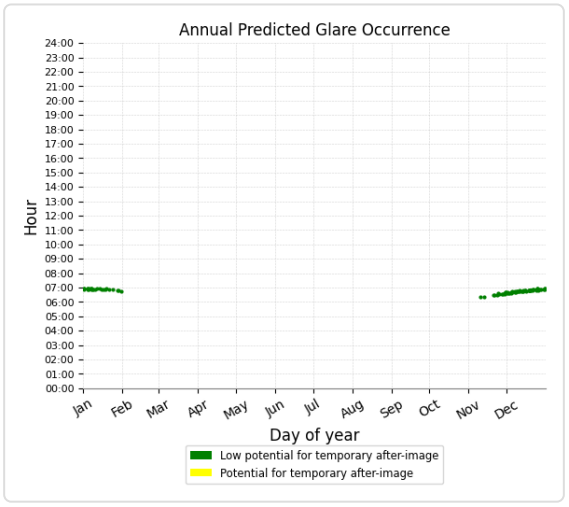


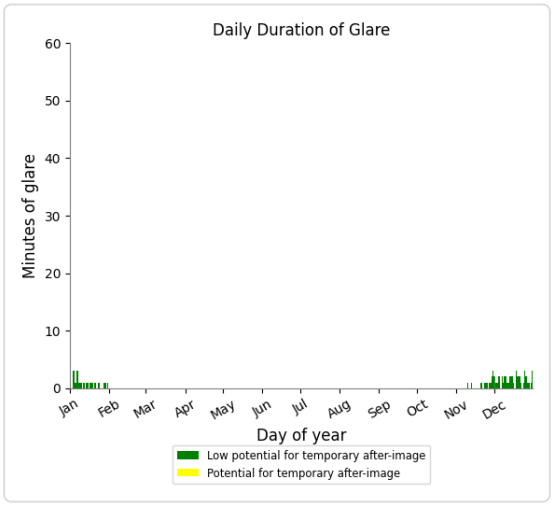


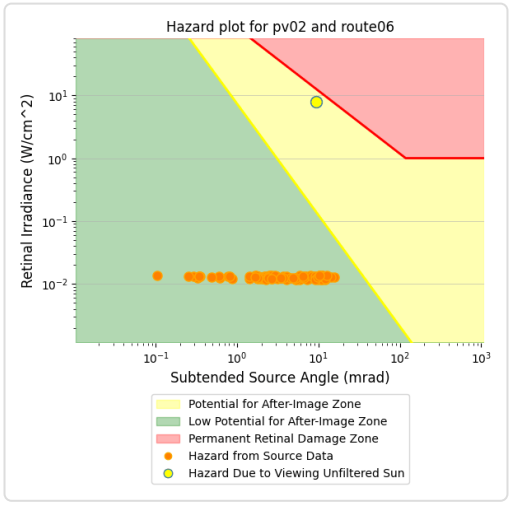
PV02 and Route: Route06

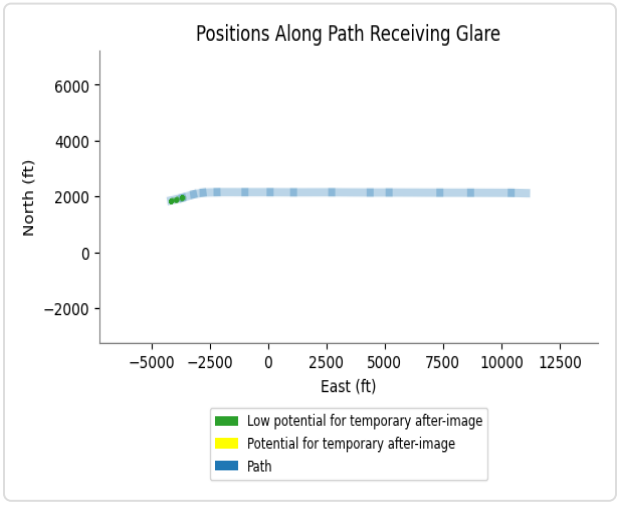
Yellow glare: none

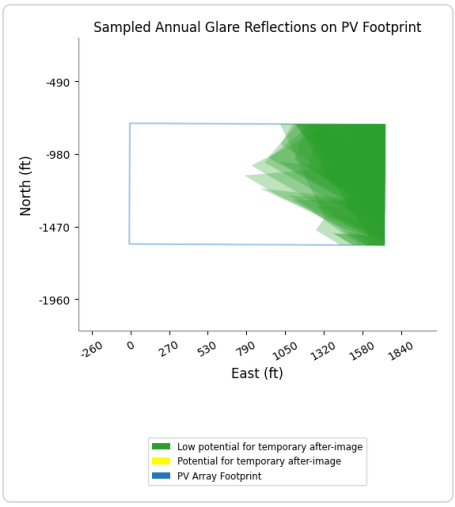
Green glare: 85 min.







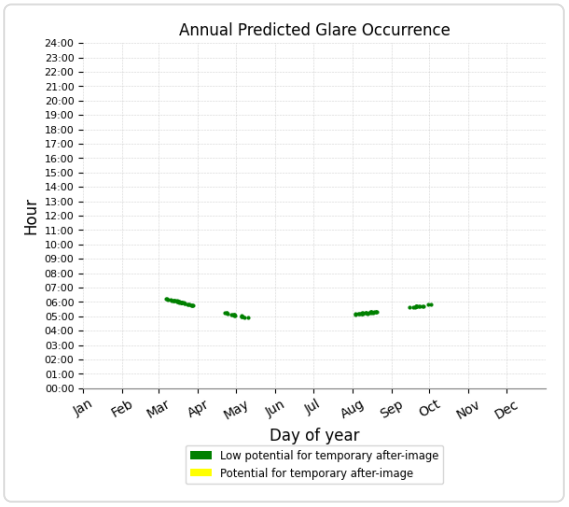


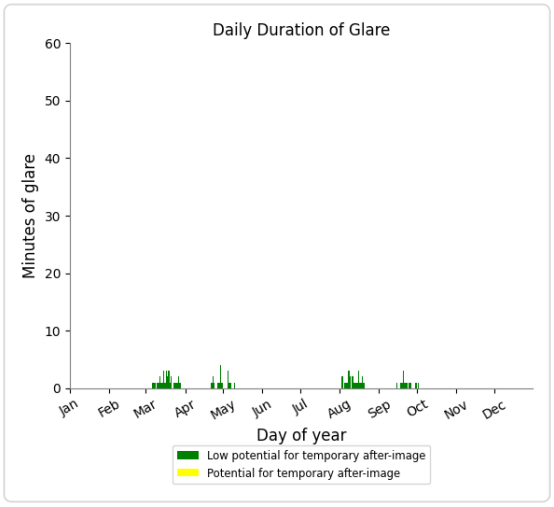


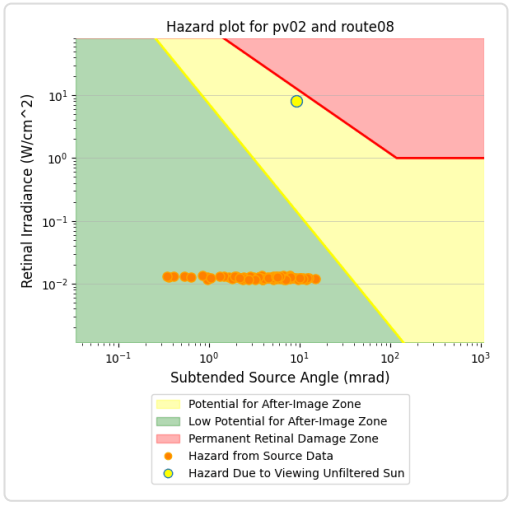
PV02 and Route: Route08

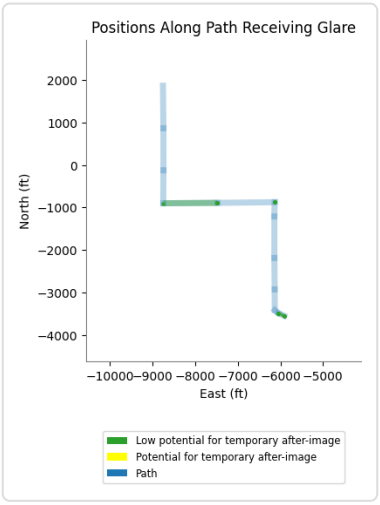
Yellow glare: none

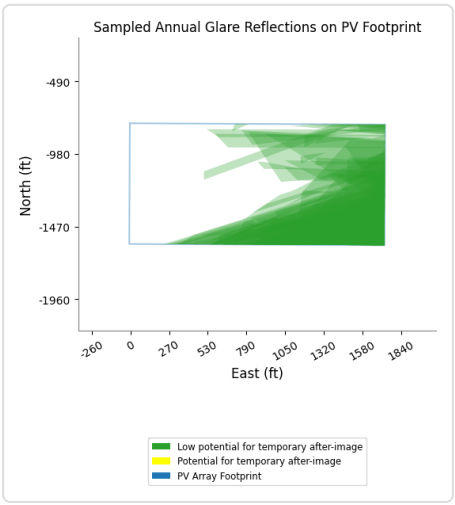
Green glare: 85 min.







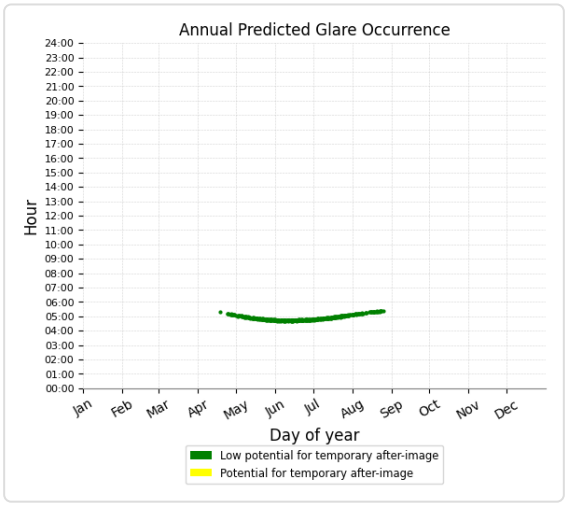


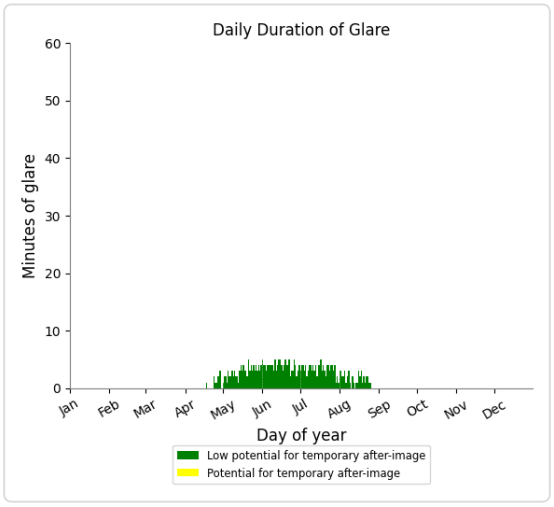


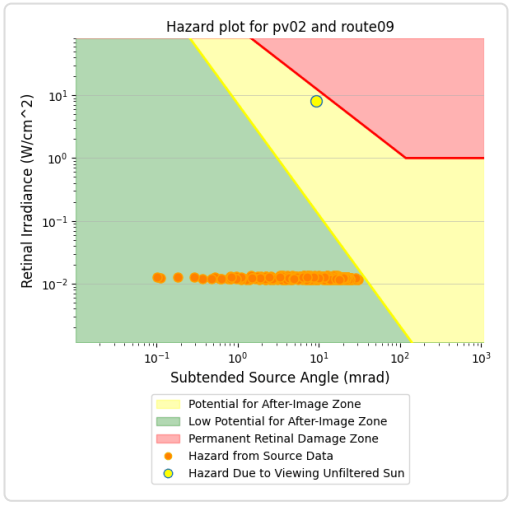
PV02 and Route: Route09

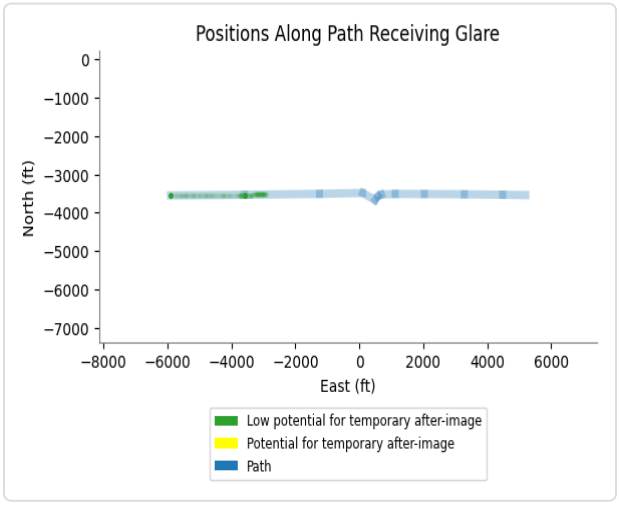
Yellow glare: none

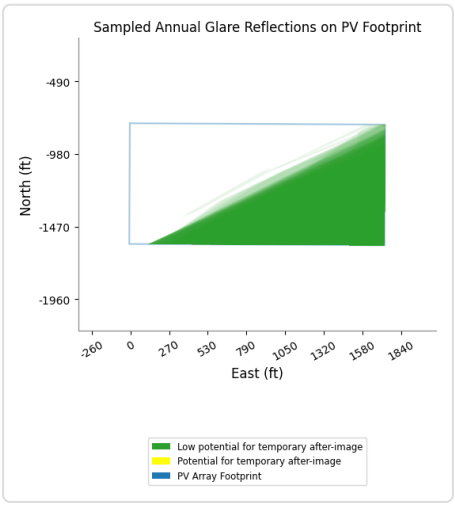
Green glare: 362 min.











PV02 and Route: Route01

No glare found

PV02 and Route: Route02

No glare found

PV02 and Route: Route04

No glare found

PV02 and Route: Route07

No glare found

PV02 and Route: Route10

No glare found

PV02 and Route: Route11

No glare found

PV02 and Route: Route12

No glare found

PV02 and FP: NJK08

No glare found

PV02 and FP: NJK12

No glare found

PV02 and FP: NJK26

No glare found

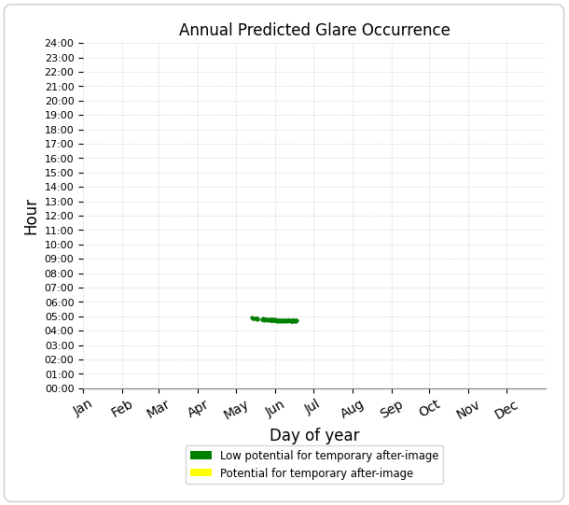
PV02 and FP: NJK30

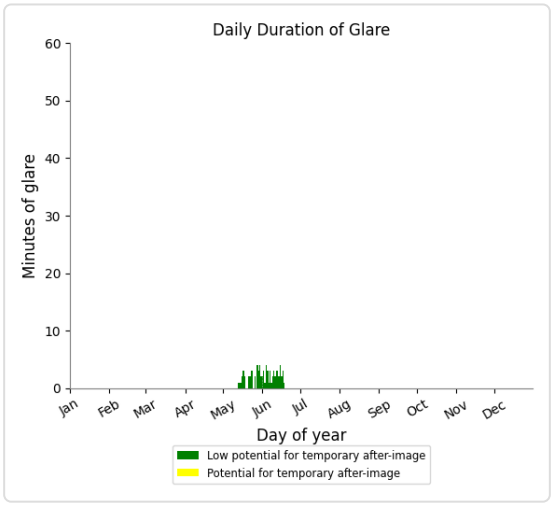
No glare found

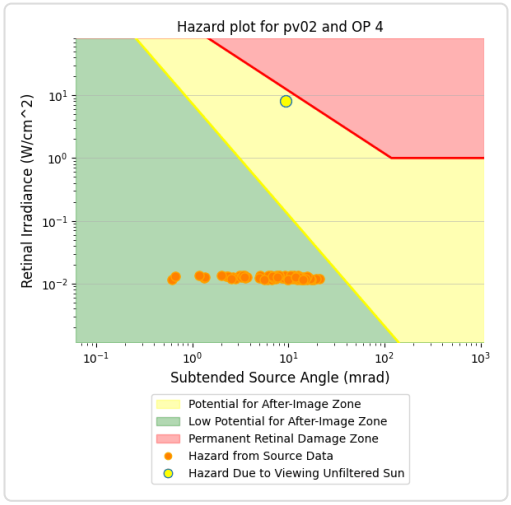
PC ORIGINAL PKG

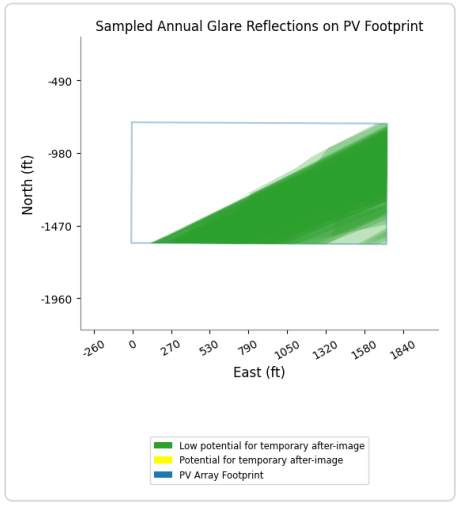
PV02 and OP 4

Yellow glare: none
Green glare: 78 min.









PV02 and OP 1

No glare found

PV02 and OP 2

No glare found

PV02 and OP 3

No glare found

PV02 and OP 5

No glare found

PV02 and OP 6

No glare found

PV02 and OP 7

No glare found

PV02 and OP 8

No glare found

PV02 and OP 9

No glare found

PV02 and OP 10

No glare found

PV02 and OP 11

No glare found

PV02 and OP 12

No glare found

PV02 and OP 13

No glare found

PV02 and OP 14

No glare found

PV02 and OP 15

No glare found

PV02 and OP 16

No glare found

PV02 and OP 17

No glare found

PV02 and OP 18

No glare found

PV02 and OP 19

No glare found

PV02 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV03 low potential for temporary after-image

Receptor results ordered by category of glare

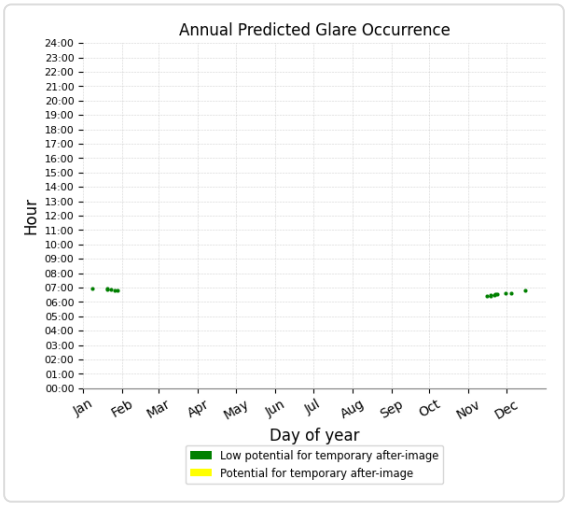
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route06	15	0.2	0	0.0
Route07	73	1.2	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 6	16	0.3	0	0.0
OP 11	256	4.3	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

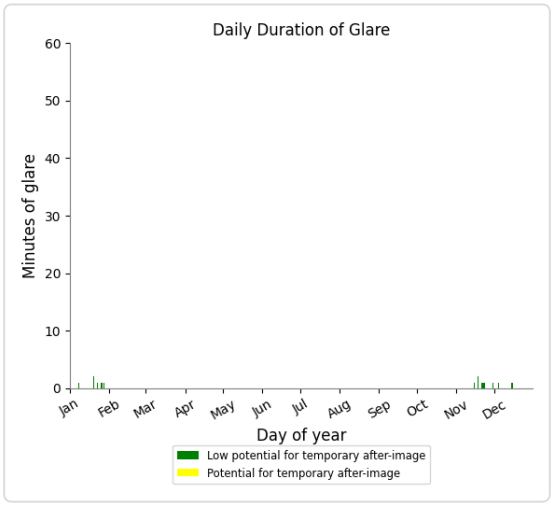
PC ORIGINAL PKG

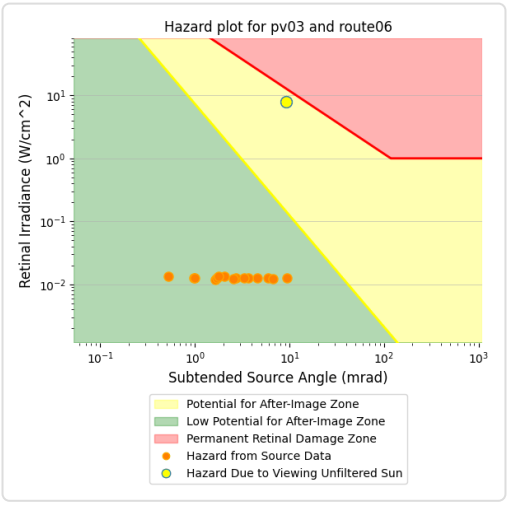
PV03 and Route: Route06

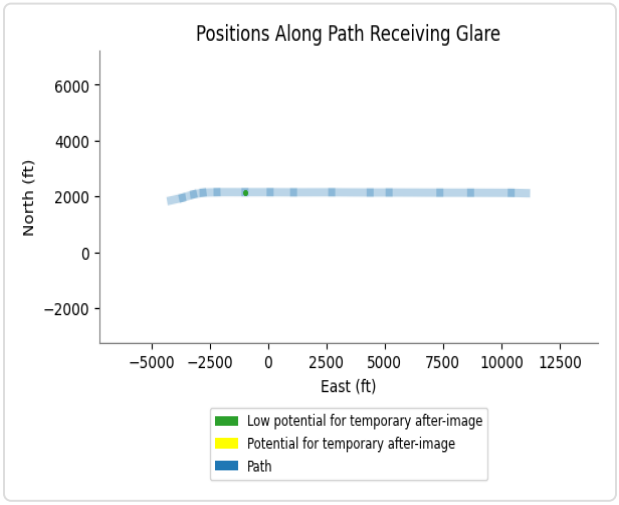
Yellow glare: none

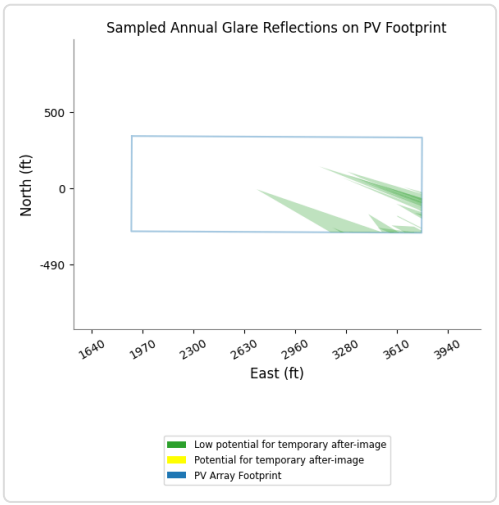
Green glare: 15 min.







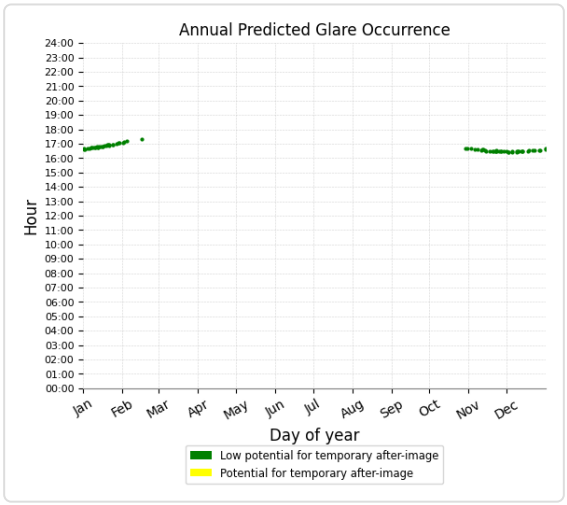


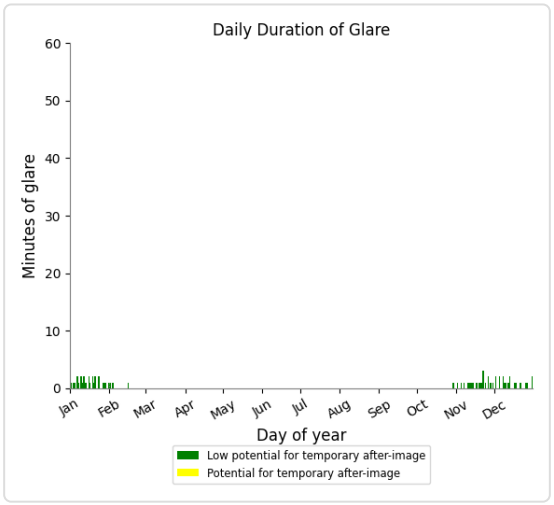


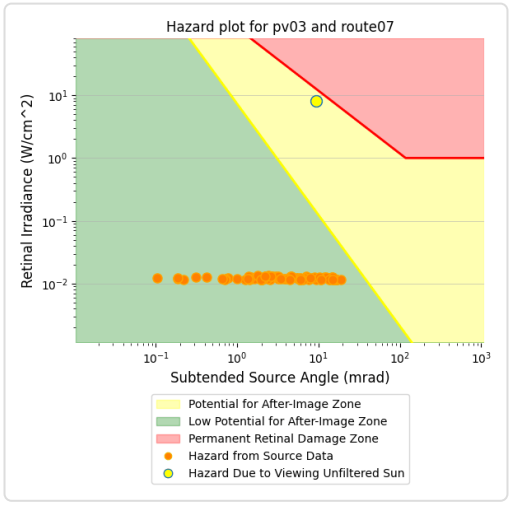
PV03 and Route: Route07

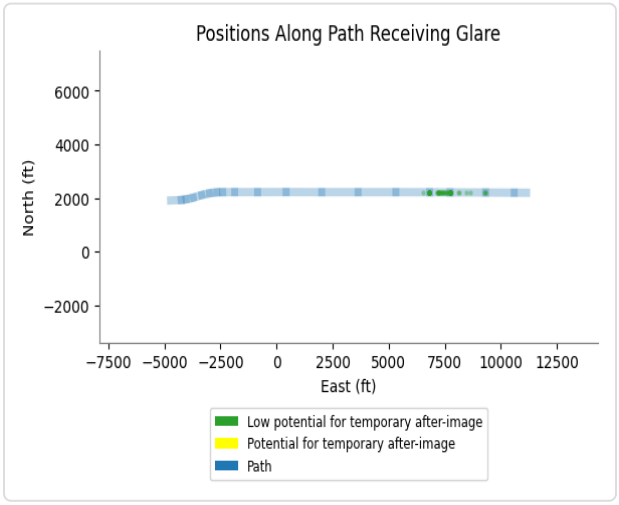
Yellow glare: none

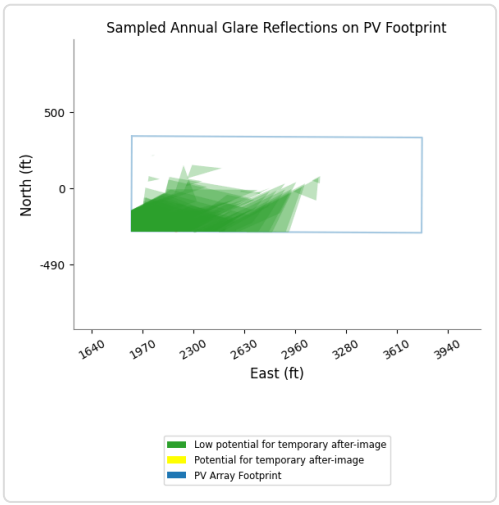
Green glare: 73 min.











PV03 and Route: Route01

No glare found

PV03 and Route: Route02

No glare found

PV03 and Route: Route04

No glare found

PV03 and Route: Route05

No glare found

PV03 and Route: Route08

No glare found

PV03 and Route: Route09

No glare found

PV03 and Route: Route10

No glare found

PV03 and Route: Route11

No glare found

PV03 and Route: Route12

No glare found

PV03 and FP: NJK08

No glare found

PV03 and FP: NJK12

No glare found

PV03 and FP: NJK26

No glare found

PV03 and FP: NJK30

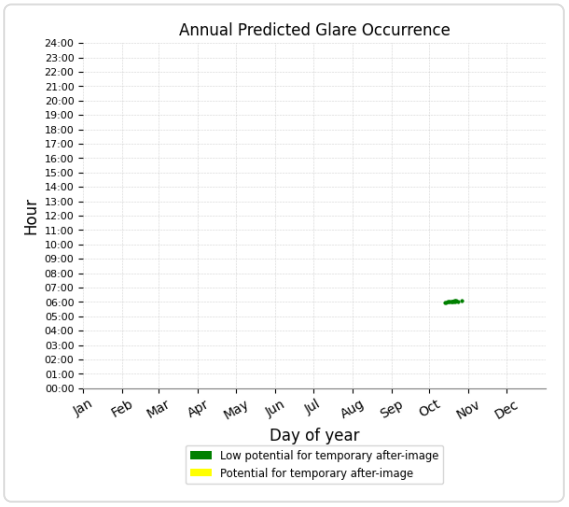
No glare found

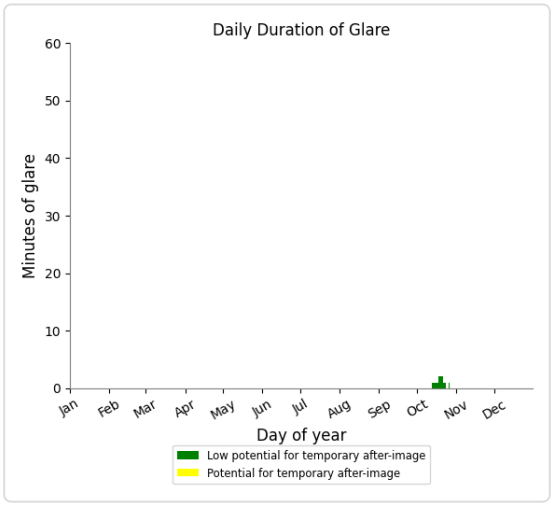
PC ORIGINAL PKG

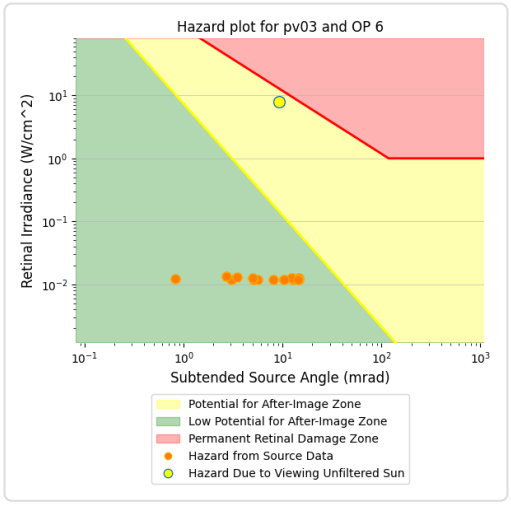
PV03 and OP 6

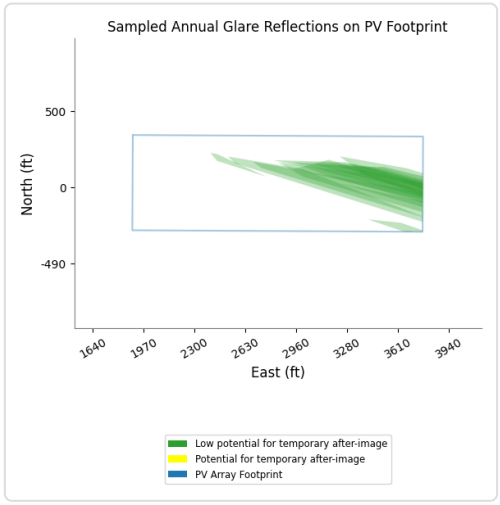
Yellow glare: none

Green glare: 16 min.





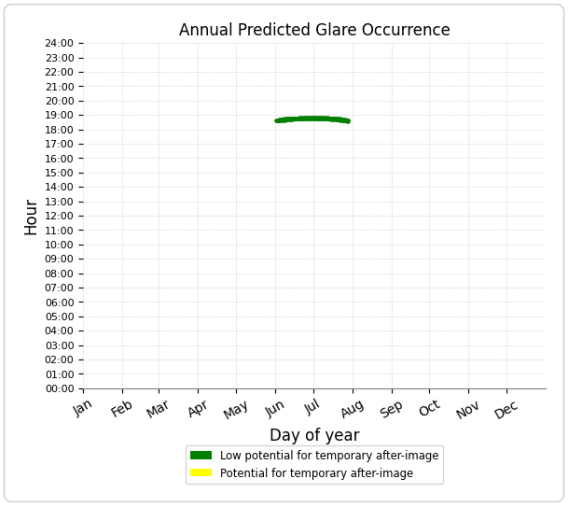


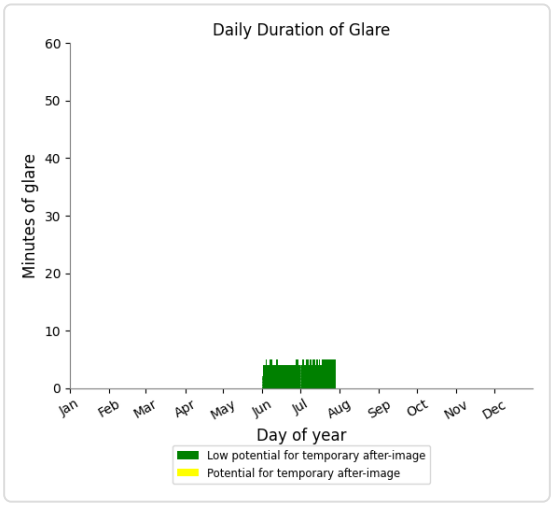


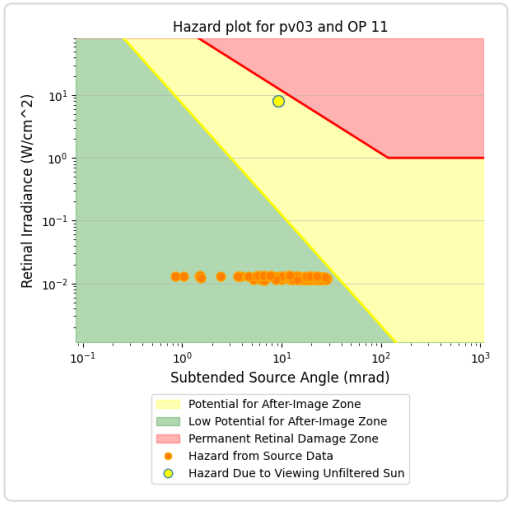
PC ORIGINAL PKG

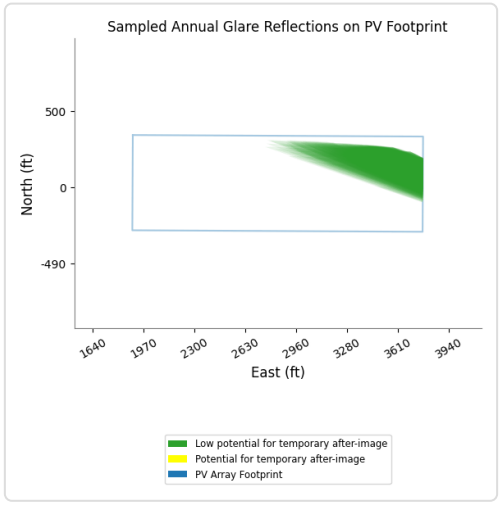
PV03 and OP 11

Yellow glare: none
Green glare: 256 min.









PV03 and OP 1

No glare found

PV03 and OP 2

No glare found

PV03 and OP 3

No glare found

PV03 and OP 4

No glare found

PV03 and OP 5

No glare found

PV03 and OP 7

No glare found

PV03 and OP 8

No glare found

PV03 and OP 9

No glare found

PV03 and OP 10

No glare found

PV03 and OP 12

No glare found

PV03 and OP 13

No glare found

PV03 and OP 14

No glare found

PV03 and OP 15

No glare found

PV03 and OP 16

No glare found

PV03 and OP 17

No glare found

PV03 and OP 18

No glare found

PV03 and OP 19

No glare found

PV03 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV04 low potential for temporary after-image

Receptor results ordered by category of glare

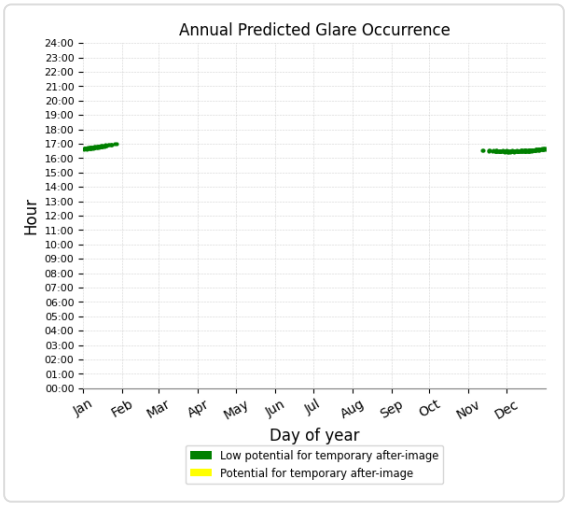
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route07	201	3.4	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 11	134	2.2	0	0.0
OP 14	24	0.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

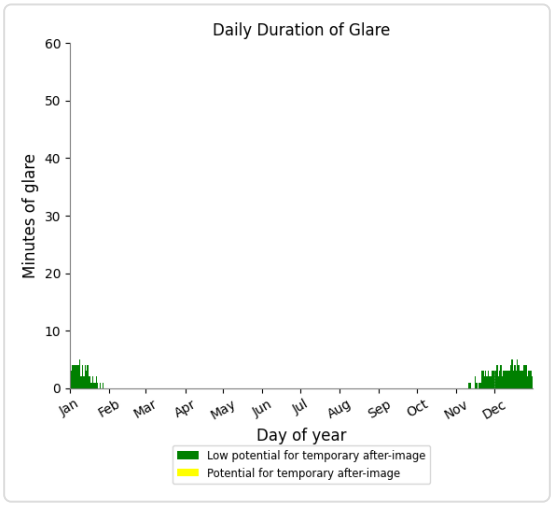
PC ORIGINAL PKG

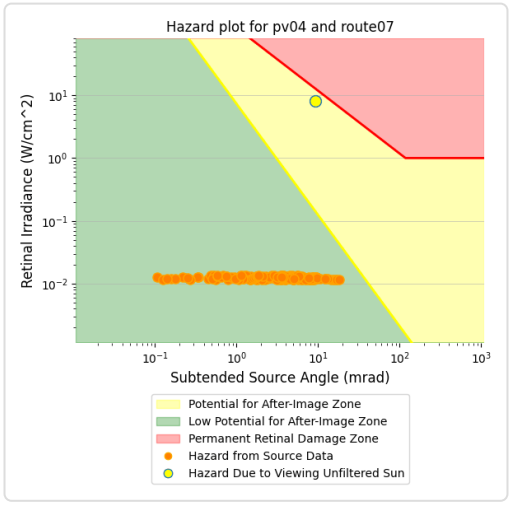
PV04 and Route: Route07

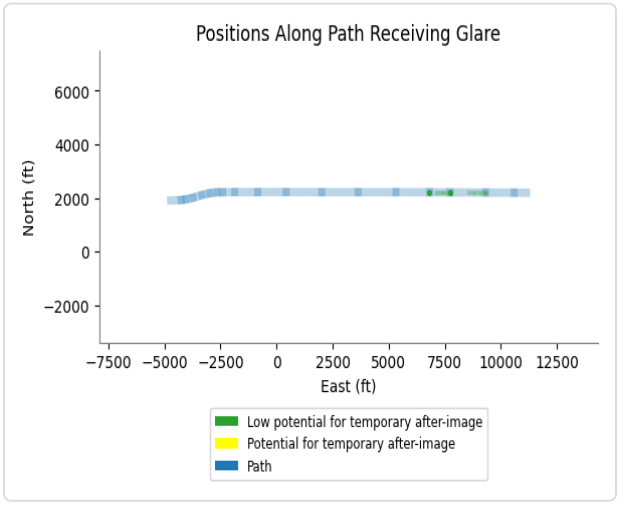
Yellow glare: none

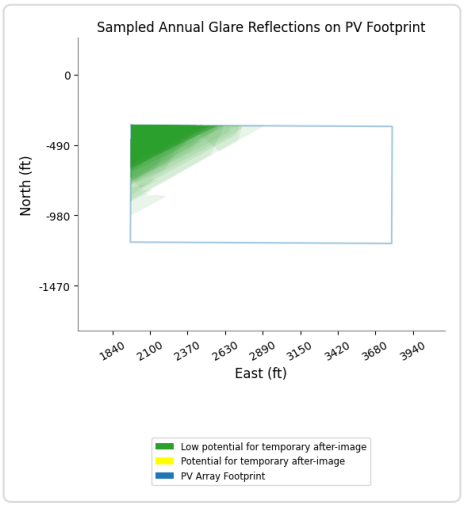
Green glare: 201 min.











PV04 and Route: Route01

No glare found

PV04 and Route: Route02

No glare found

PV04 and Route: Route04

No glare found

PV04 and Route: Route05

No glare found

PV04 and Route: Route06

No glare found

PV04 and Route: Route08

No glare found

PV04 and Route: Route09

No glare found

PV04 and Route: Route10

No glare found

PV04 and Route: Route11

No glare found

PV04 and Route: Route12

No glare found

PV04 and FP: NJK08

No glare found

PV04 and FP: NJK12

No glare found

PV04 and FP: NJK26

No glare found

PV04 and FP: NJK30

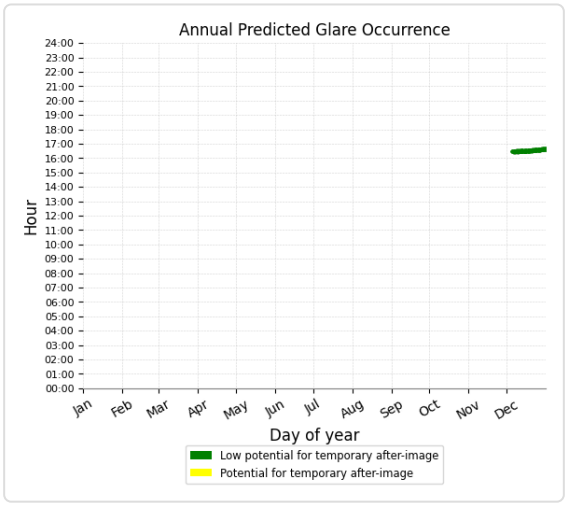
No glare found

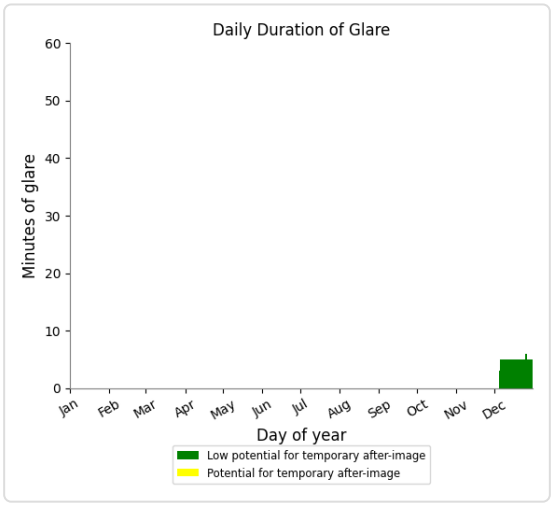
PC ORIGINAL PKG

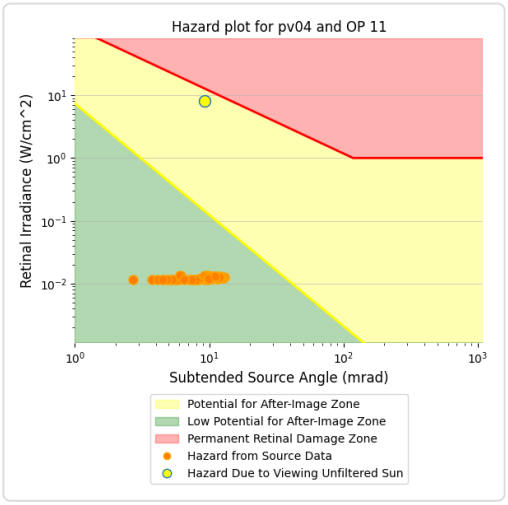
PV04 and OP 11

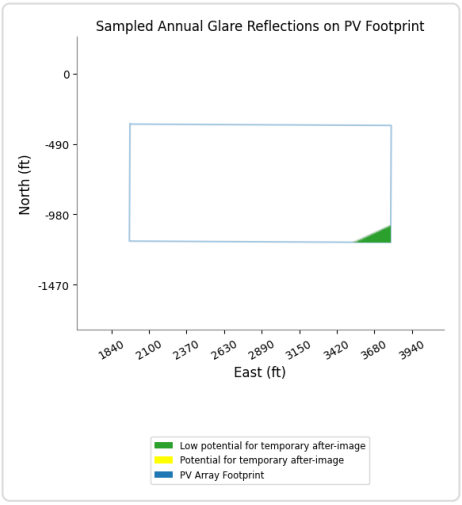
Yellow glare: none

Green glare: 134 min.



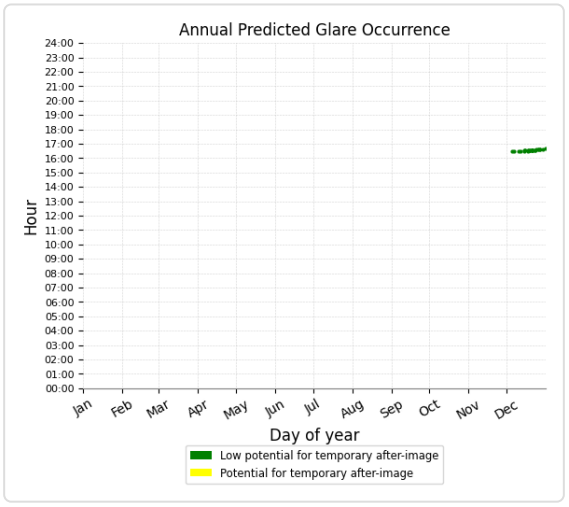


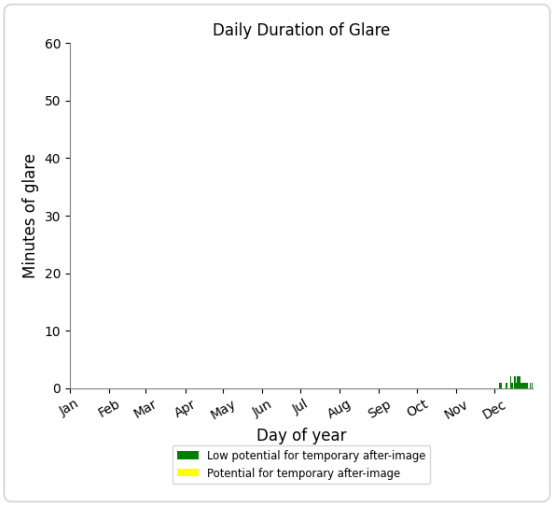


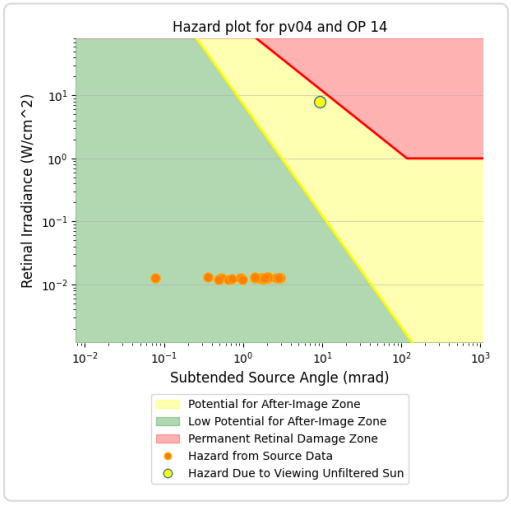


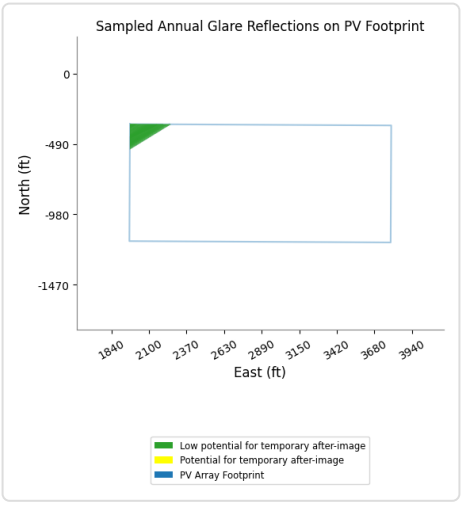
PV04 and OP 14

Yellow glare: none
Green glare: 24 min.









PV04 and OP 1

No glare found

PV04 and OP 2

No glare found

PV04 and OP 3

No glare found

PV04 and OP 4

No glare found

PV04 and OP 5

No glare found

PV04 and OP 6

No glare found

PV04 and OP 7

No glare found

PV04 and OP 8

No glare found

PV04 and OP 9

No glare found

PV04 and OP 10

No glare found

PV04 and OP 12

No glare found

PV04 and OP 13

No glare found

PV04 and OP 15

No glare found

PV04 and OP 16

No glare found

PV04 and OP 17

No glare found

PV04 and OP 18

No glare found

PV04 and OP 19

No glare found

PV04 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV05 low potential for temporary after-image

Receptor results ordered by category of glare

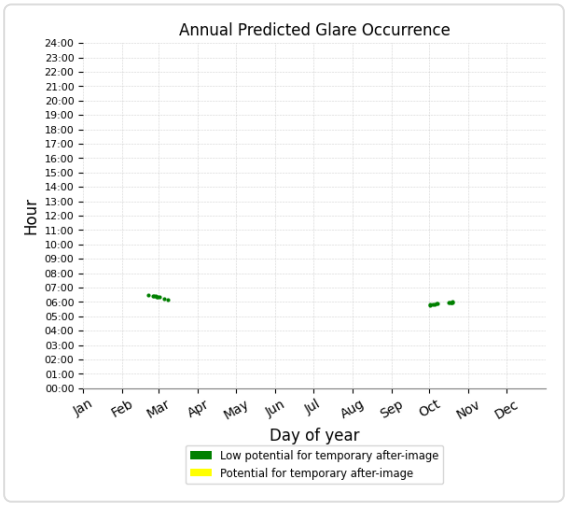
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route05	21	0.3	0	0.0
Route06	286	4.8	0	0.0
Route09	198	3.3	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 11	374	6.2	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

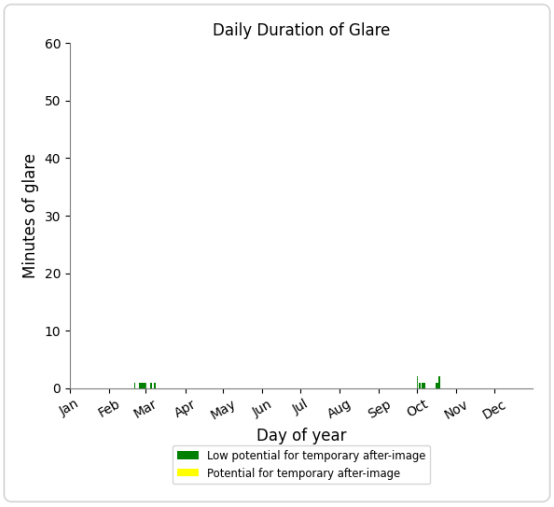
PC ORIGINAL PKG

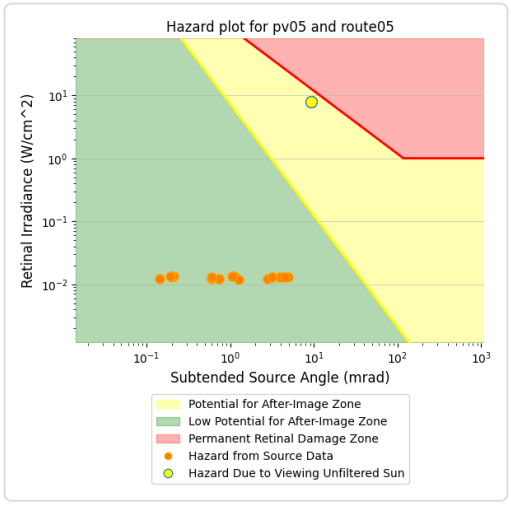
PV05 and Route: Route05

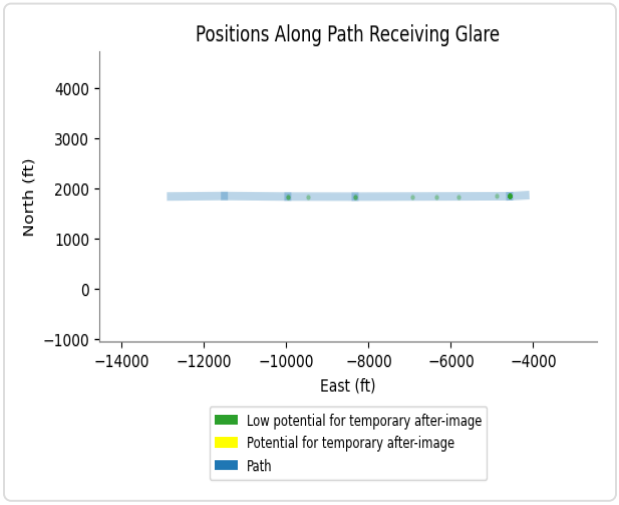
Yellow glare: none

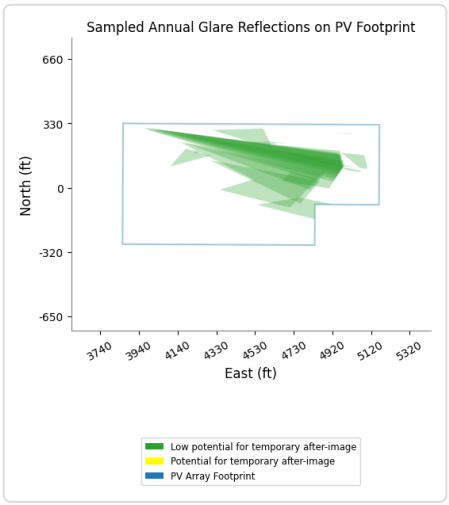
Green glare: 21 min.







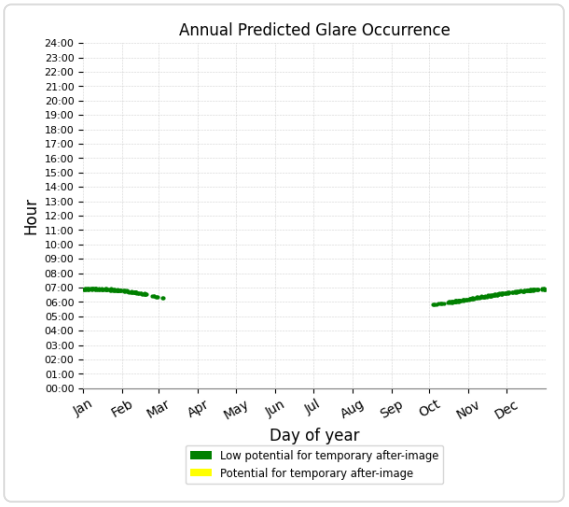


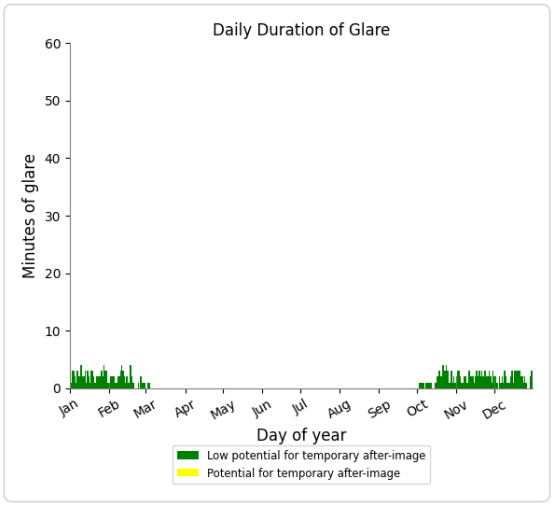


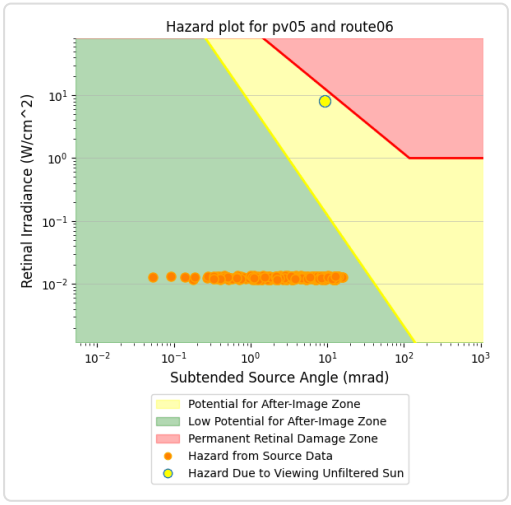
PV05 and Route: Route06

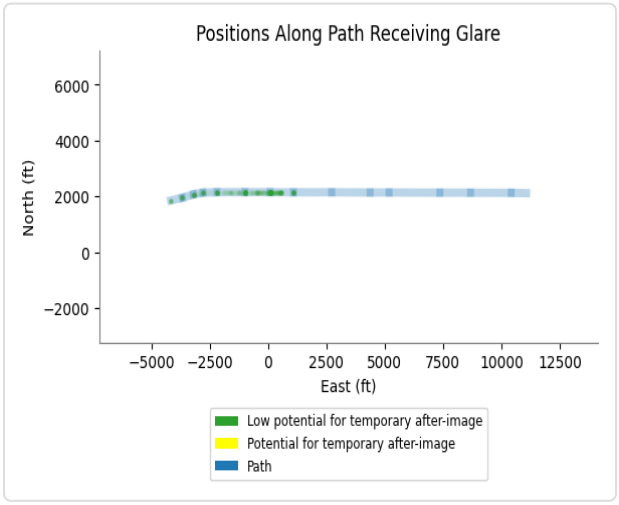
Yellow glare: none

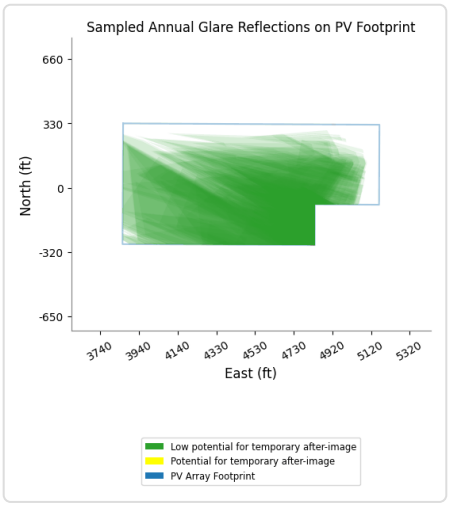
Green glare: 286 min.







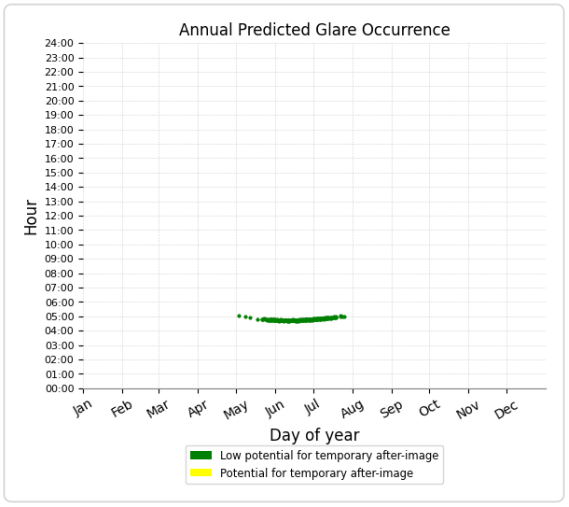


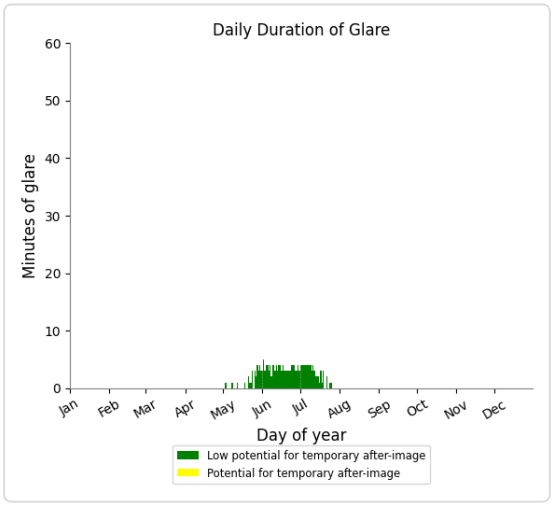


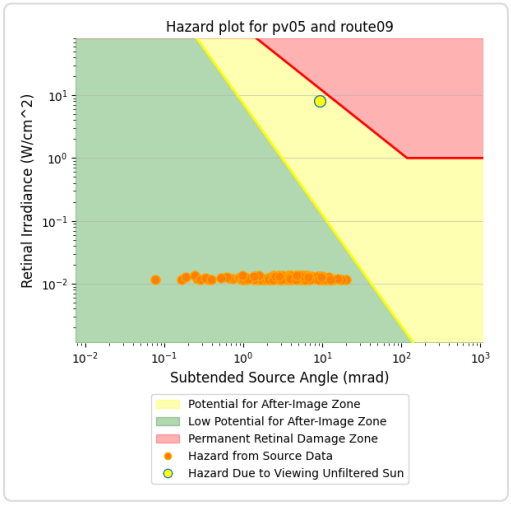
PV05 and Route: Route09

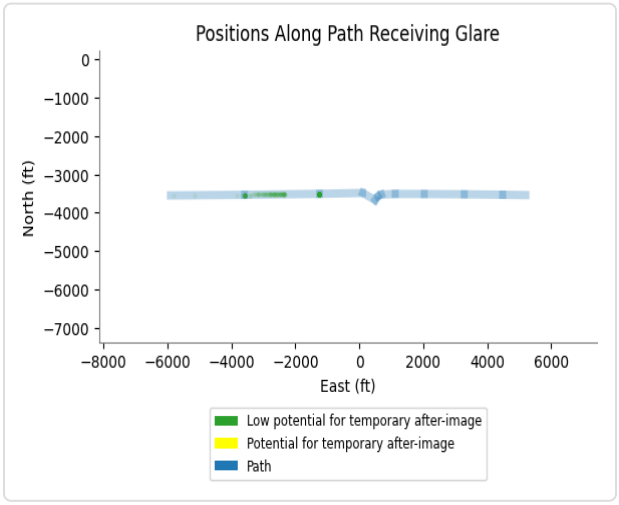
Yellow glare: none

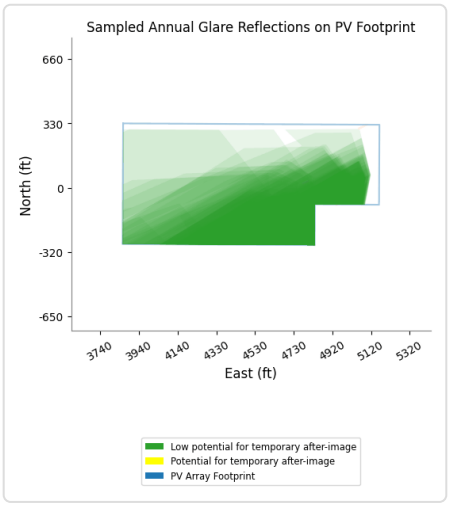
Green glare: 198 min.











PV05 and Route: Route01

No glare found

PV05 and Route: Route02

No glare found

PV05 and Route: Route04

No glare found

PV05 and Route: Route07

No glare found

PV05 and Route: Route08

No glare found

PV05 and Route: Route10

No glare found

PV05 and Route: Route11

No glare found

PV05 and Route: Route12

No glare found

PV05 and FP: NJK08

No glare found

PV05 and FP: NJK12

No glare found

PV05 and FP: NJK26

No glare found

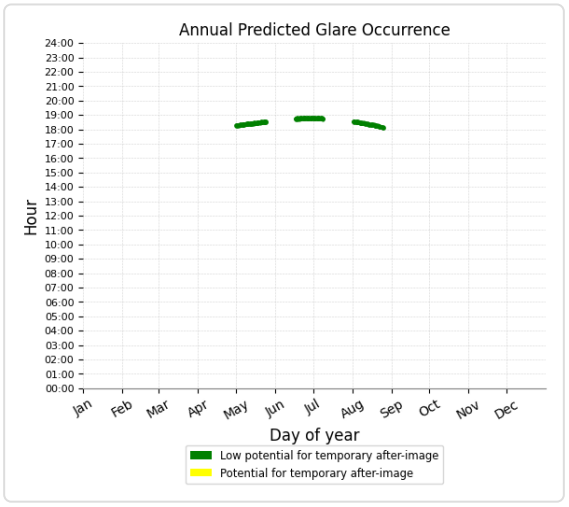
PV05 and FP: NJK30

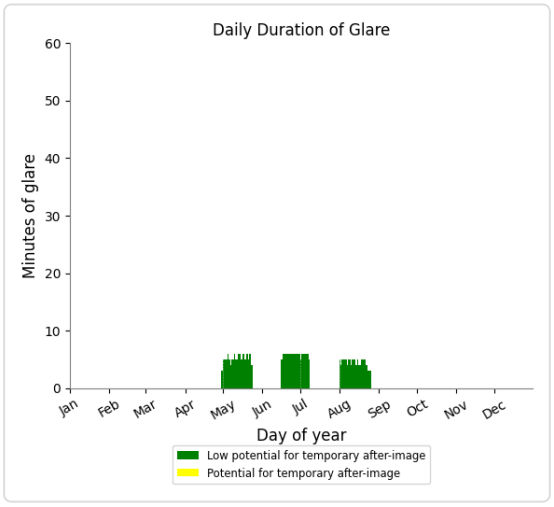
No glare found

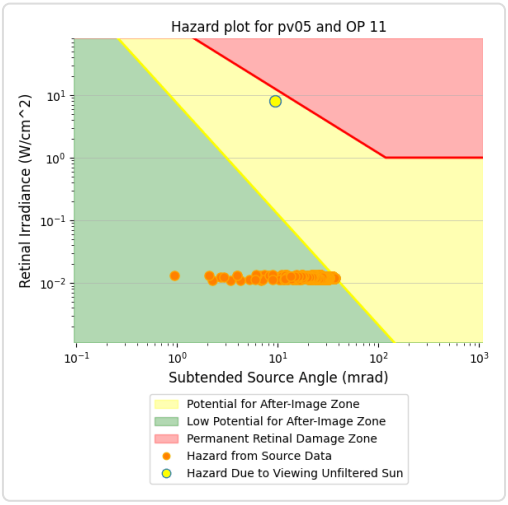
PC ORIGINAL PKG

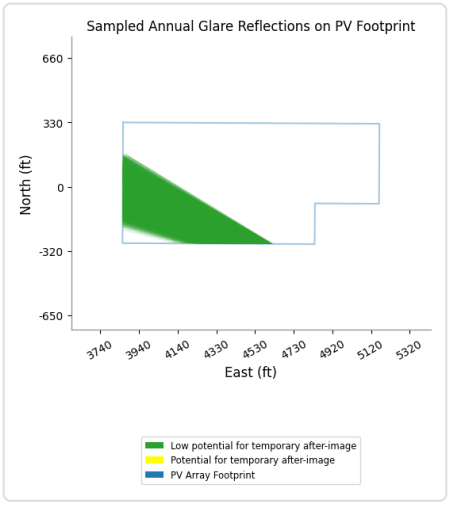
PV05 and OP 11

Yellow glare: none
Green glare: 374 min.









PV05 and OP 1

No glare found

PV05 and OP 2

No glare found

PV05 and OP 3

No glare found

PV05 and OP 4

No glare found

PV05 and OP 5

No glare found

PV05 and OP 6

No glare found

PV05 and OP 7

No glare found

PV05 and OP 8

No glare found

PV05 and OP 9

No glare found

PV05 and OP 10

No glare found

PV05 and OP 12

No glare found

PV05 and OP 13

No glare found

PV05 and OP 14

No glare found

PV05 and OP 15

No glare found

PV05 and OP 16

No glare found

PV05 and OP 17

No glare found

PV05 and OP 18

No glare found

PV05 and OP 19

No glare found

PV05 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV06 potential temporary after-image

Receptor results ordered by category of glare

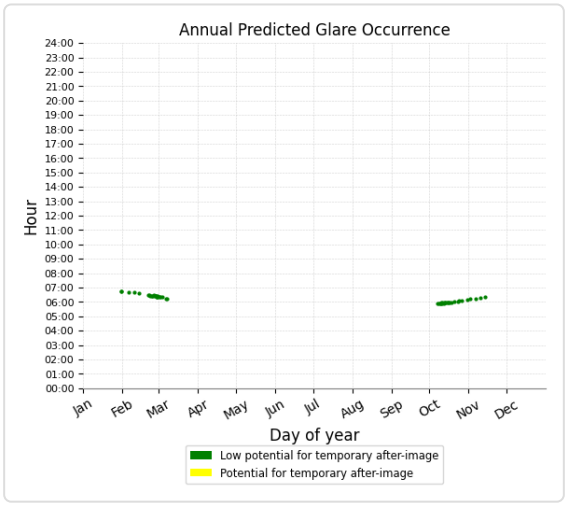
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route05	51	0.8	0	0.0
Route06	201	3.4	0	0.0
Route08	21	0.3	0	0.0
Route09	591	9.8	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 11	794	13.2	135	2.2
OP 7	100	1.7	0	0.0
OP 8	110	1.8	0	0.0
OP 9	111	1.9	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

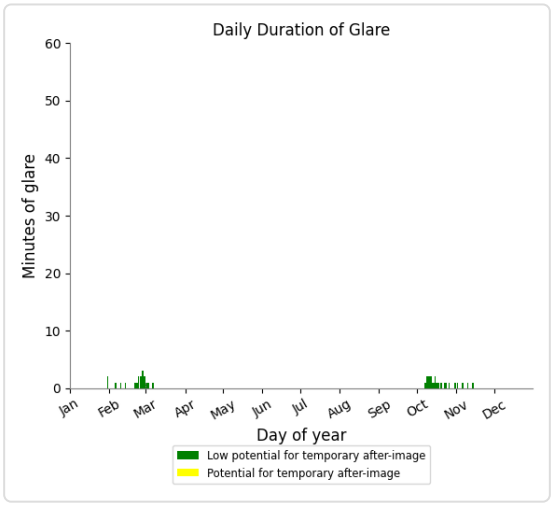
PC ORIGINAL PKG

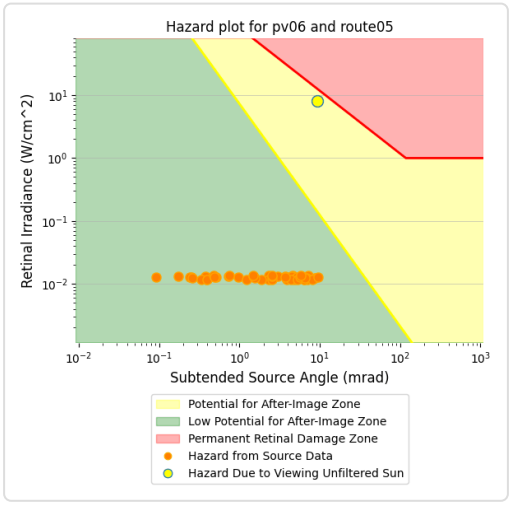
PV06 and Route: Route05

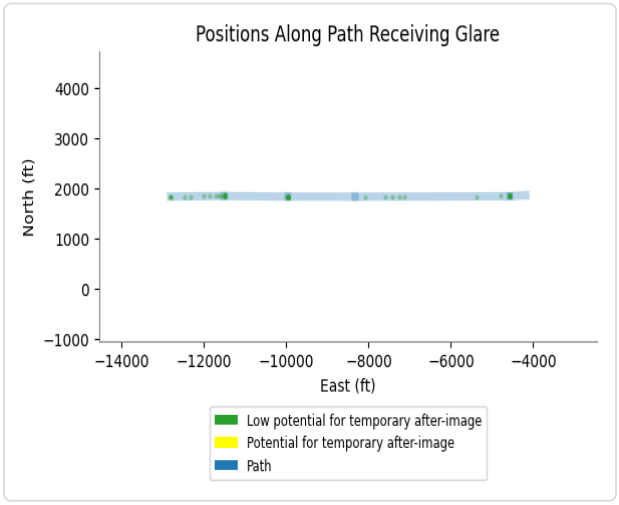
Yellow glare: none

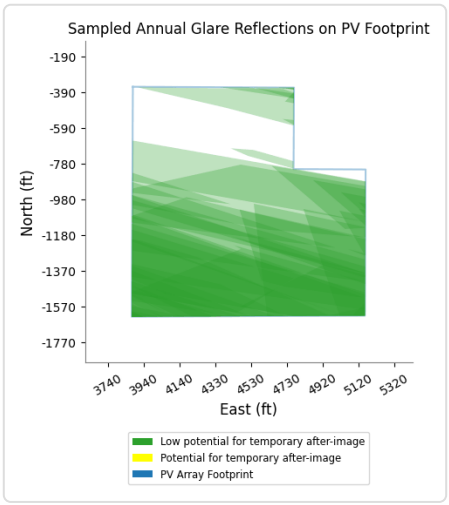
Green glare: 51 min.







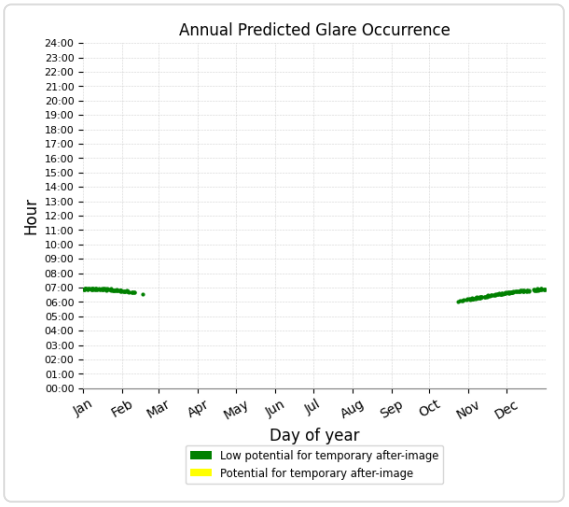


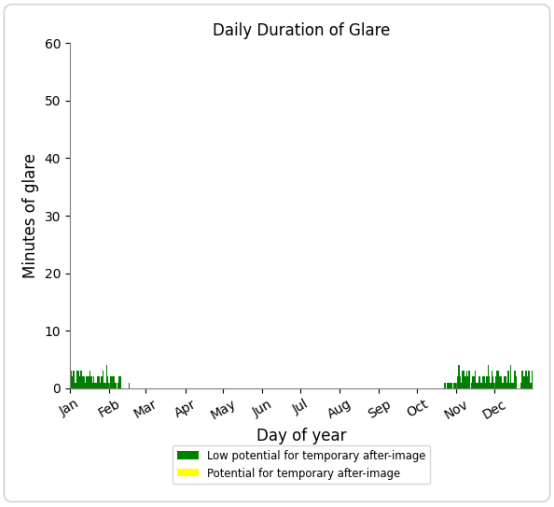


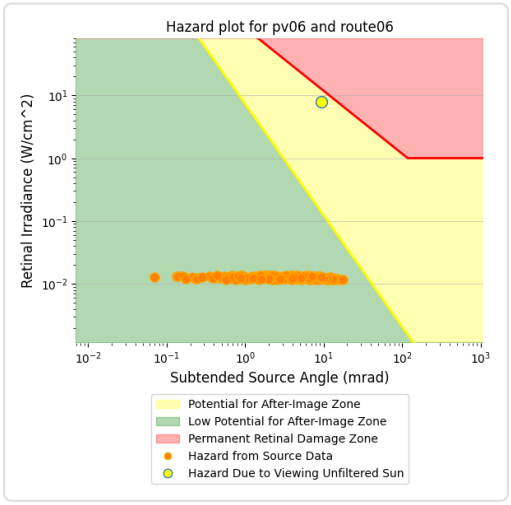
PV06 and Route: Route06

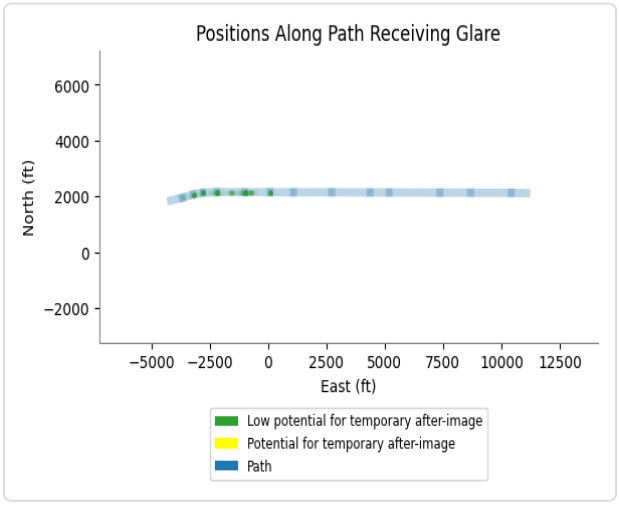
Yellow glare: none

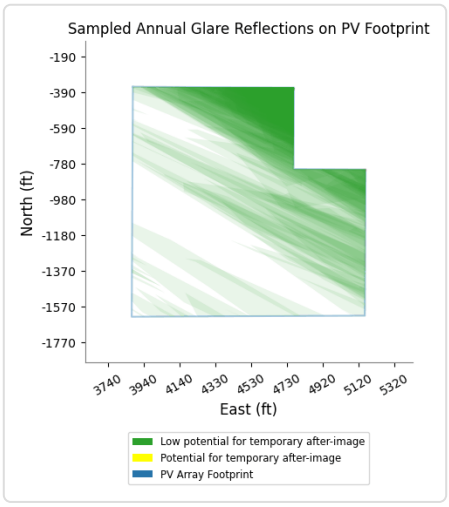
Green glare: 201 min.







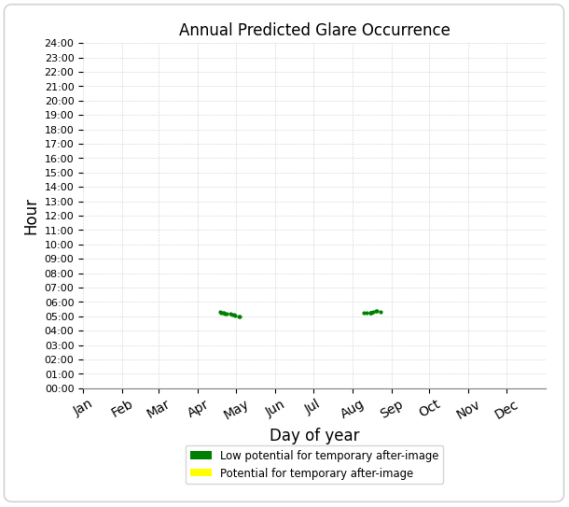


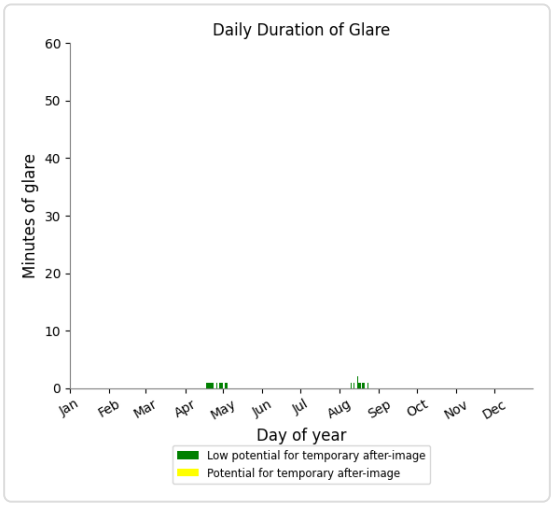


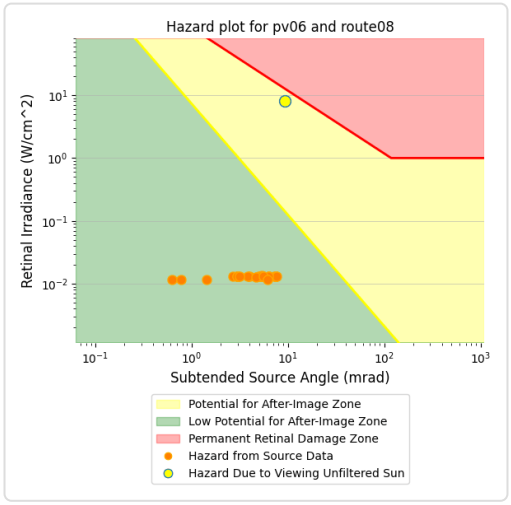
PV06 and Route: Route08

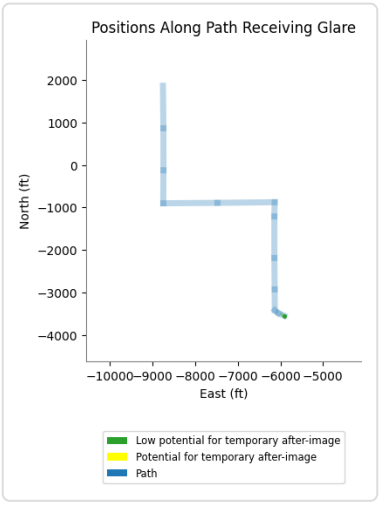
Yellow glare: none

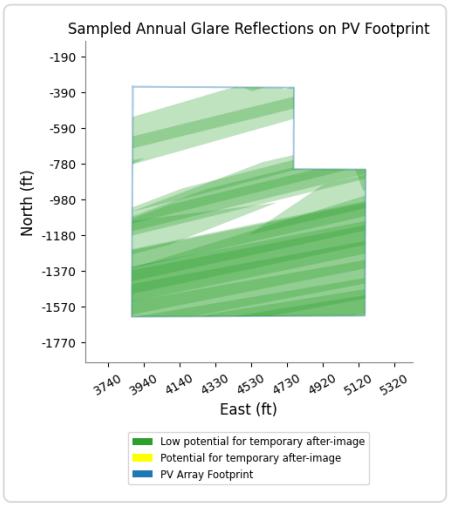
Green glare: 21 min.







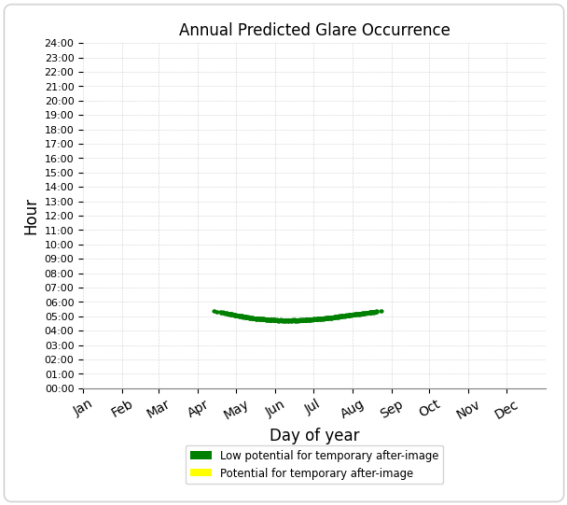


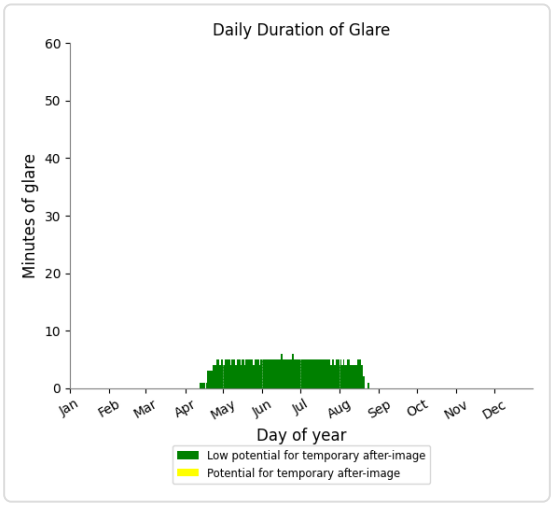


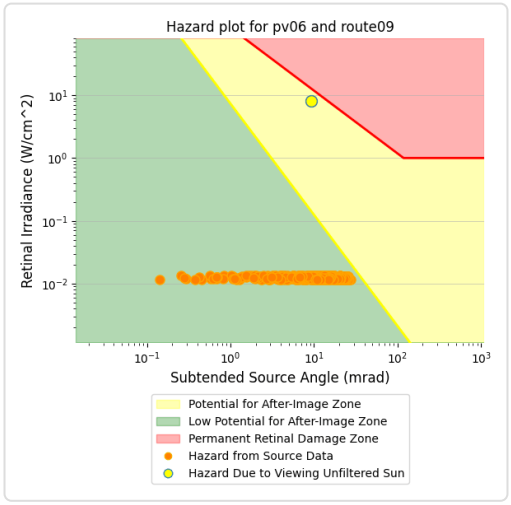
PV06 and Route: Route09

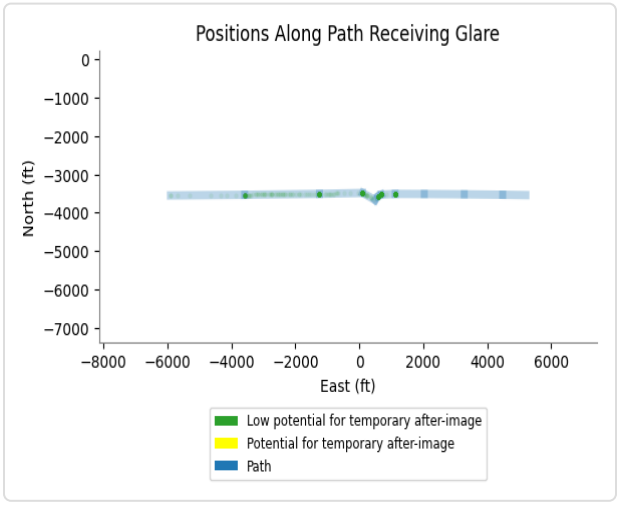
Yellow glare: none

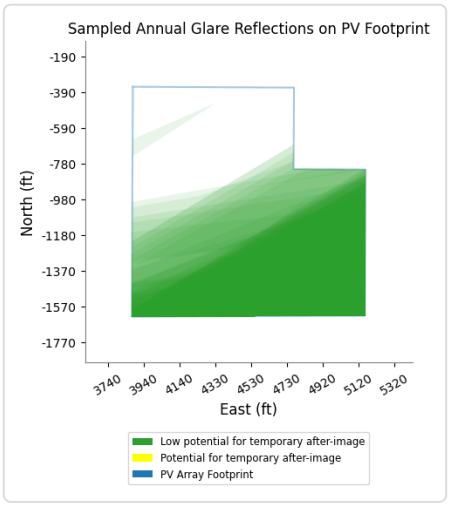
Green glare: 591 min.











PV06 and Route: Route01

No glare found

PV06 and Route: Route02

No glare found

PV06 and Route: Route04

No glare found

PV06 and Route: Route07

No glare found

PV06 and Route: Route10

No glare found

PV06 and Route: Route11

No glare found

PV06 and Route: Route12

No glare found

PV06 and FP: NJK08

No glare found

PV06 and FP: NJK12

No glare found

PV06 and FP: NJK26

No glare found

PV06 and FP: NJK30

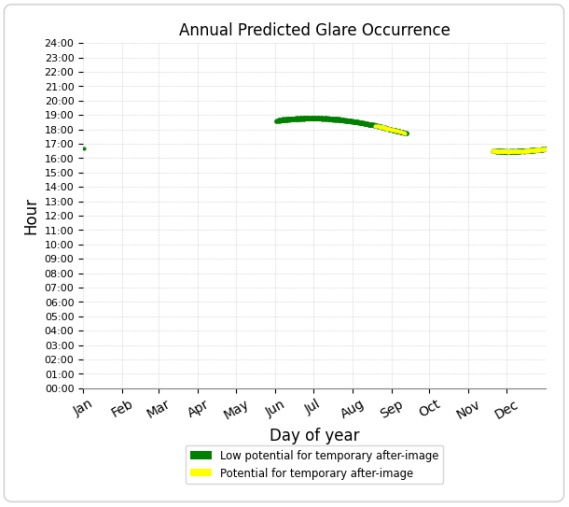
No glare found

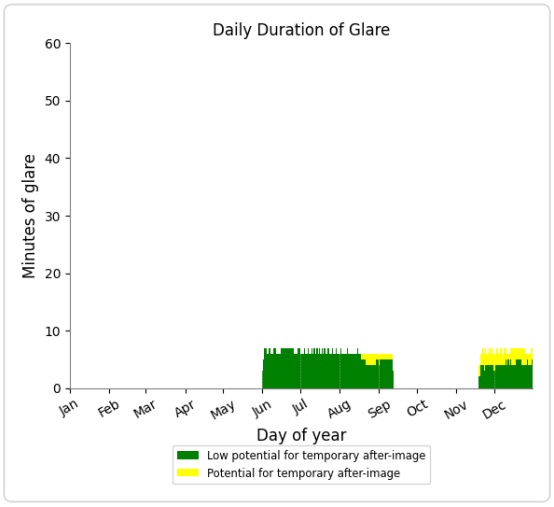
PC ORIGINAL PKG

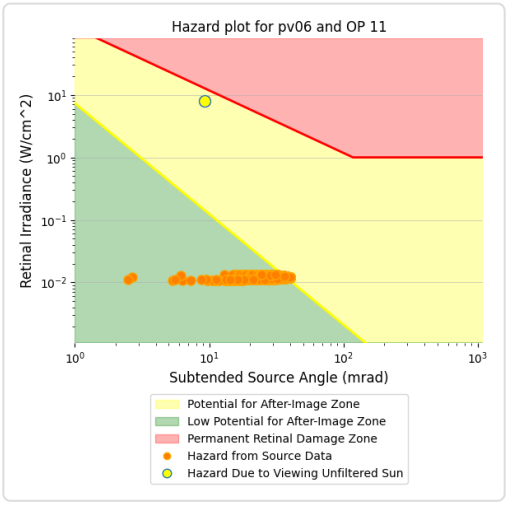
PV06 and OP 11

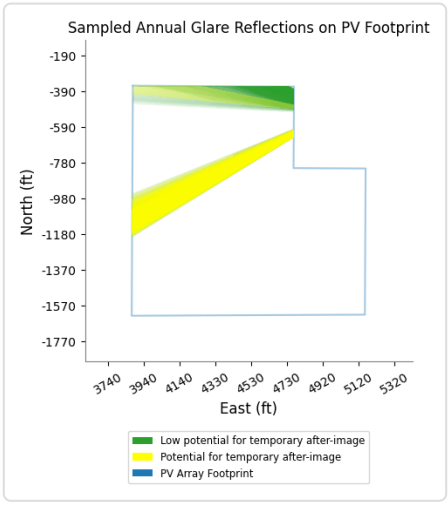
Yellow glare: 135 min.

Green glare: 794 min.





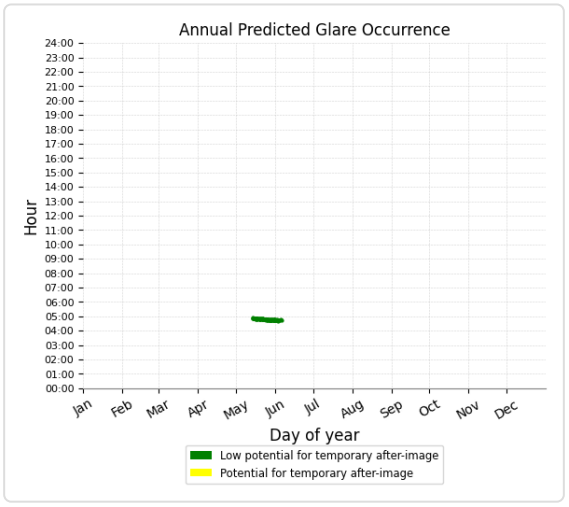


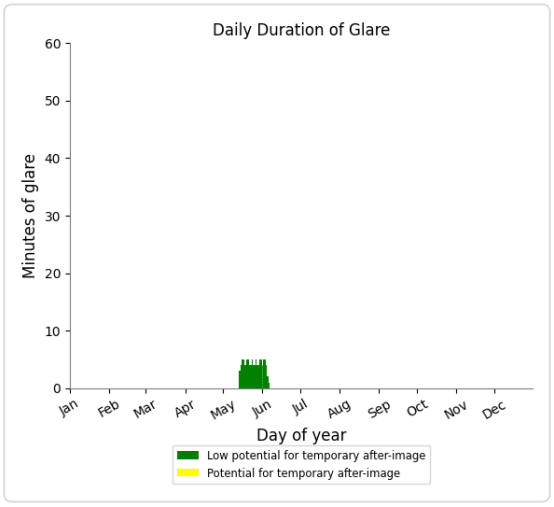


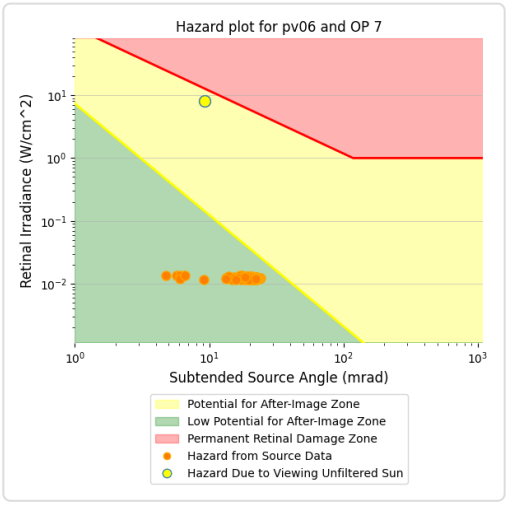
PV06 and OP 7

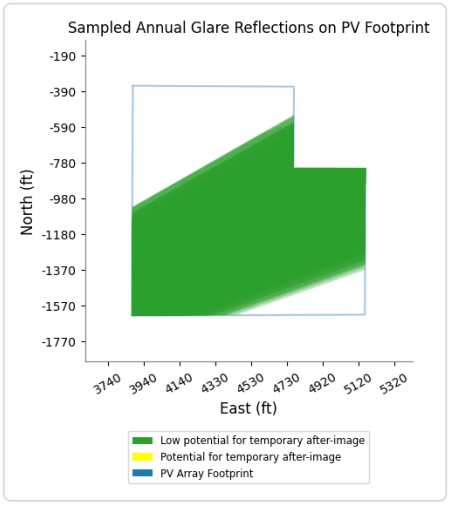
Yellow glare: none

Green glare: 100 min.





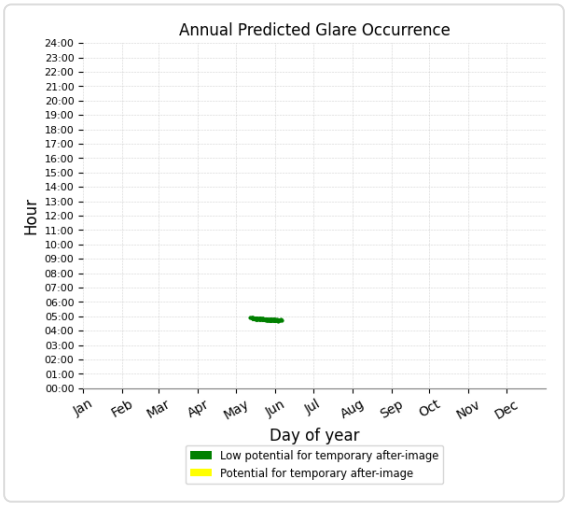


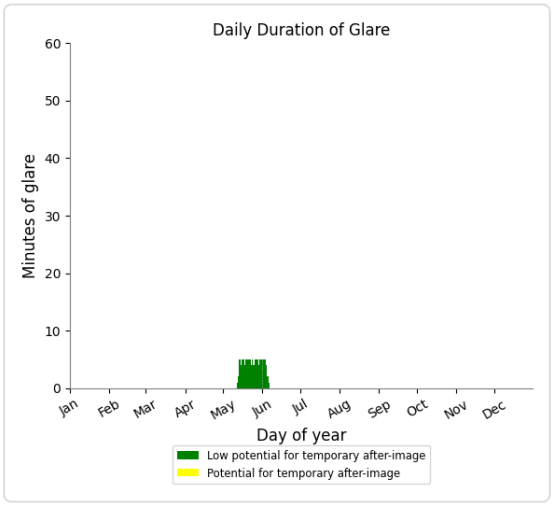


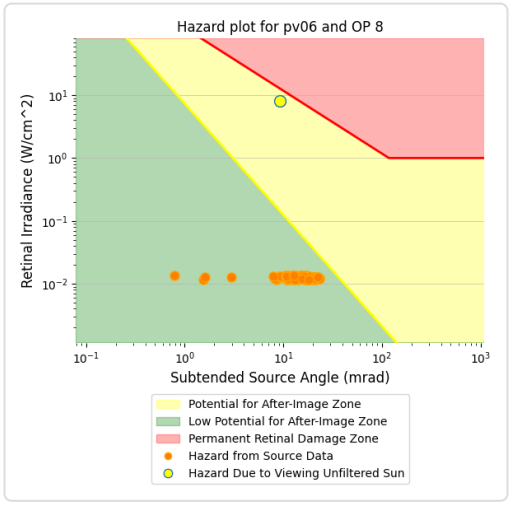
PV06 and OP 8

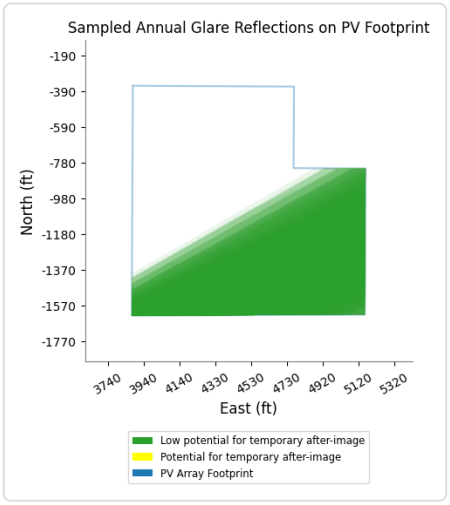
Yellow glare: none

Green glare: 110 min.



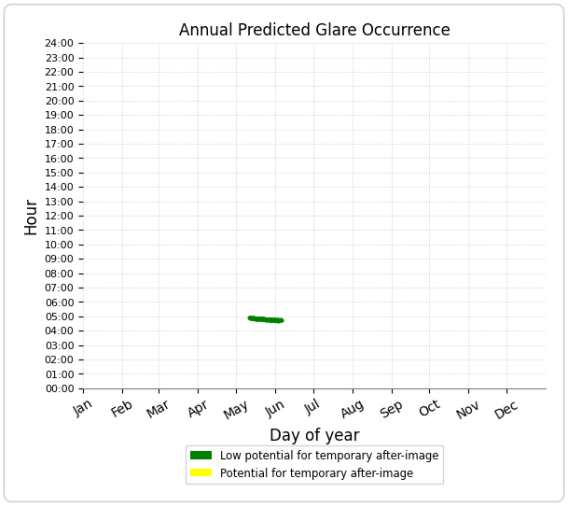


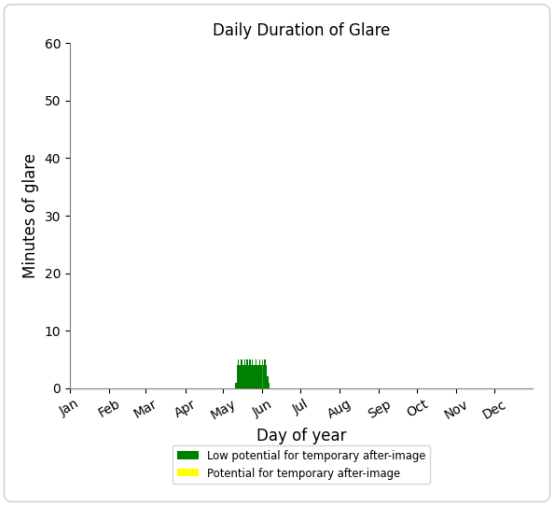


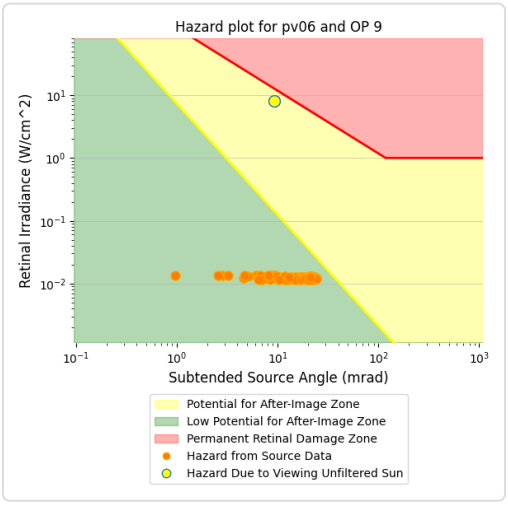


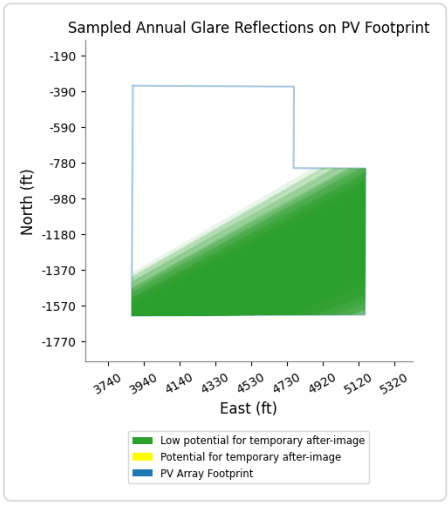
PV06 and OP 9

Yellow glare: none
Green glare: 111 min.









PV06 and OP 1

No glare found

PV06 and OP 2

No glare found

PV06 and OP 3

No glare found

PV06 and OP 4

No glare found

PV06 and OP 5

No glare found

PV06 and OP 6

No glare found

PV06 and OP 10

No glare found

PV06 and OP 12

No glare found

PV06 and OP 13

No glare found

PV06 and OP 14

No glare found

PV06 and OP 15

No glare found

PV06 and OP 16

No glare found

PV06 and OP 17

No glare found

PV06 and OP 18

No glare found

PV06 and OP 19

No glare found

PV06 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV07 low potential for temporary after-image

Receptor results ordered by category of glare

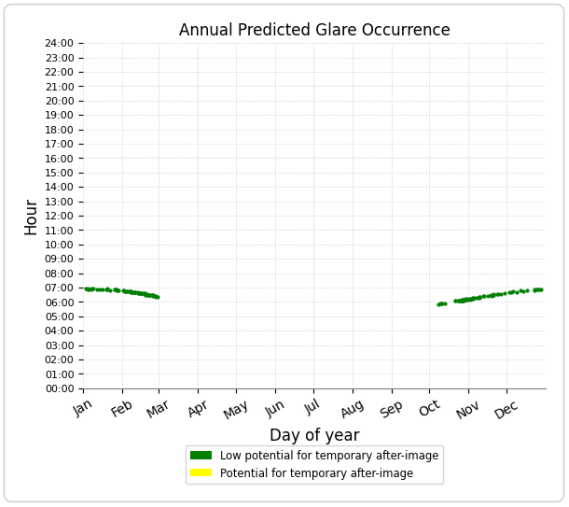
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route06	136	2.3	0	0.0
Route07	167	2.8	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

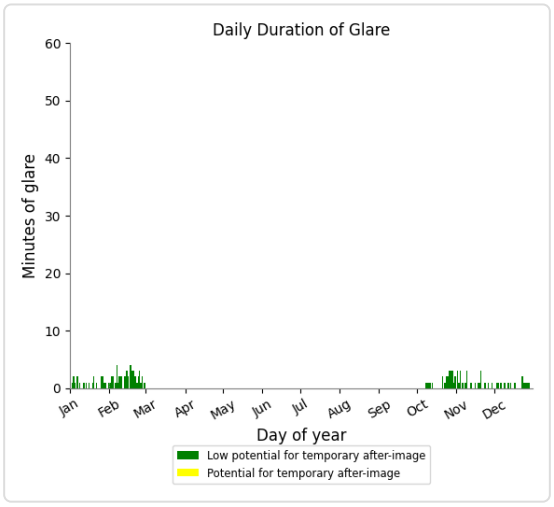
PC ORIGINAL PKG

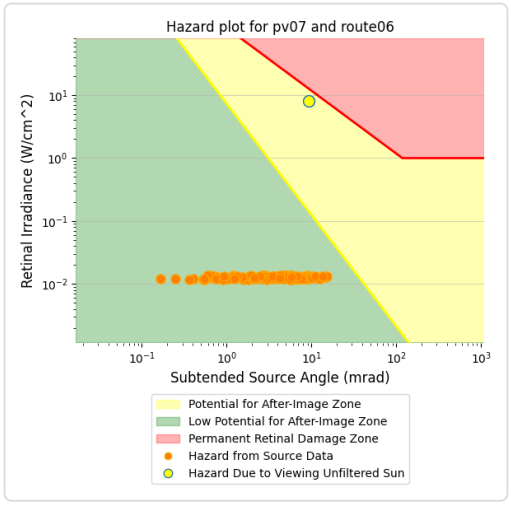
PV07 and Route: Route06

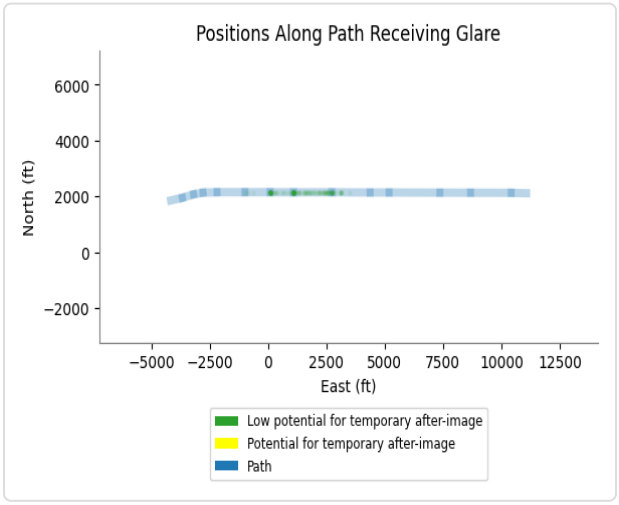
Yellow glare: none

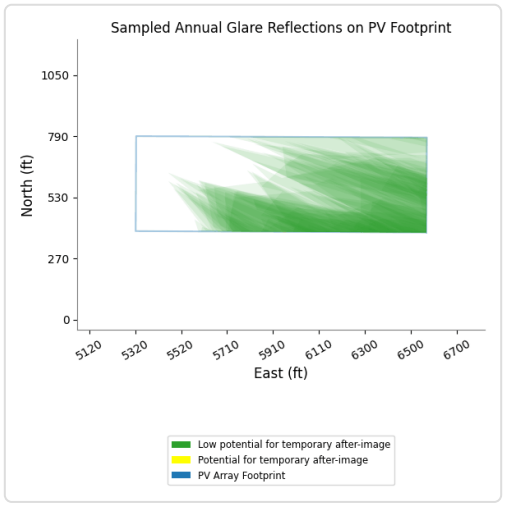
Green glare: 136 min.







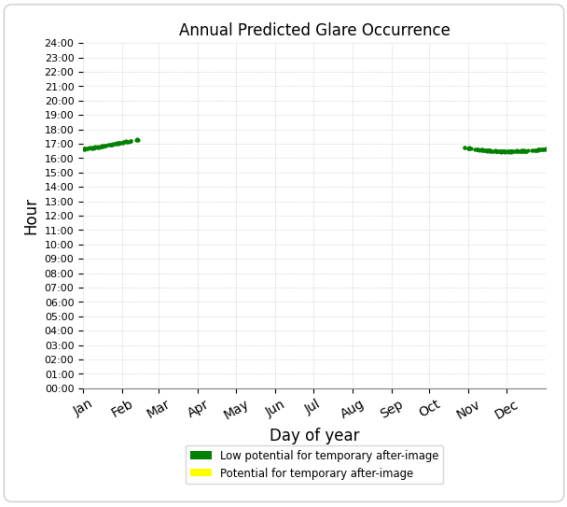


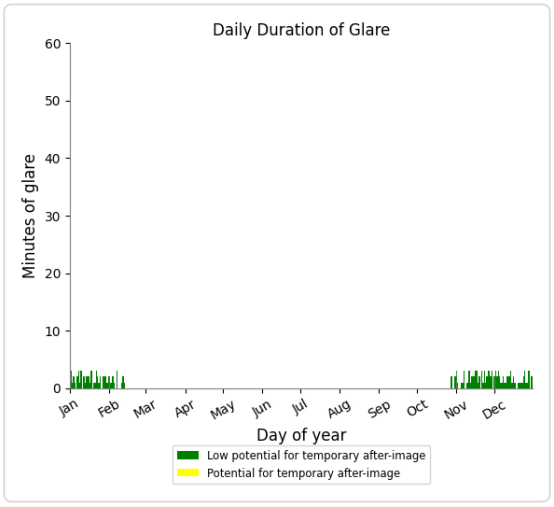


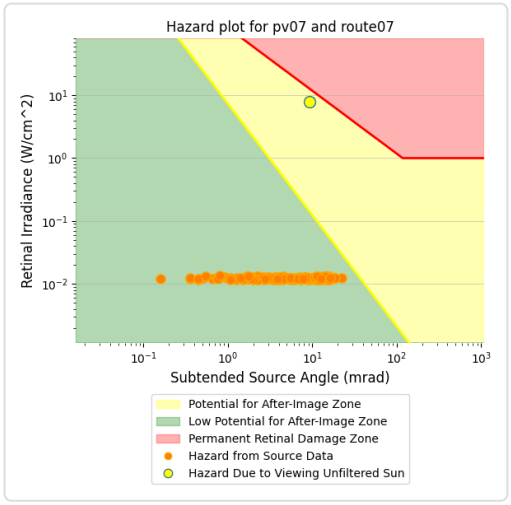
PV07 and Route: Route07

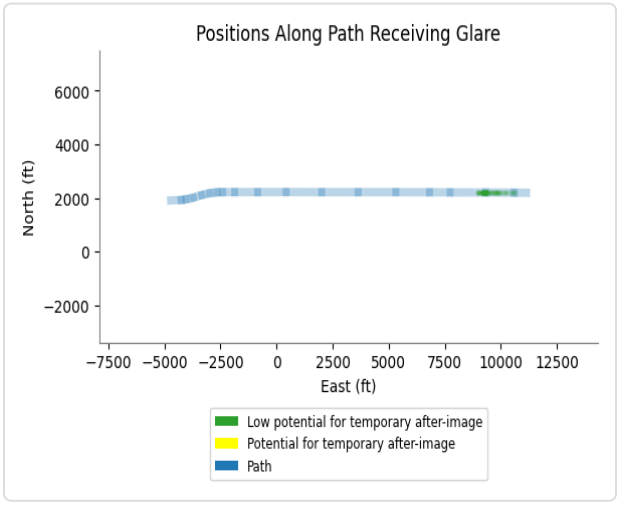
Yellow glare: none

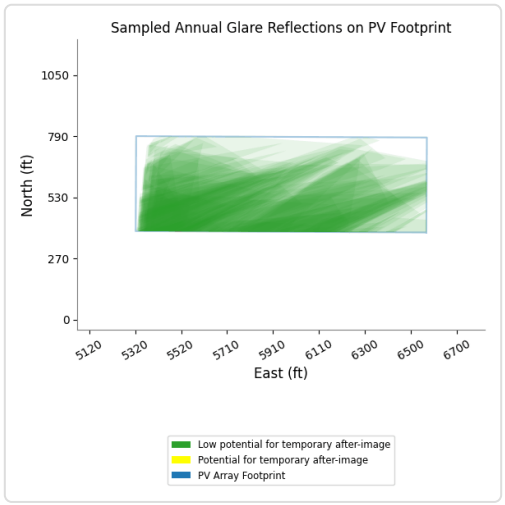
Green glare: 167 min.











PV07 and Route: Route01

No glare found

PV07 and Route: Route02

No glare found

PV07 and Route: Route04

No glare found

PV07 and Route: Route05

No glare found

PV07 and Route: Route08

No glare found

PV07 and Route: Route09

No glare found

PV07 and Route: Route10

No glare found

PV07 and Route: Route11

No glare found

PV07 and Route: Route12

No glare found

PV07 and FP: NJK08

No glare found

PV07 and FP: NJK12

No glare found

PV07 and FP: NJK26

No glare found

PV07 and FP: NJK30

No glare found

PV07 and OP 1

No glare found

PV07 and OP 2

No glare found

PC ORIGINAL PKG

PV07 and OP 3

No glare found

PV07 and OP 4

No glare found

PV07 and OP 5

No glare found

PV07 and OP 6

No glare found

PV07 and OP 7

No glare found

PV07 and OP 8

No glare found

PV07 and OP 9

No glare found

PV07 and OP 10

No glare found

PV07 and OP 11

No glare found

PV07 and OP 12

No glare found

PV07 and OP 13

No glare found

PV07 and OP 14

No glare found

PV07 and OP 15

No glare found

PV07 and OP 16

No glare found

PC ORIGINAL PKG

PV07 and OP 17

No glare found

PV07 and OP 18

No glare found

PV07 and OP 19

No glare found

PV07 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV08 low potential for temporary after-image

Receptor results ordered by category of glare

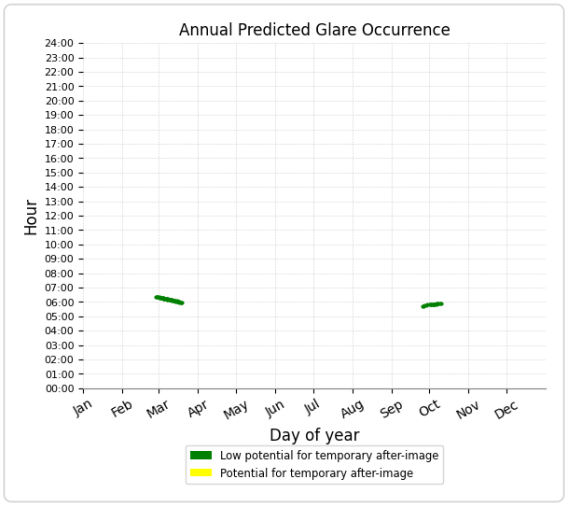
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route05	66	1.1	0	0.0
Route06	323	5.4	0	0.0
Route09	299	5.0	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 6	19	0.3	0	0.0
OP 7	39	0.7	0	0.0
OP 8	26	0.4	0	0.0
OP 9	15	0.2	0	0.0
OP 11	52	0.9	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

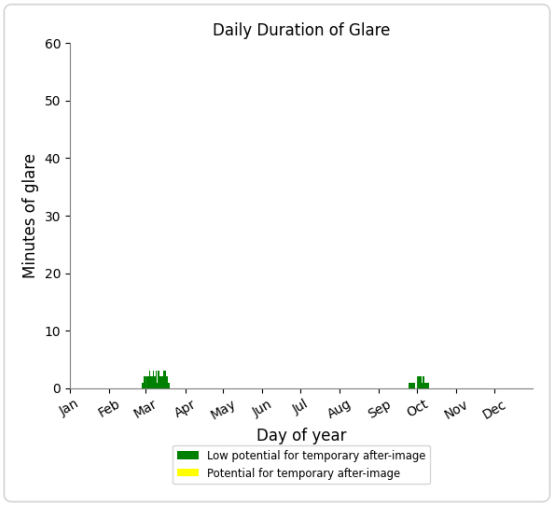
PC ORIGINAL PKG

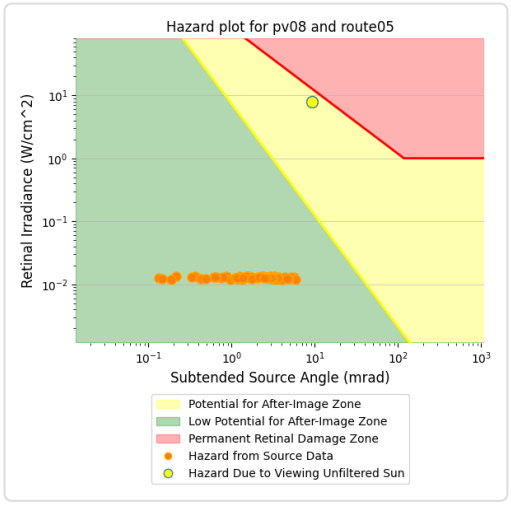
PV08 and Route: Route05

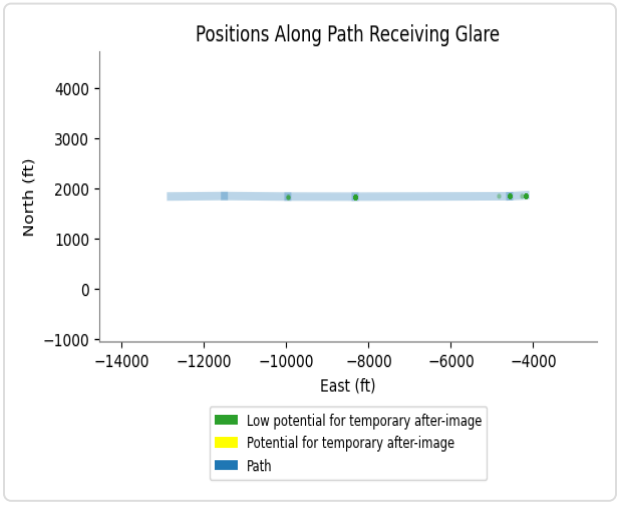
Yellow glare: none

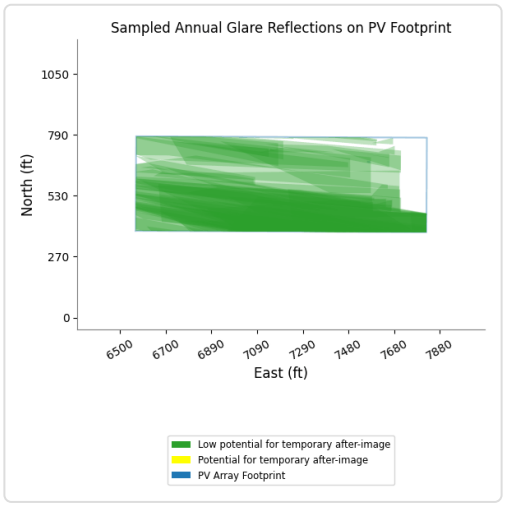
Green glare: 66 min.







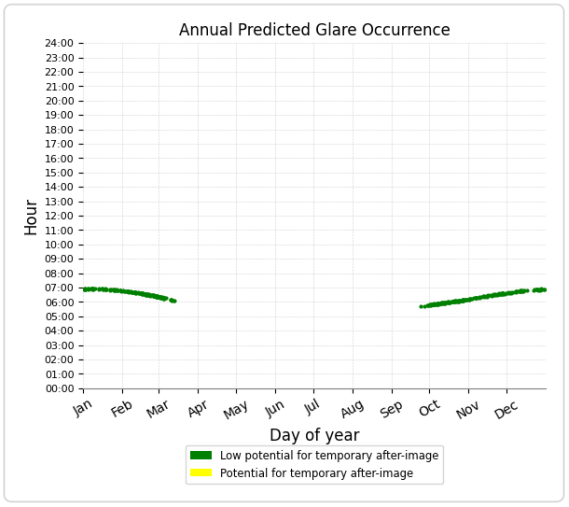


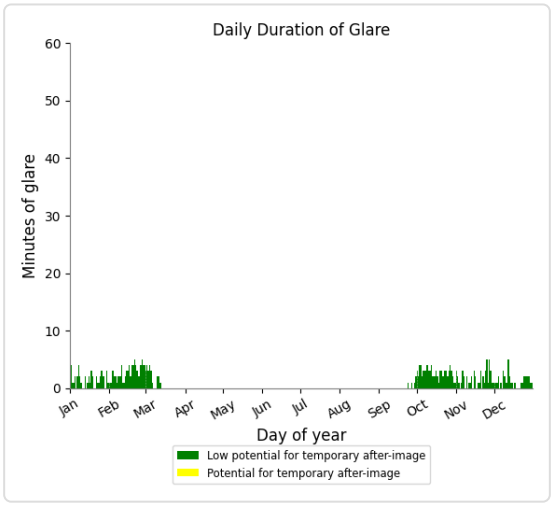


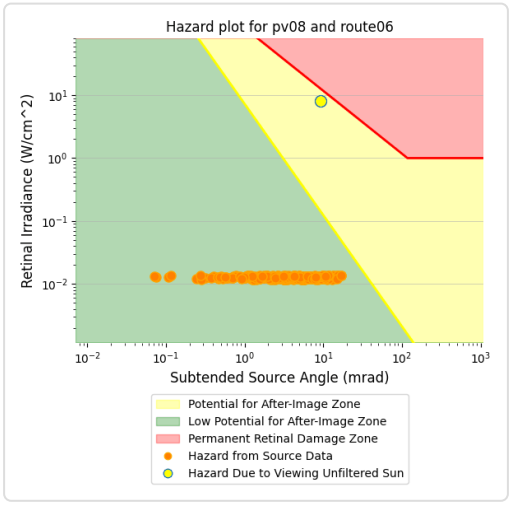
PV08 and Route: Route06

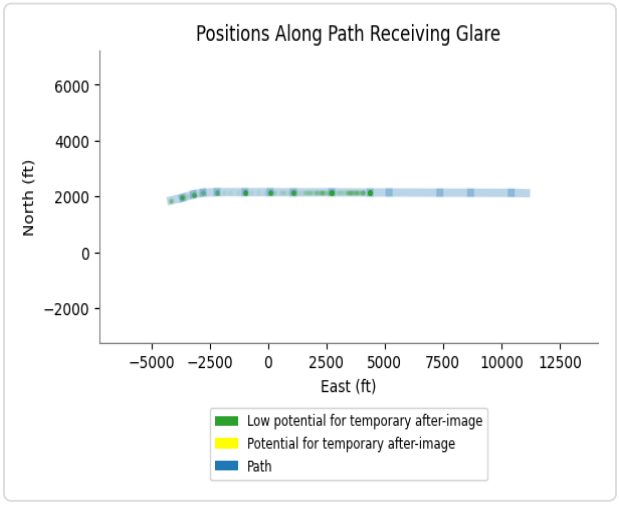
Yellow glare: none

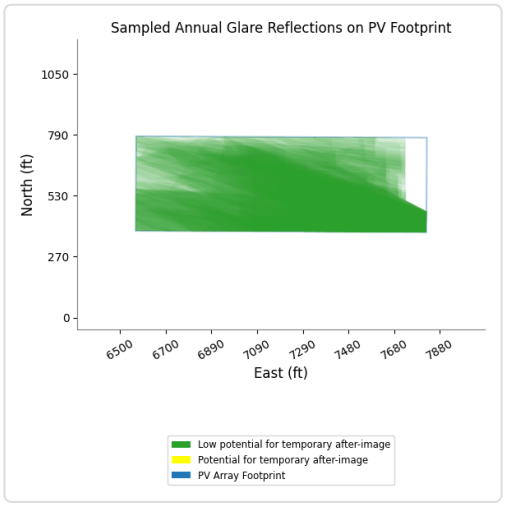
Green glare: 323 min.







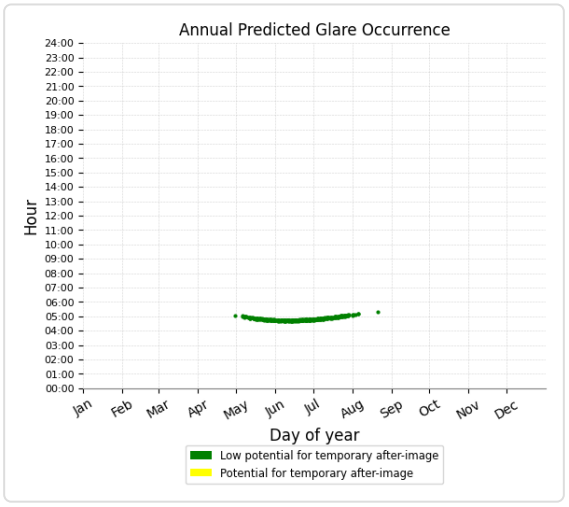


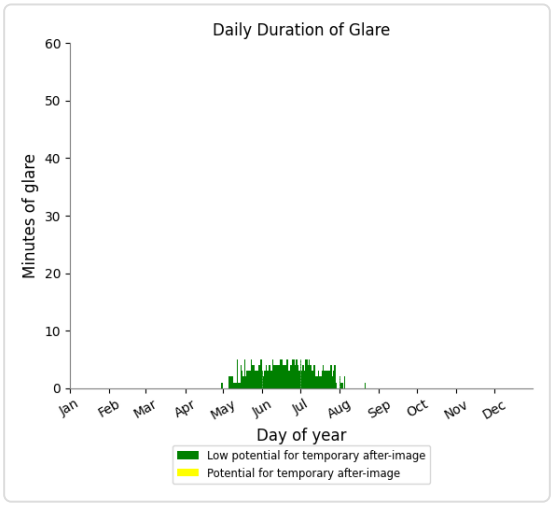


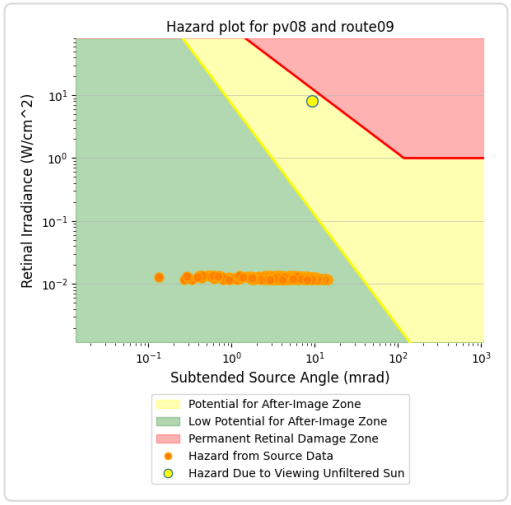
PV08 and Route: Route09

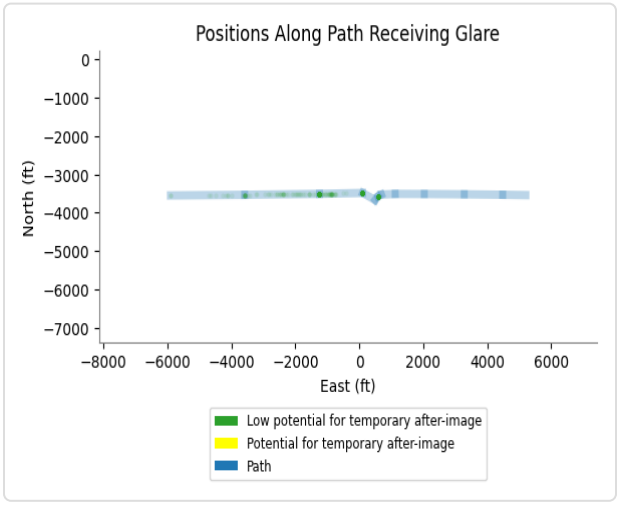
Yellow glare: none

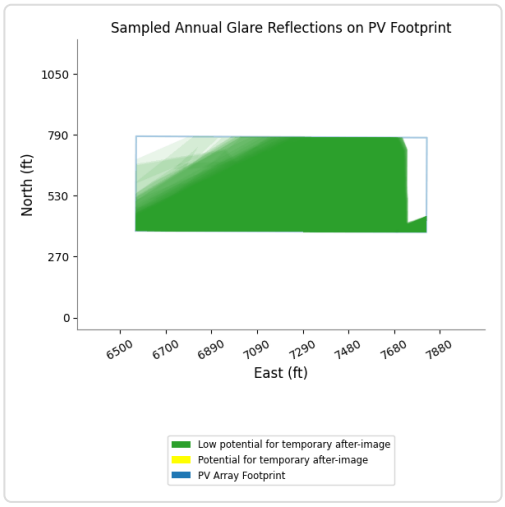
Green glare: 299 min.











PV08 and Route: Route01

No glare found

PV08 and Route: Route02

No glare found

PV08 and Route: Route04

No glare found

PV08 and Route: Route07

No glare found

PV08 and Route: Route08

No glare found

PV08 and Route: Route10

No glare found

PV08 and Route: Route11

No glare found

PV08 and Route: Route12

No glare found

PV08 and FP: NJK08

No glare found

PV08 and FP: NJK12

No glare found

PV08 and FP: NJK26

No glare found

PV08 and FP: NJK30

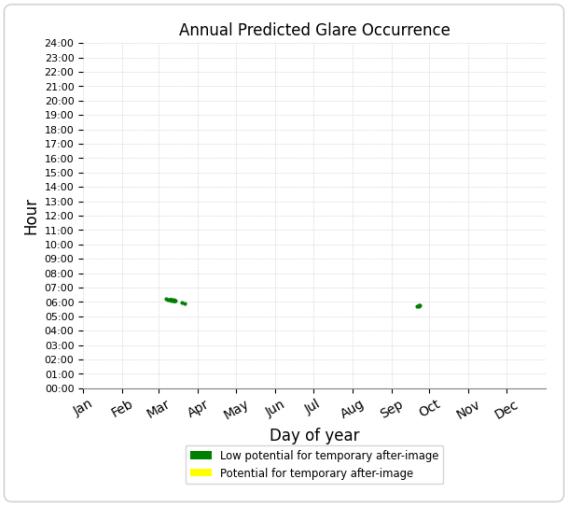
No glare found

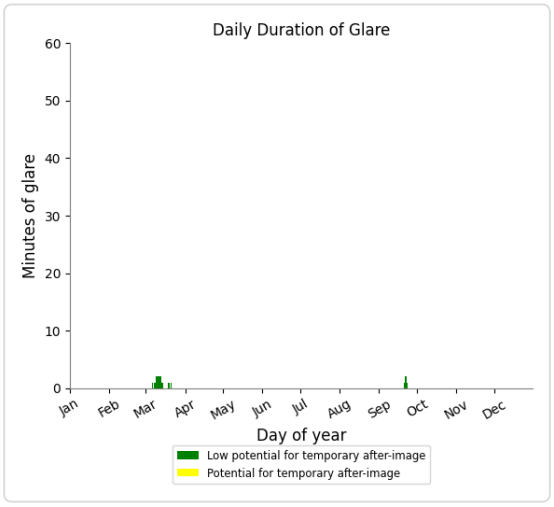
PC ORIGINAL PKG

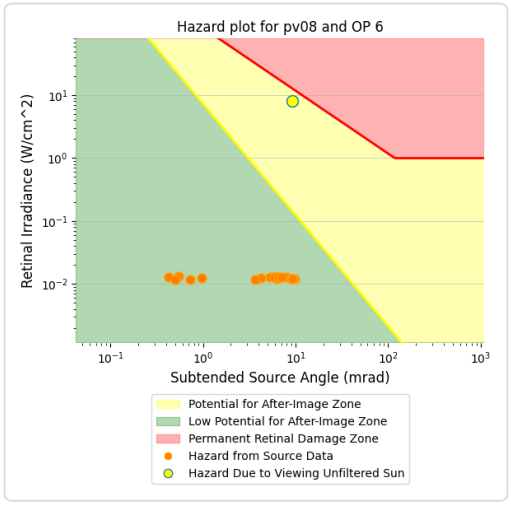
PV08 and OP 6

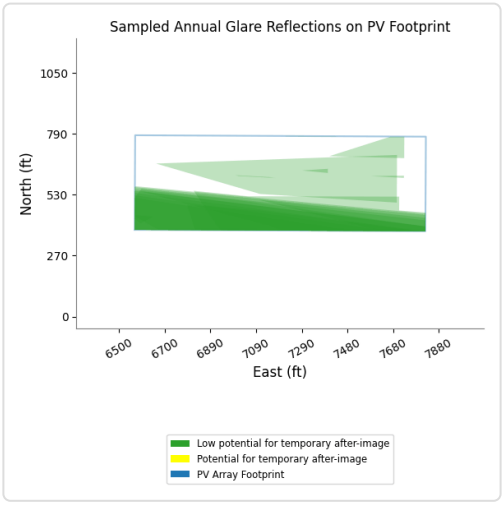
Yellow glare: none

Green glare: 19 min.





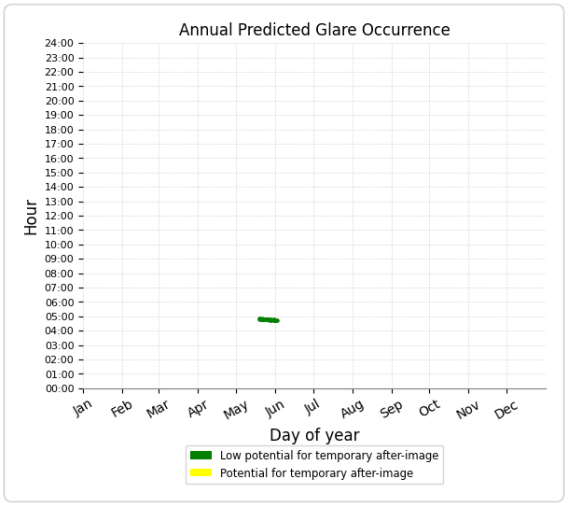


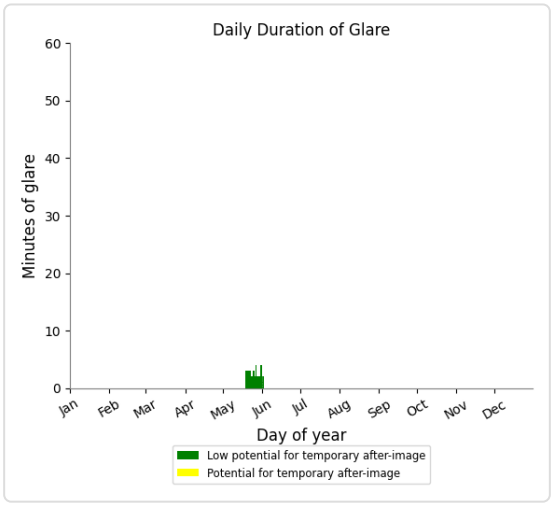


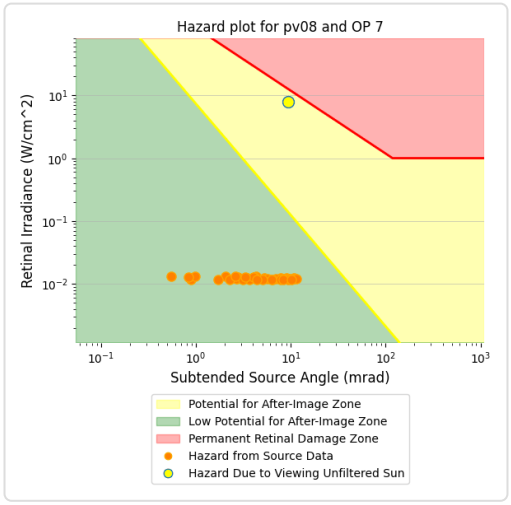
PV08 and OP 7

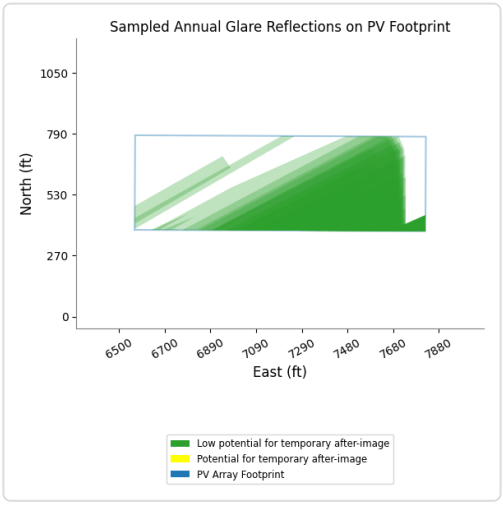
Yellow glare: none

Green glare: 39 min.





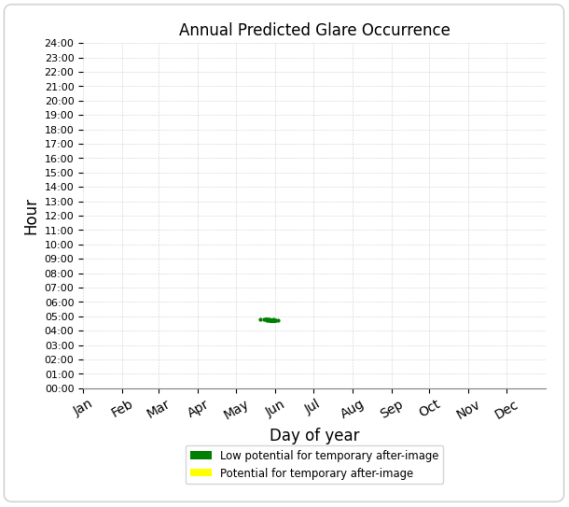


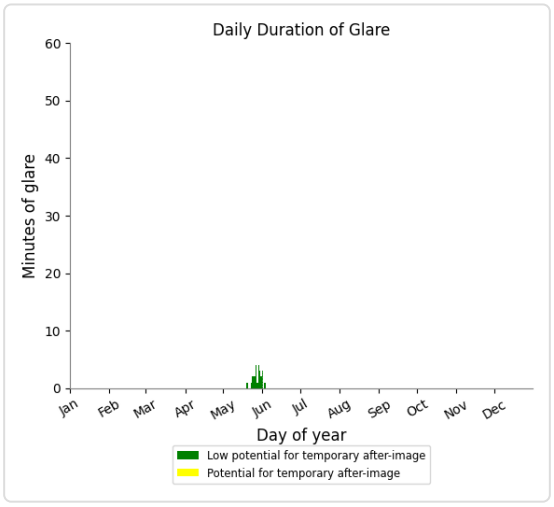


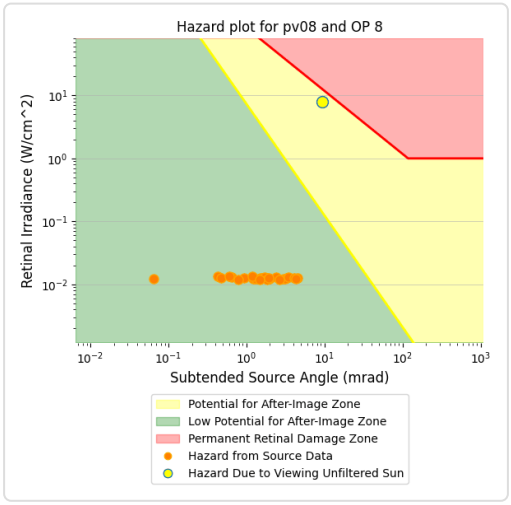
PV08 and OP 8

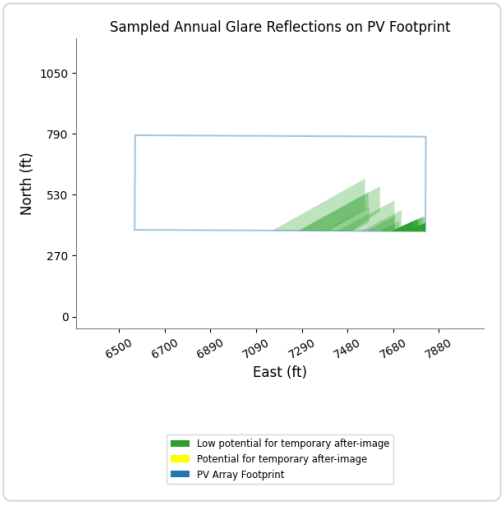
Yellow glare: none

Green glare: 26 min.





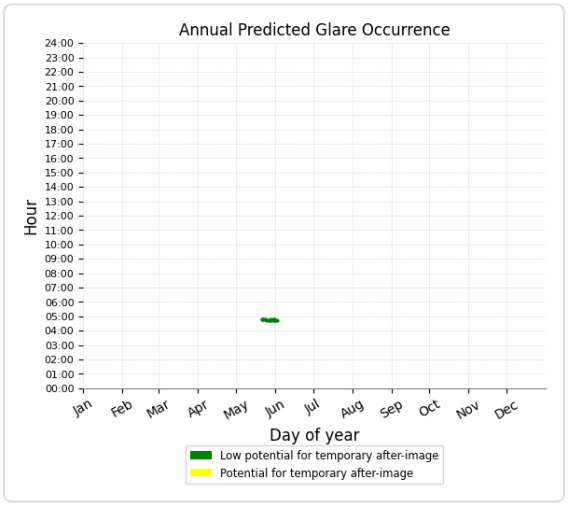


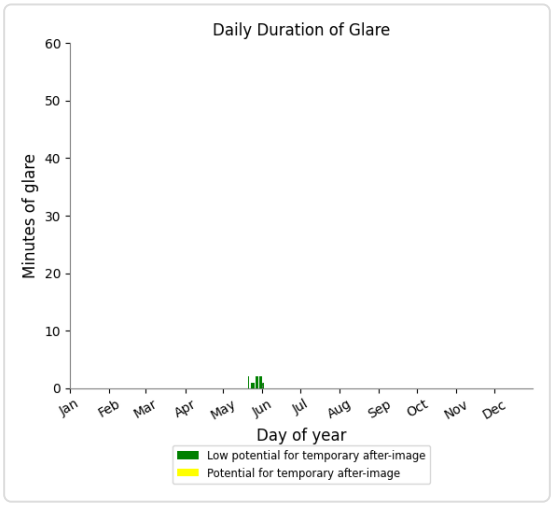


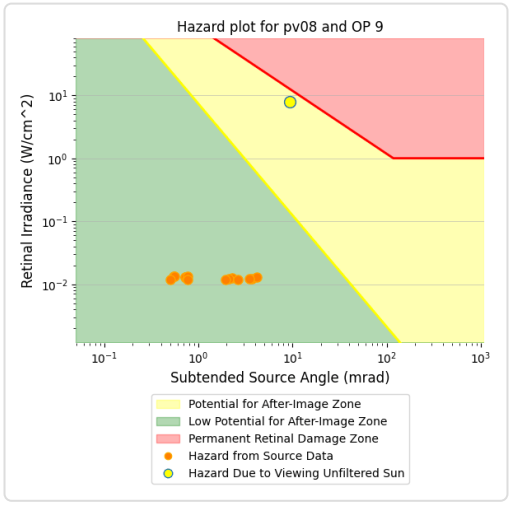
PV08 and OP 9

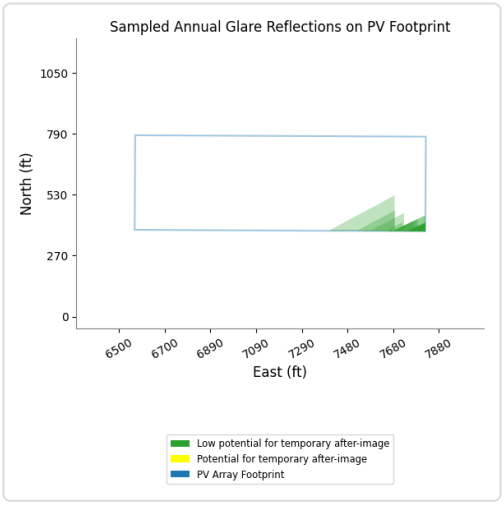
Yellow glare: none

Green glare: 15 min.



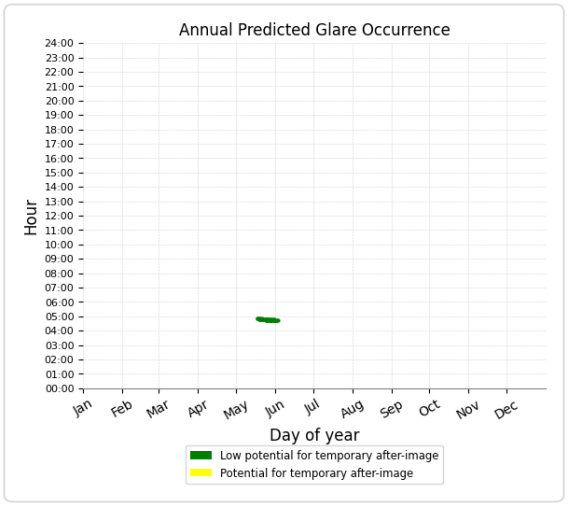


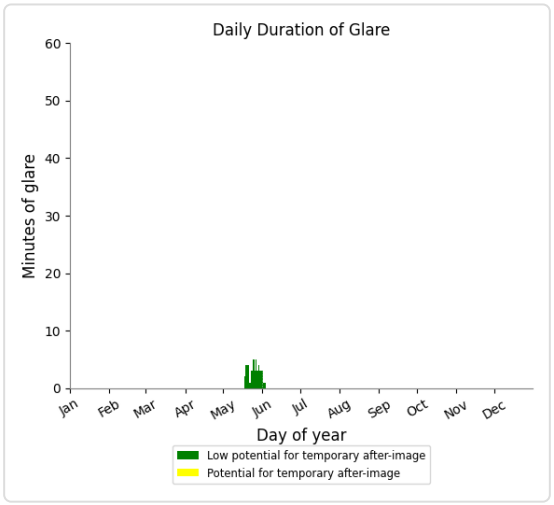


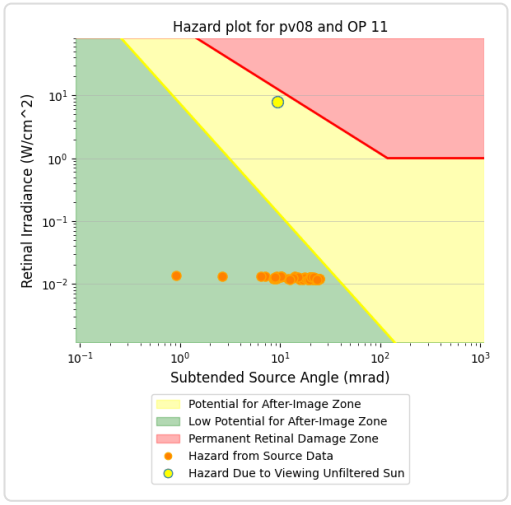


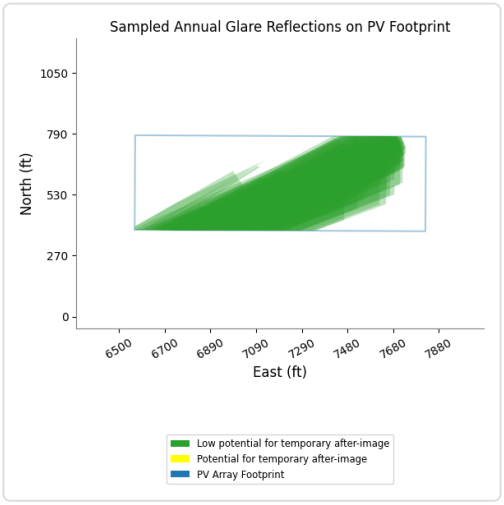
PV08 and OP 11

Yellow glare: none
Green glare: 52 min.









PV08 and OP 1

No glare found

PV08 and OP 2

No glare found

PV08 and OP 3

No glare found

PV08 and OP 4

No glare found

PV08 and OP 5

No glare found

PV08 and OP 10

No glare found

PV08 and OP 12

No glare found

PV08 and OP 13

No glare found

PV08 and OP 14

No glare found

PV08 and OP 15

No glare found

PV08 and OP 16

No glare found

PV08 and OP 17

No glare found

PV08 and OP 18

No glare found

PV08 and OP 19

No glare found

PV08 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV09 potential temporary after-image

Receptor results ordered by category of glare

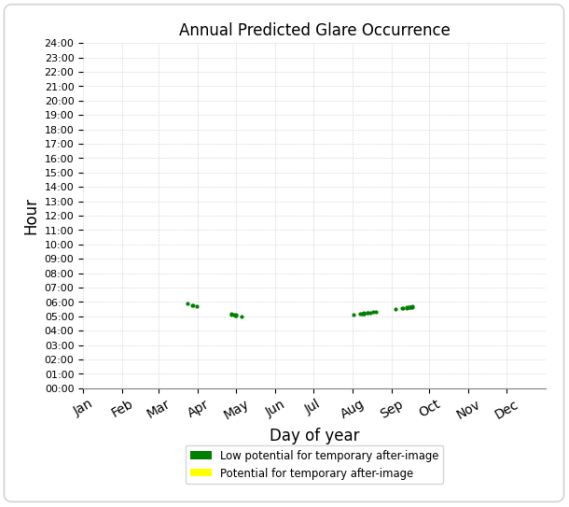
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route08	34	0.6	0	0.0
Route09	373	6.2	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 11	122	2.0	1	0.0
OP 7	33	0.6	0	0.0
OP 8	16	0.3	0	0.0
OP 9	26	0.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

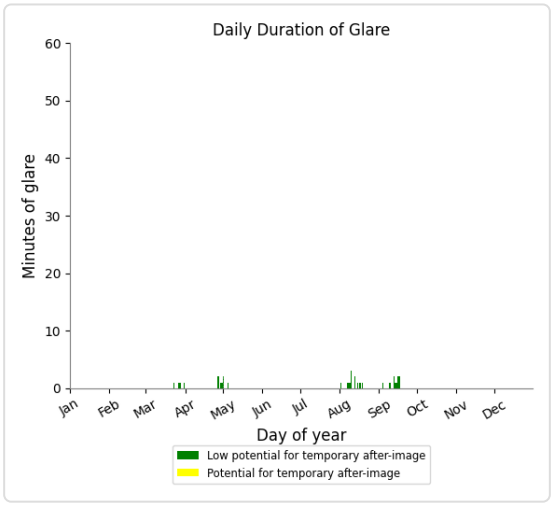
PC ORIGINAL PKG

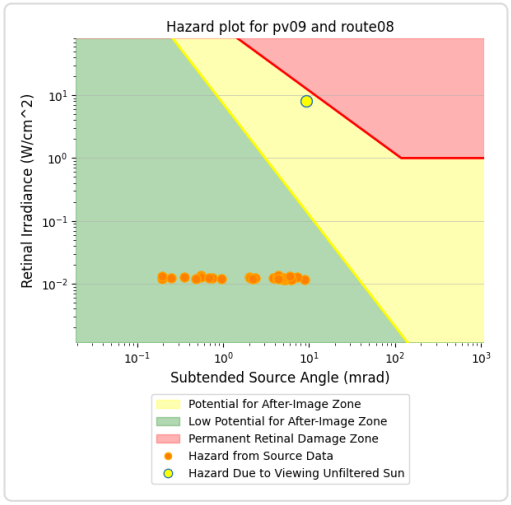
PV09 and Route: Route08

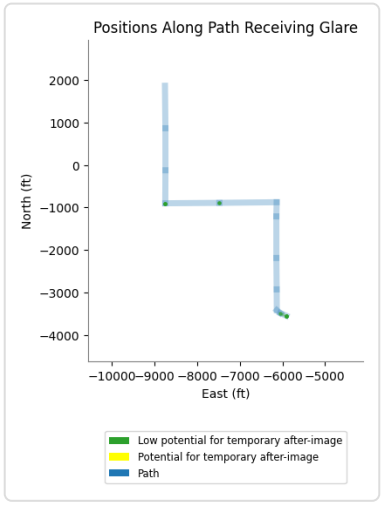
Yellow glare: none

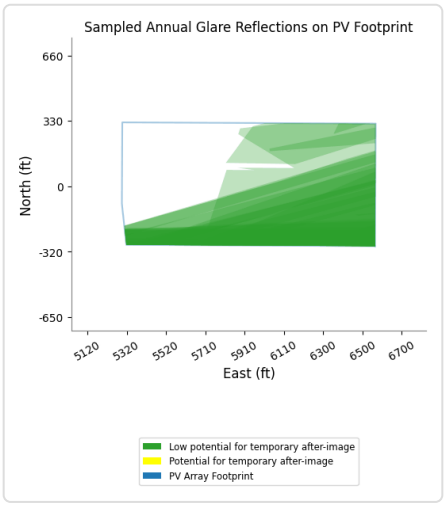
Green glare: 34 min.







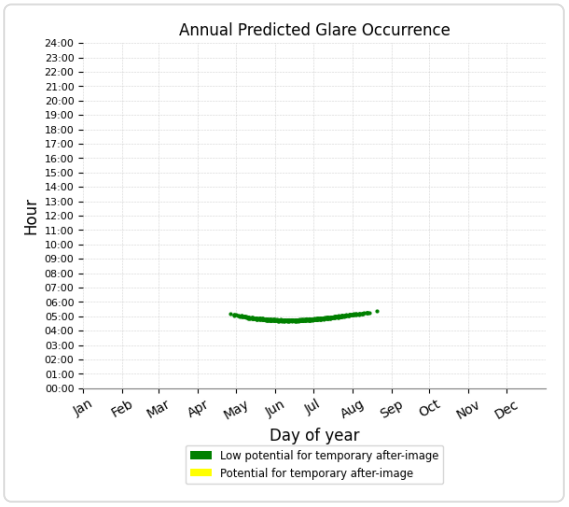


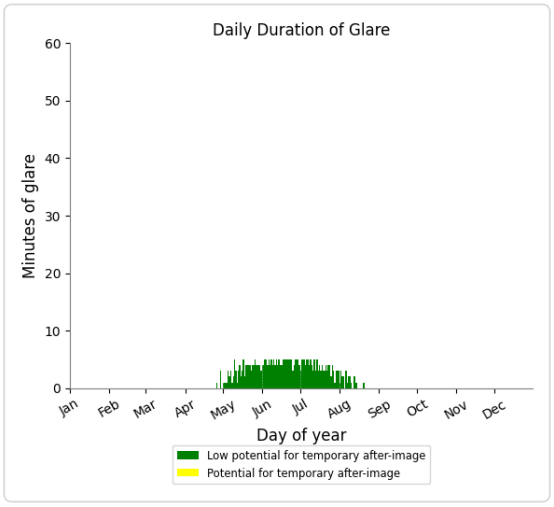


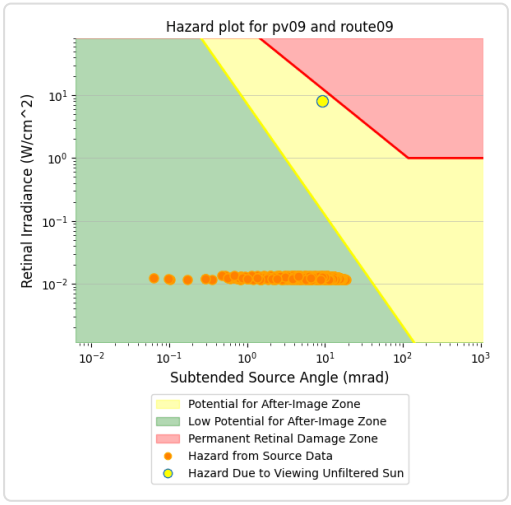
PV09 and Route: Route09

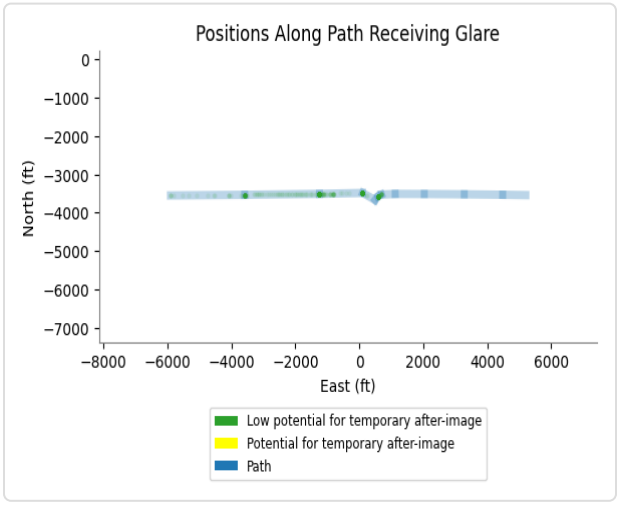
Yellow glare: none

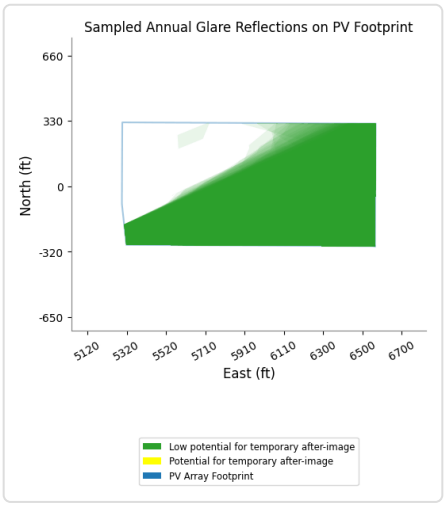
Green glare: 373 min.











PV09 and Route: Route01

No glare found

PV09 and Route: Route02

No glare found

PV09 and Route: Route04

No glare found

PV09 and Route: Route05

No glare found

PV09 and Route: Route06

No glare found

PV09 and Route: Route07

No glare found

PV09 and Route: Route10

No glare found

PV09 and Route: Route11

No glare found

PV09 and Route: Route12

No glare found

PV09 and FP: NJK08

No glare found

PV09 and FP: NJK12

No glare found

PV09 and FP: NJK26

No glare found

PV09 and FP: NJK30

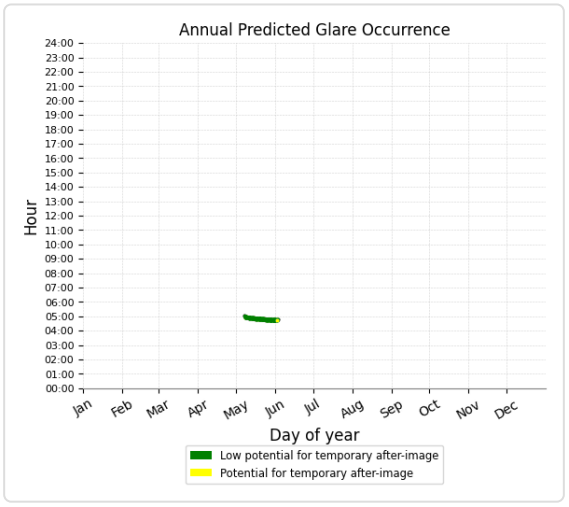
No glare found

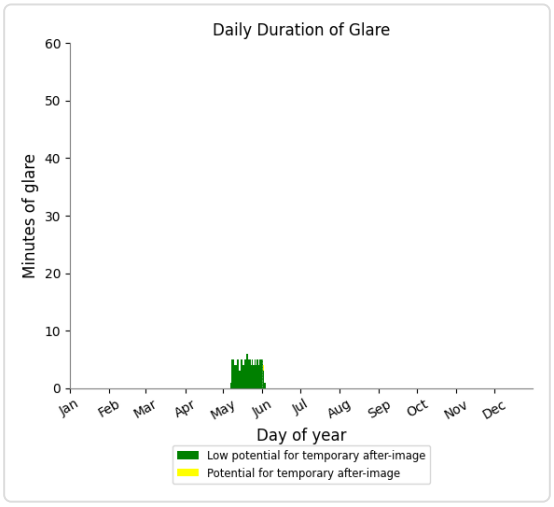
PC ORIGINAL PKG

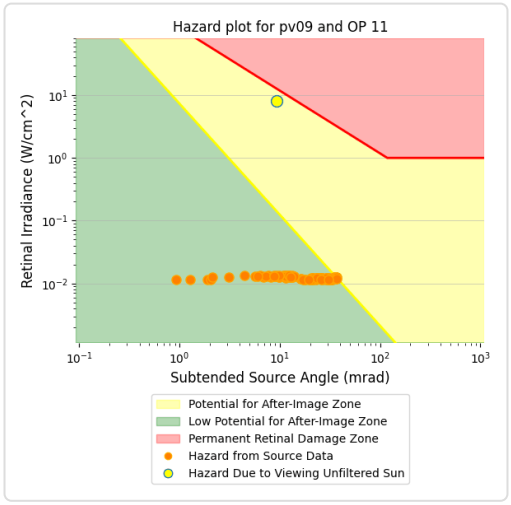
PV09 and OP 11

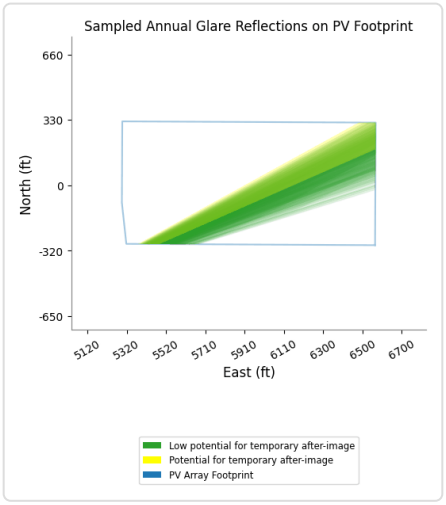
Yellow glare: 1 min.

Green glare: 122 min.





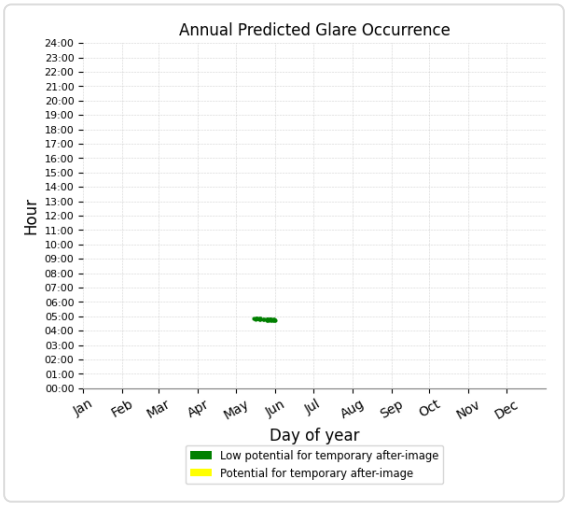


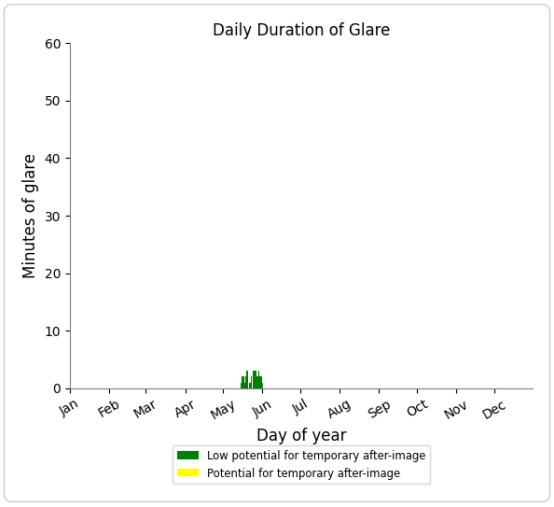


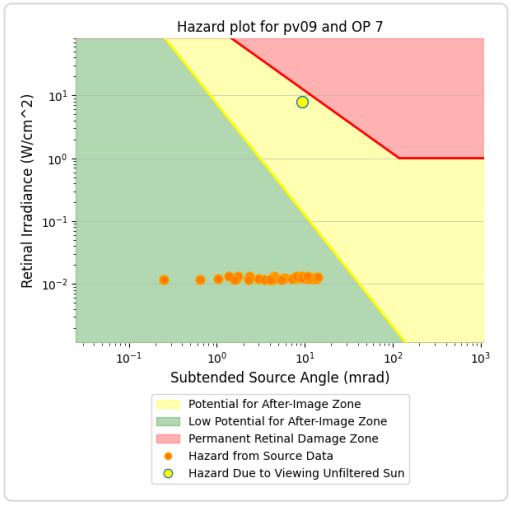
PV09 and OP 7

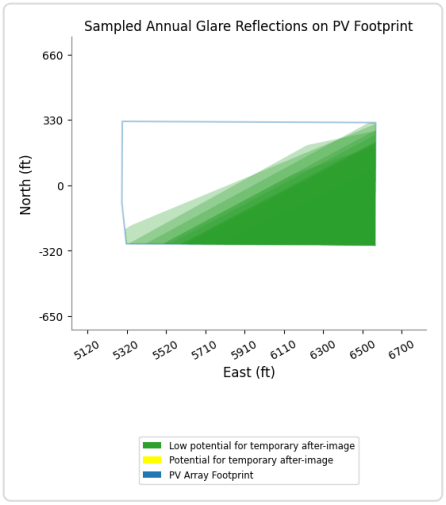
Yellow glare: none

Green glare: 33 min.





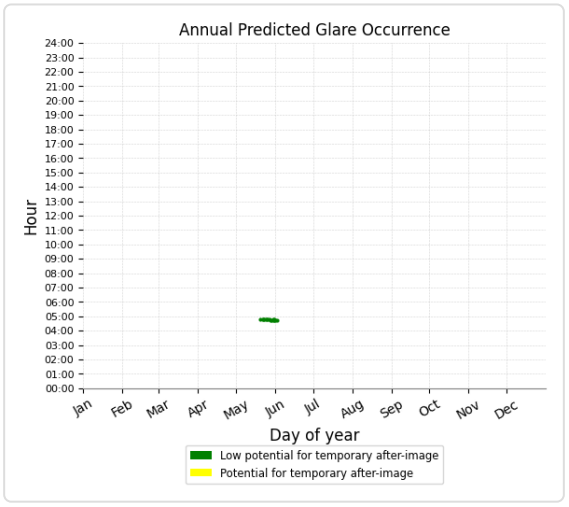


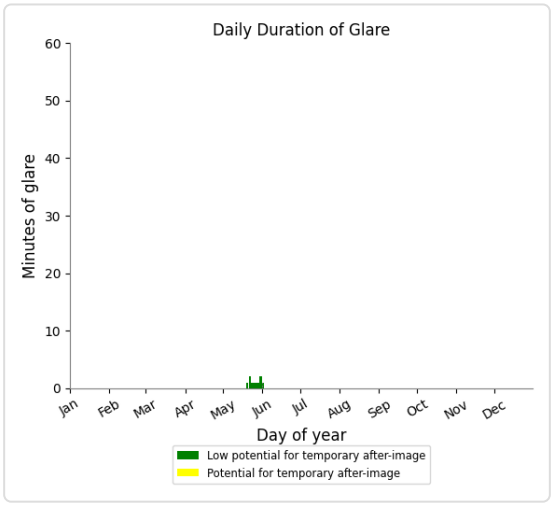


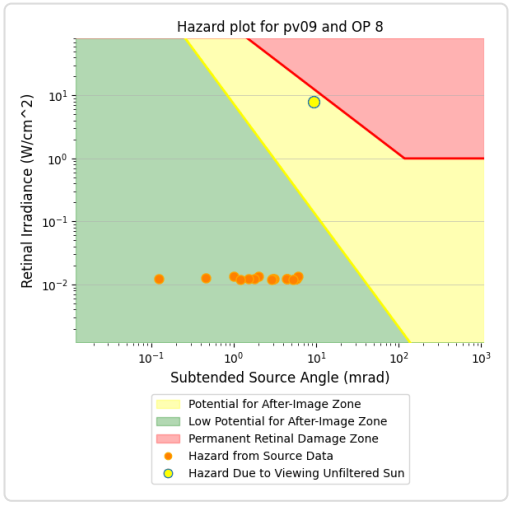
PV09 and OP 8

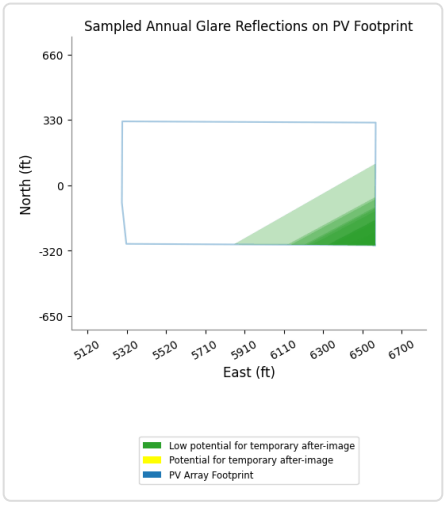
Yellow glare: none

Green glare: 16 min.



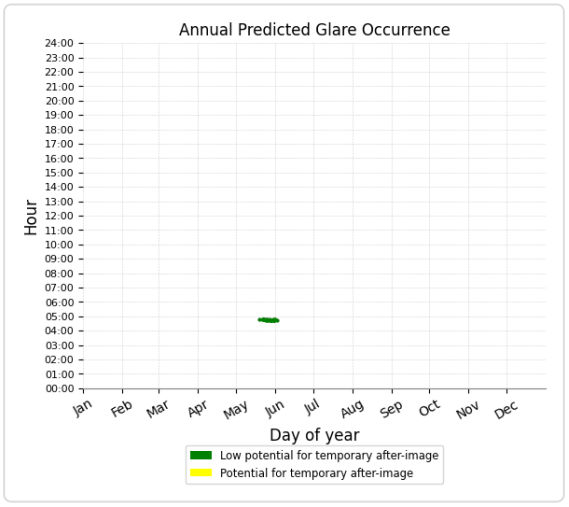


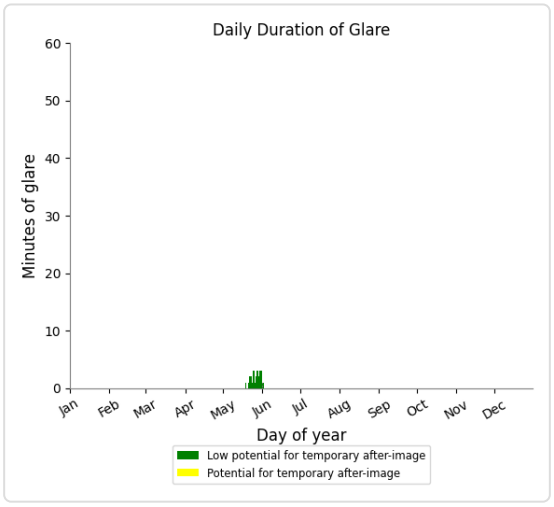


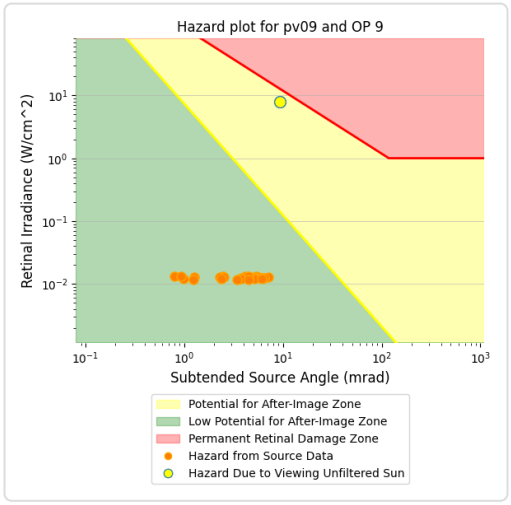


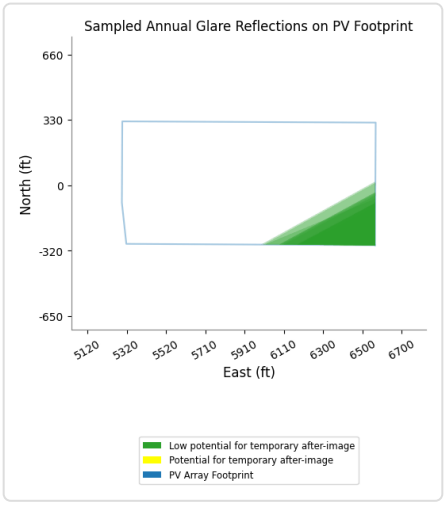
PV09 and OP 9

Yellow glare: none
Green glare: 26 min.









PV09 and OP 1

No glare found

PV09 and OP 2

No glare found

PV09 and OP 3

No glare found

PV09 and OP 4

No glare found

PV09 and OP 5

No glare found

PV09 and OP 6

No glare found

PV09 and OP 10

No glare found

PV09 and OP 12

No glare found

PV09 and OP 13

No glare found

PV09 and OP 14

No glare found

PV09 and OP 15

No glare found

PV09 and OP 16

No glare found

PV09 and OP 17

No glare found

PV09 and OP 18

No glare found

PV09 and OP 19

No glare found

PV09 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV10 low potential for temporary after-image

Receptor results ordered by category of glare

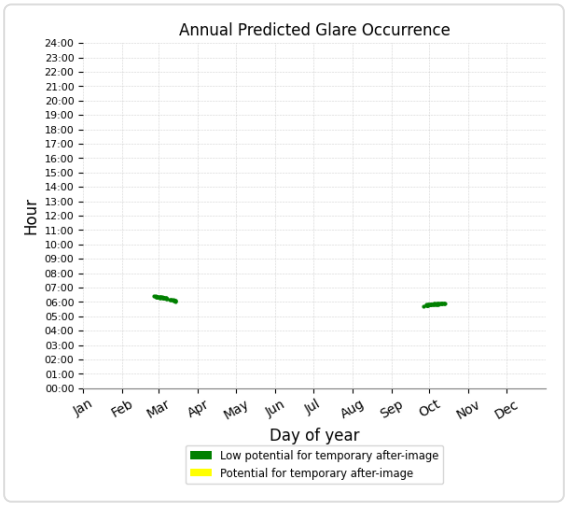
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route05	69	1.1	0	0.0
Route06	498	8.3	0	0.0
Route08	47	0.8	0	0.0
Route09	258	4.3	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 6	20	0.3	0	0.0
OP 8	35	0.6	0	0.0
OP 9	53	0.9	0	0.0
OP 11	60	1.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

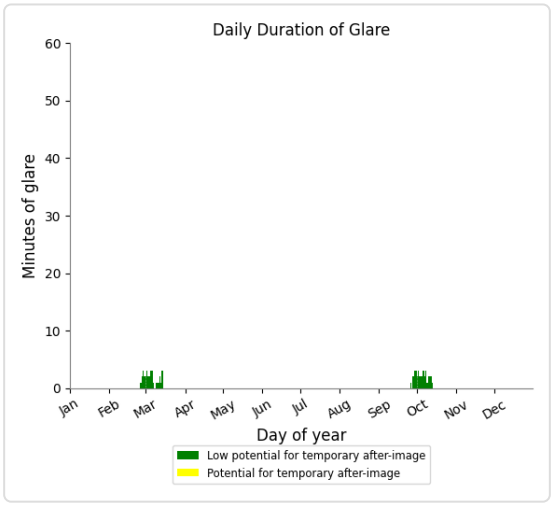
PC ORIGINAL PKG

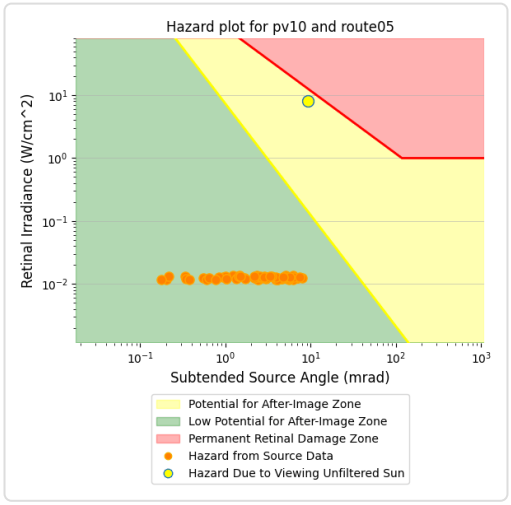
PV10 and Route: Route05

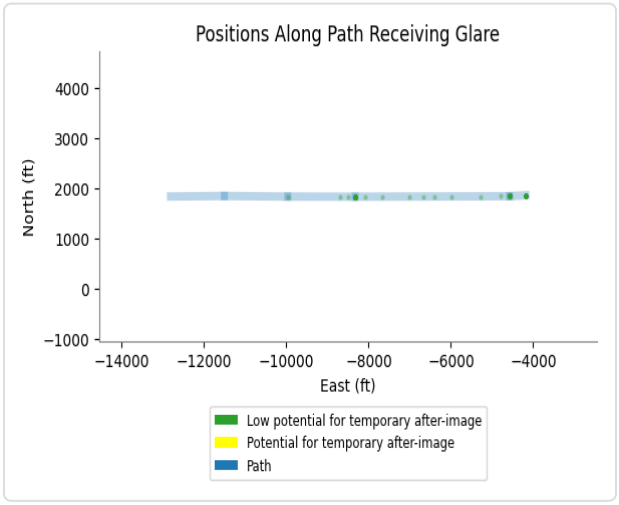
Yellow glare: none

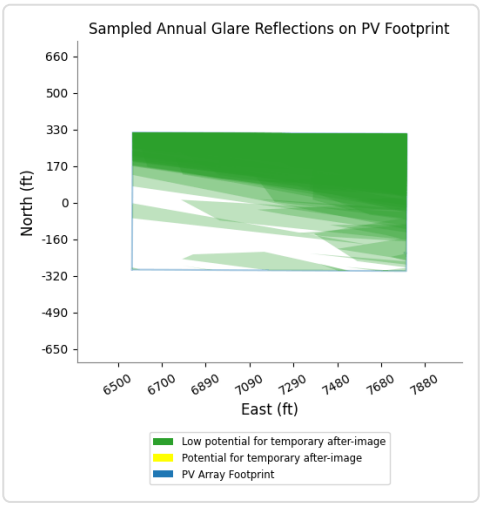
Green glare: 69 min.







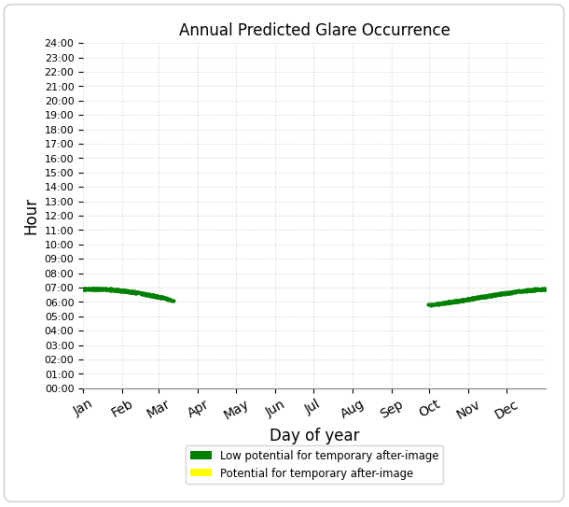


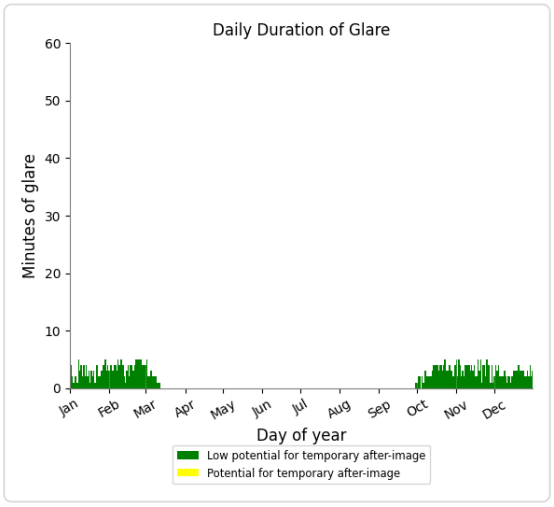


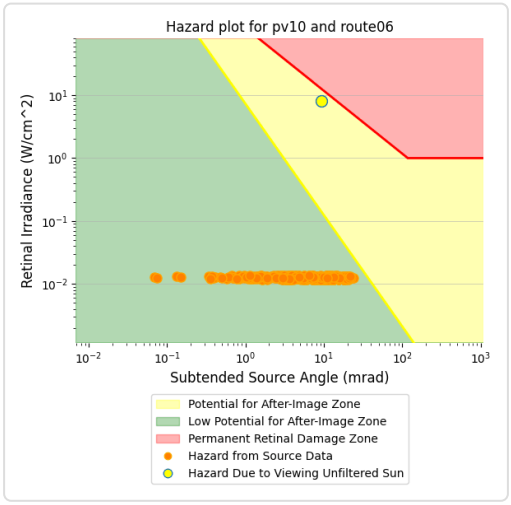
PV10 and Route: Route06

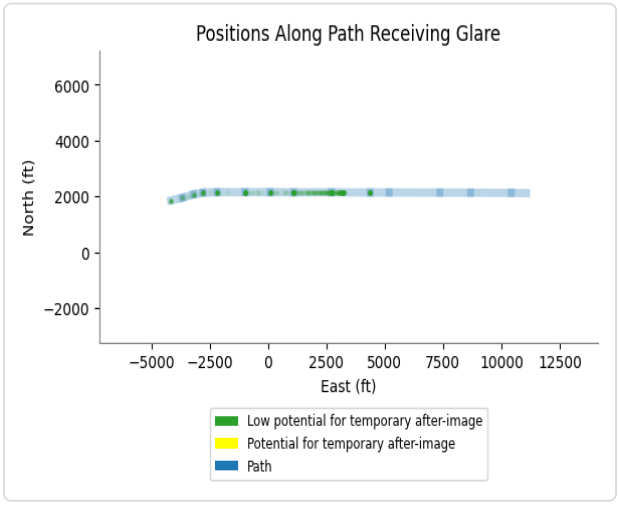
Yellow glare: none

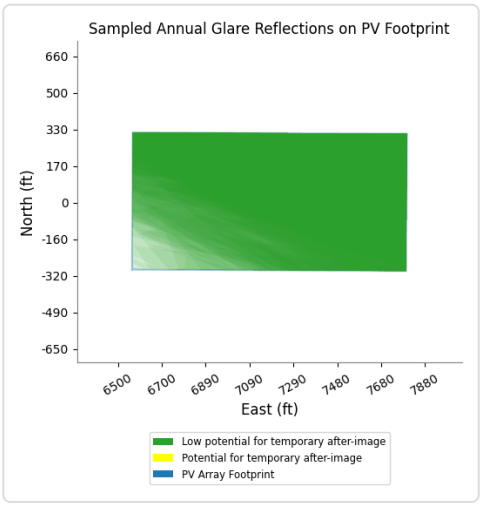
Green glare: 498 min.







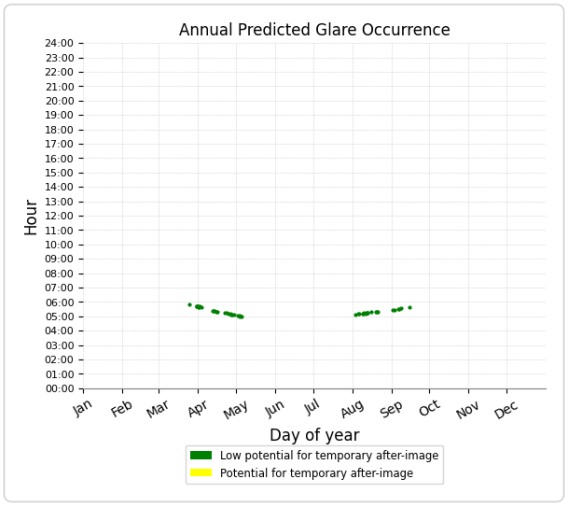


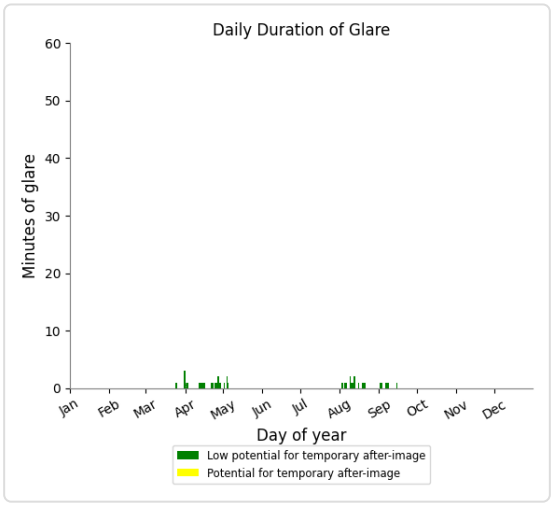


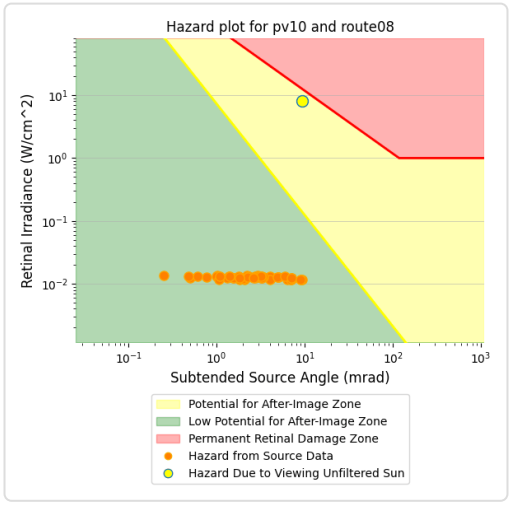
PV10 and Route: Route08

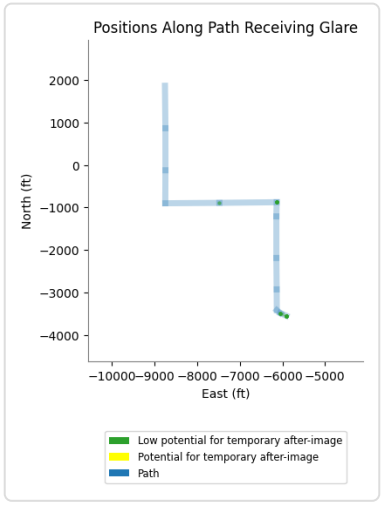
Yellow glare: none

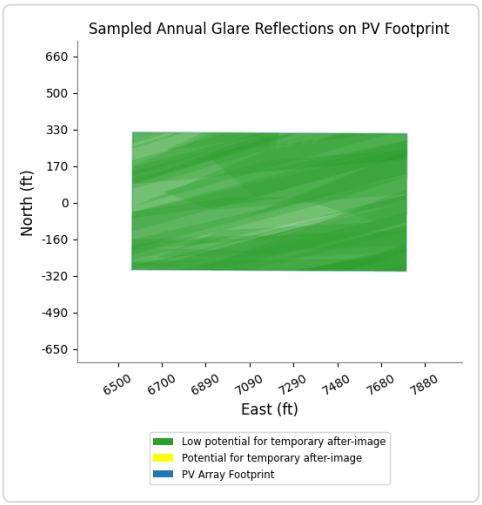
Green glare: 47 min.









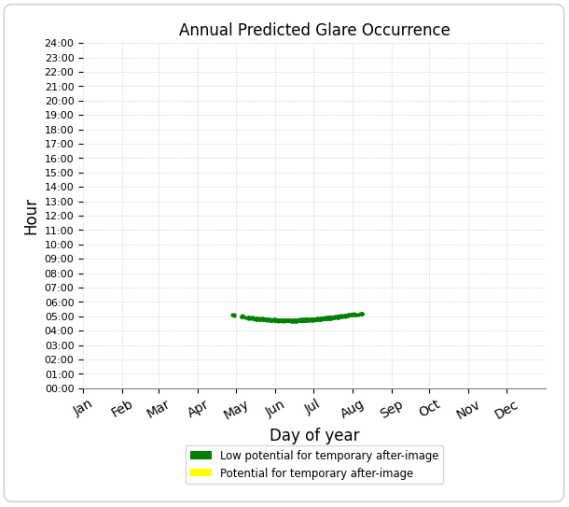


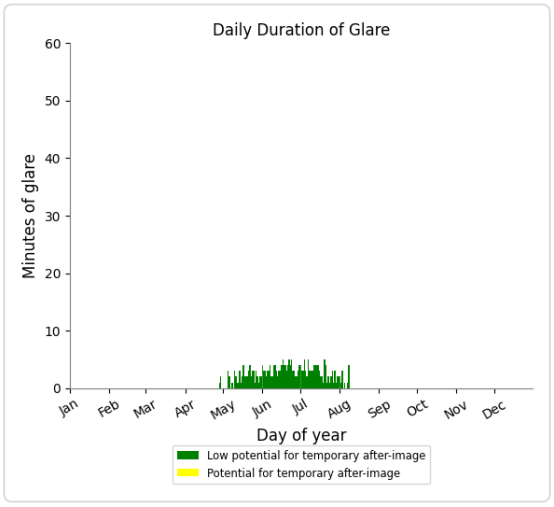
PC ORIGINAL PKG

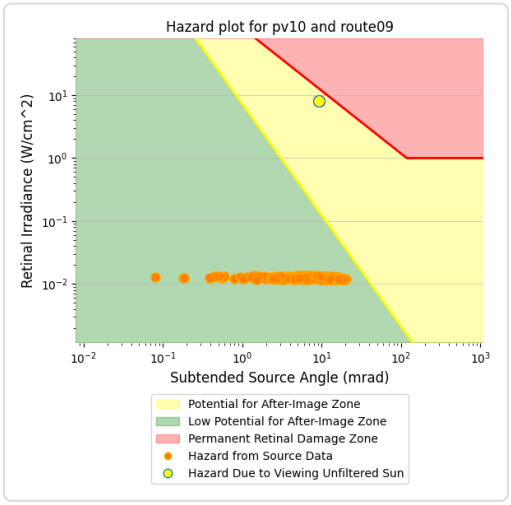
PV10 and Route: Route09

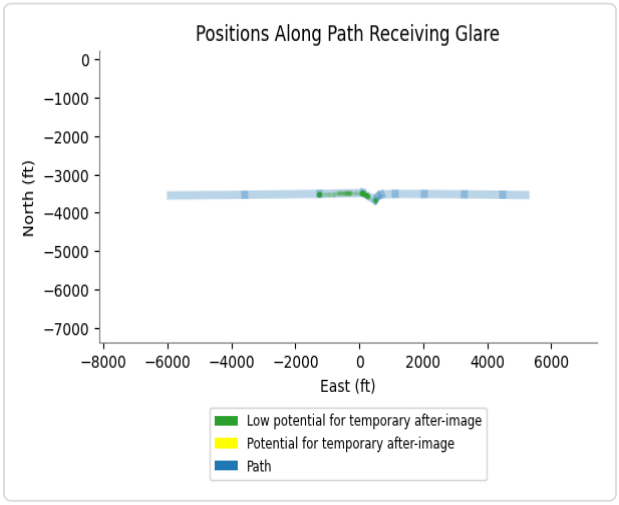
Yellow glare: none

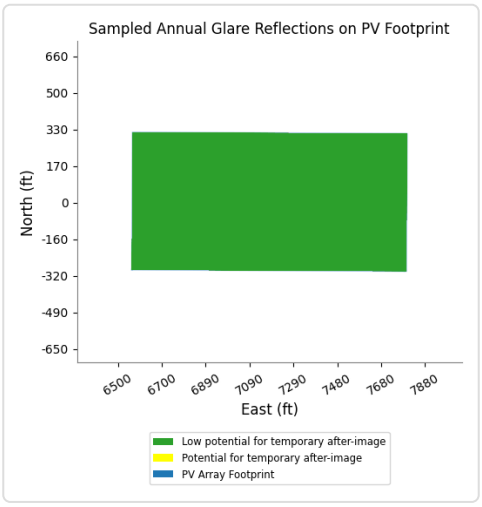
Green glare: 258 min.











PV10 and Route: Route01

No glare found

PV10 and Route: Route02

No glare found

PV10 and Route: Route04

No glare found

PV10 and Route: Route07

No glare found

PV10 and Route: Route10

No glare found

PV10 and Route: Route11

No glare found

PV10 and Route: Route12

No glare found

PV10 and FP: NJK08

No glare found

PV10 and FP: NJK12

No glare found

PV10 and FP: NJK26

No glare found

PV10 and FP: NJK30

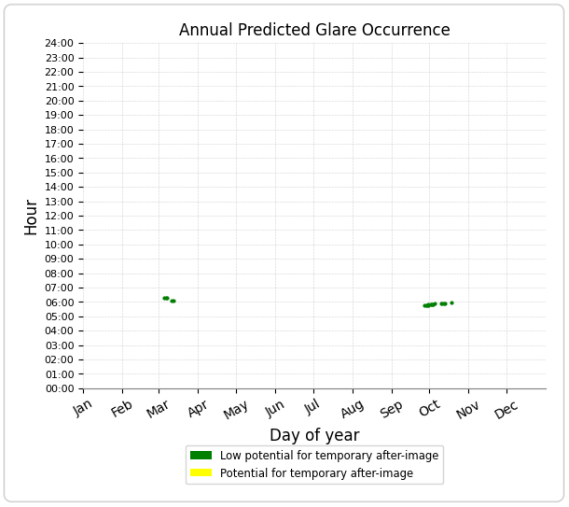
No glare found

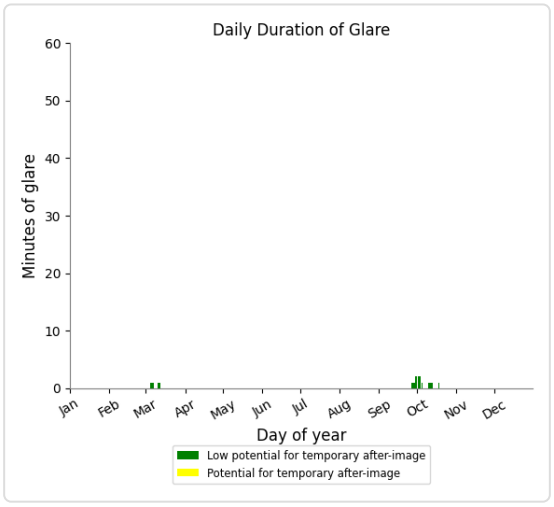
PC ORIGINAL PKG

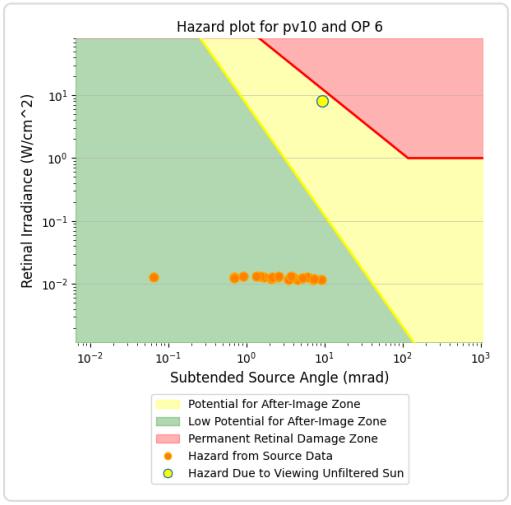
PV10 and OP 6

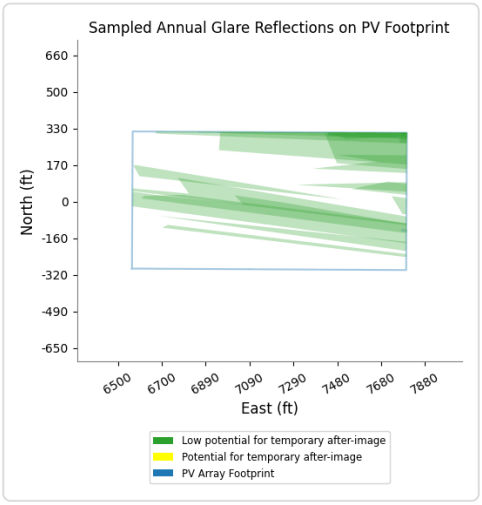
Yellow glare: none

Green glare: 20 min.





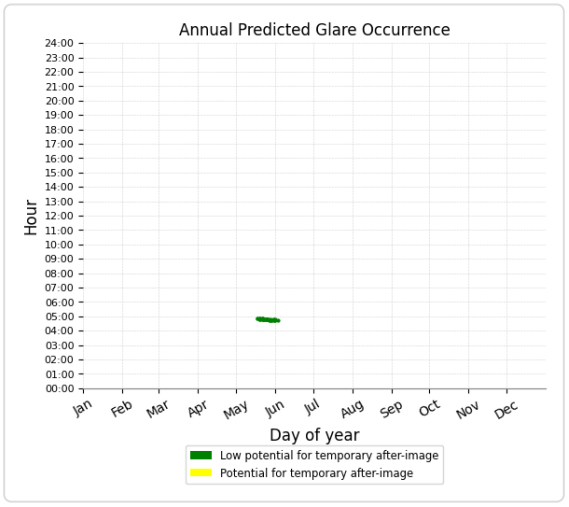


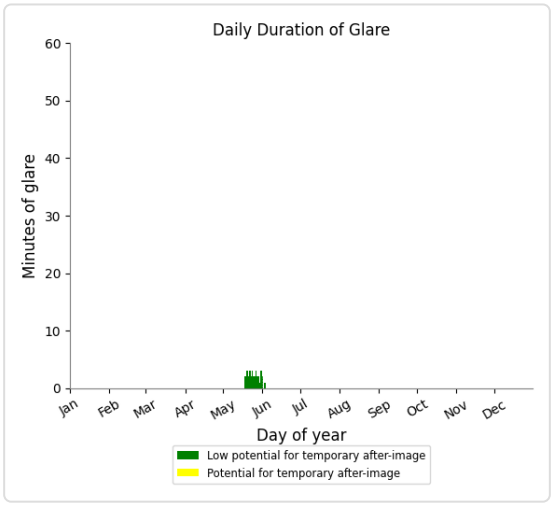


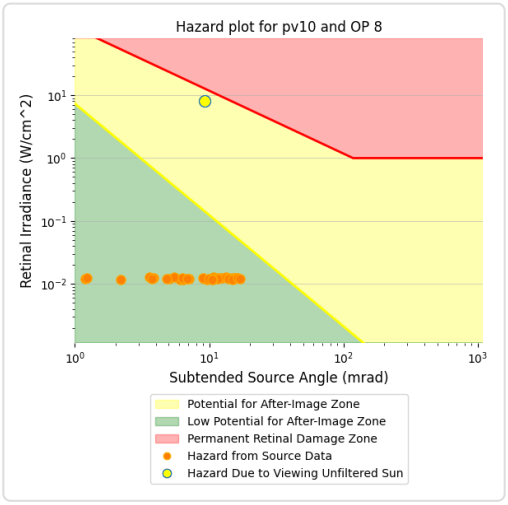
PV10 and OP 8

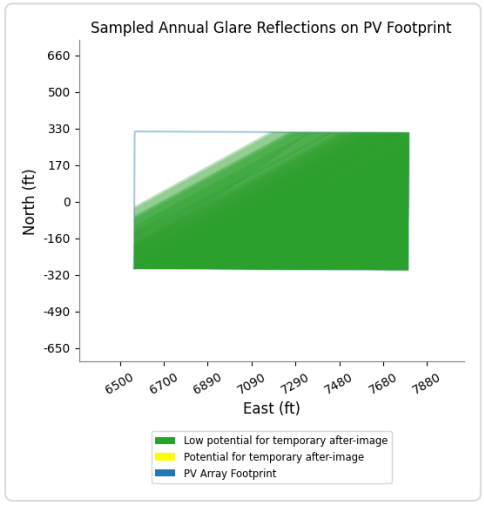
Yellow glare: none

Green glare: 35 min.





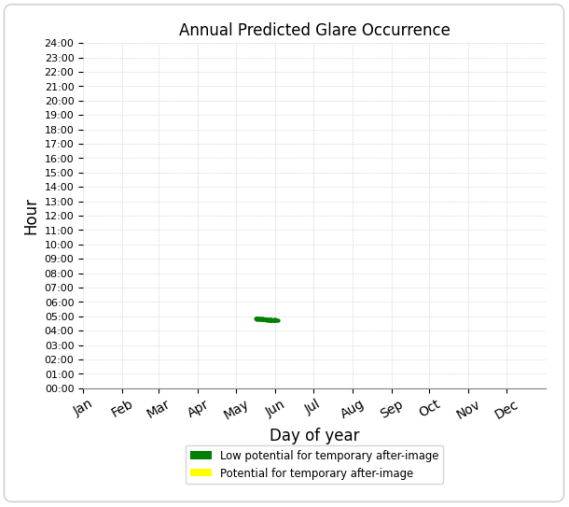


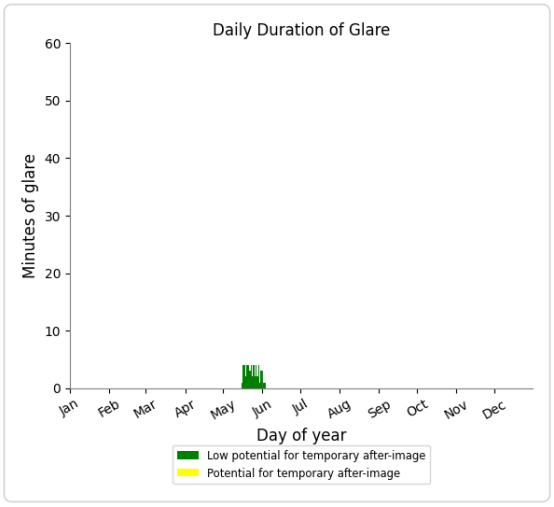


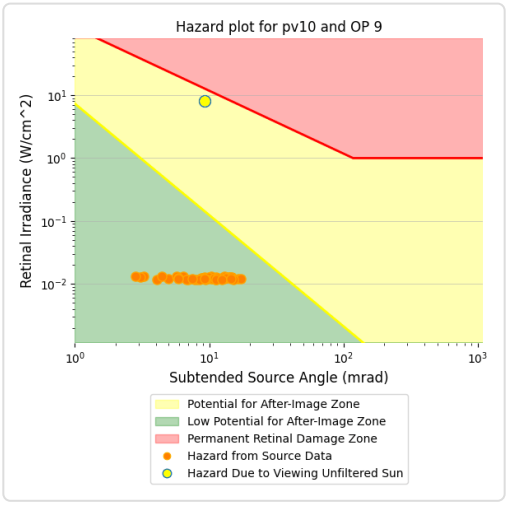
PV10 and OP 9

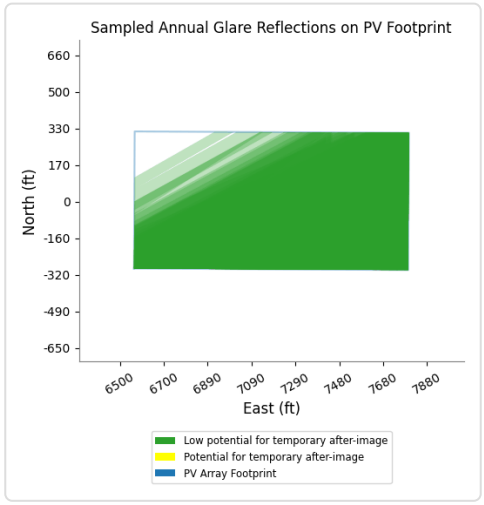
Yellow glare: none

Green glare: 53 min.



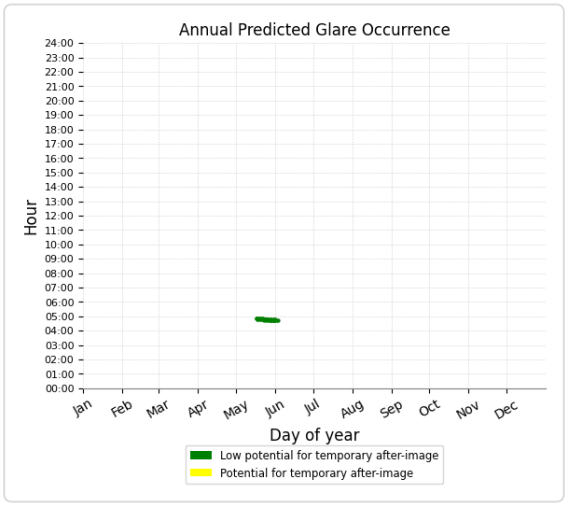


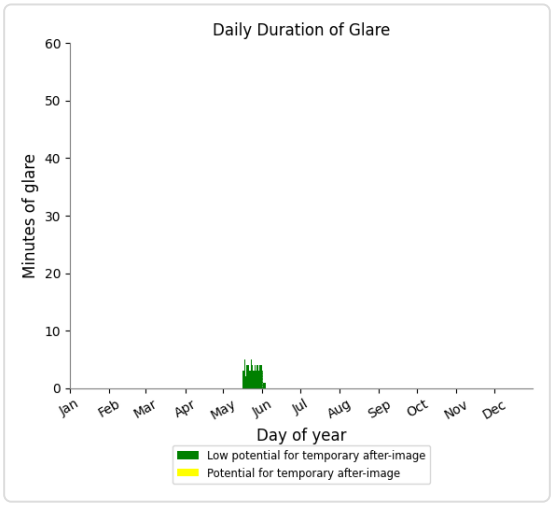


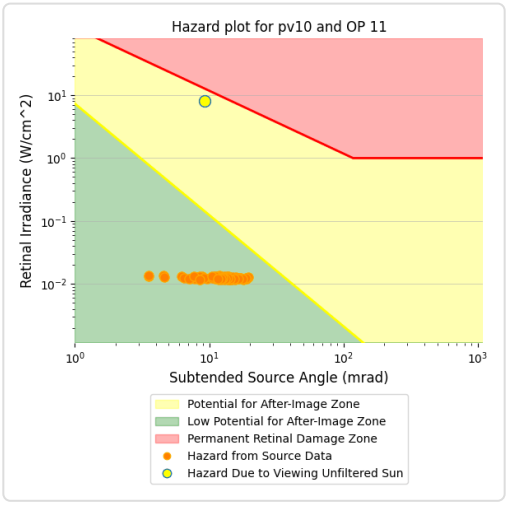


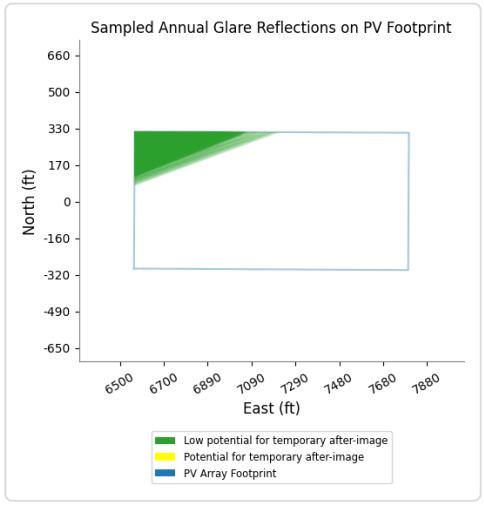
PV10 and OP 11

Yellow glare: none
Green glare: 60 min.









PV10 and OP 1

No glare found

PV10 and OP 2

No glare found

PV10 and OP 3

No glare found

PV10 and OP 4

No glare found

PV10 and OP 5

No glare found

PV10 and OP 7

No glare found

PV10 and OP 10

No glare found

PV10 and OP 12

No glare found

PV10 and OP 13

No glare found

PV10 and OP 14

No glare found

PV10 and OP 15

No glare found

PV10 and OP 16

No glare found

PV10 and OP 17

No glare found

PV10 and OP 18

No glare found

PV10 and OP 19

No glare found

PV10 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV11 low potential for temporary after-image

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 17	258	4.3	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV11 and Route: Route01

No glare found

PC ORIGINAL PKG

PV11 and Route: Route02

No glare found

PV11 and Route: Route04

No glare found

PV11 and Route: Route05

No glare found

PV11 and Route: Route06

No glare found

PV11 and Route: Route07

No glare found

PV11 and Route: Route08

No glare found

PV11 and Route: Route09

No glare found

PV11 and Route: Route10

No glare found

PV11 and Route: Route11

No glare found

PV11 and Route: Route12

No glare found

PV11 and FP: NJK08

No glare found

PV11 and FP: NJK12

No glare found

PV11 and FP: NJK26

No glare found

PV11 and FP: NJK30

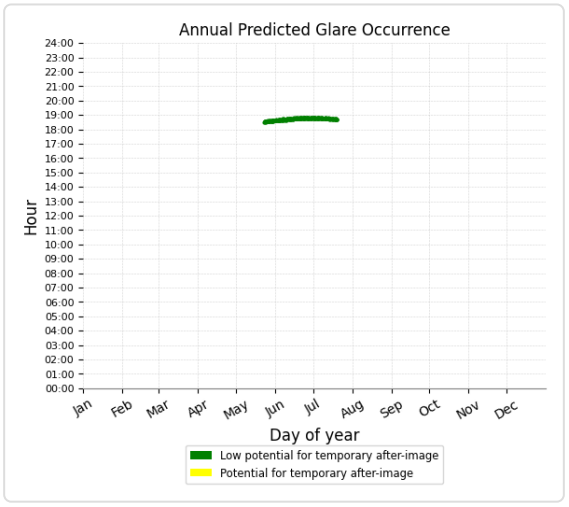
No glare found

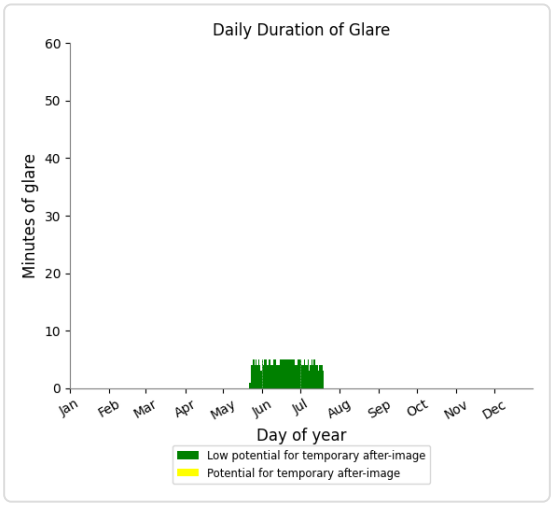
PC ORIGINAL PKG

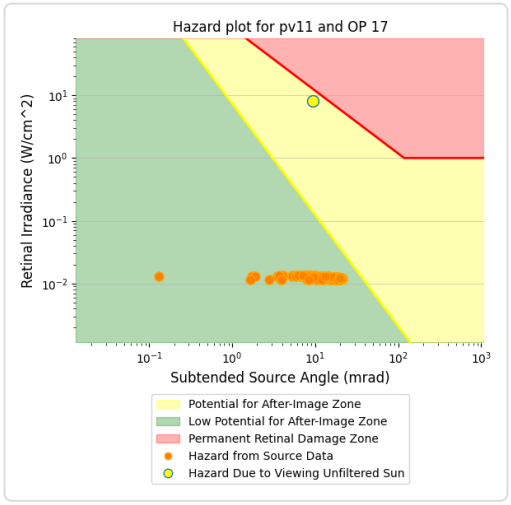
PV11 and OP 17

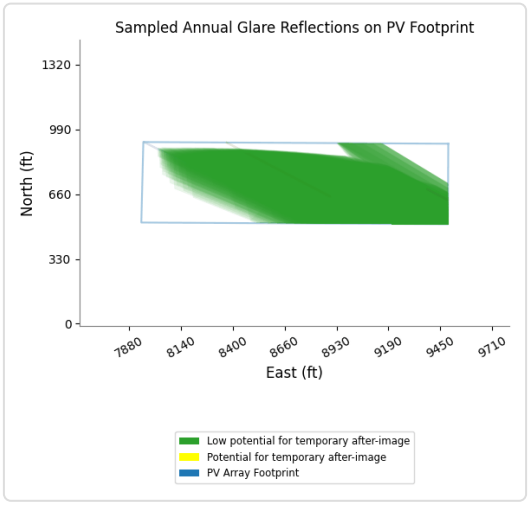
Yellow glare: none

Green glare: 258 min.









PV11 and OP 1

No glare found

PV11 and OP 2

No glare found

PV11 and OP 3

No glare found

PV11 and OP 4

No glare found

PV11 and OP 5

No glare found

PV11 and OP 6

No glare found

PV11 and OP 7

No glare found

PV11 and OP 8

No glare found

PV11 and OP 9

No glare found

PV11 and OP 10

No glare found

PV11 and OP 11

No glare found

PV11 and OP 12

No glare found

PV11 and OP 13

No glare found

PV11 and OP 14

No glare found

PV11 and OP 15

No glare found

PV11 and OP 16

No glare found

PV11 and OP 18

No glare found

PV11 and OP 19

No glare found

PV11 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV12 low potential for temporary after-image

Receptor results ordered by category of glare

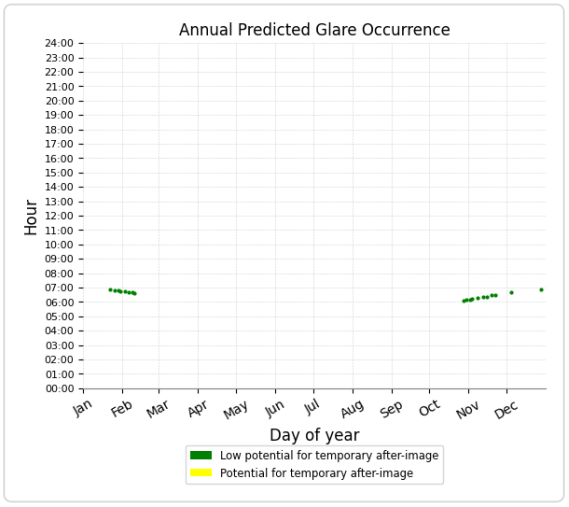
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route06	19	0.3	0	0.0
Route09	336	5.6	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 7	29	0.5	0	0.0
OP 8	72	1.2	0	0.0
OP 9	75	1.2	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

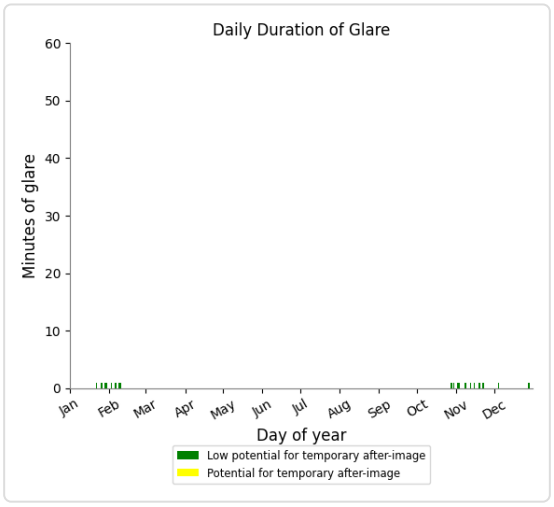
PC ORIGINAL PKG

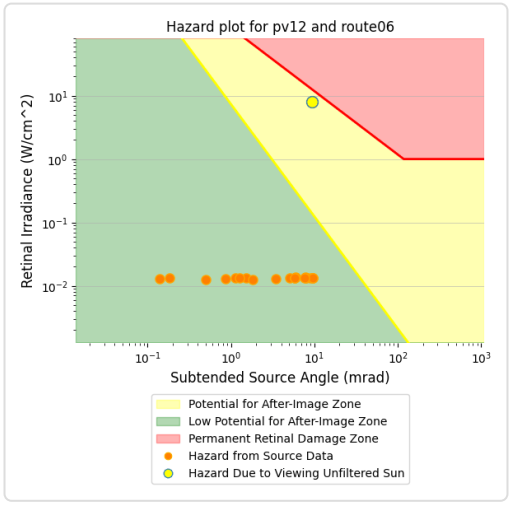
PV12 and Route: Route06

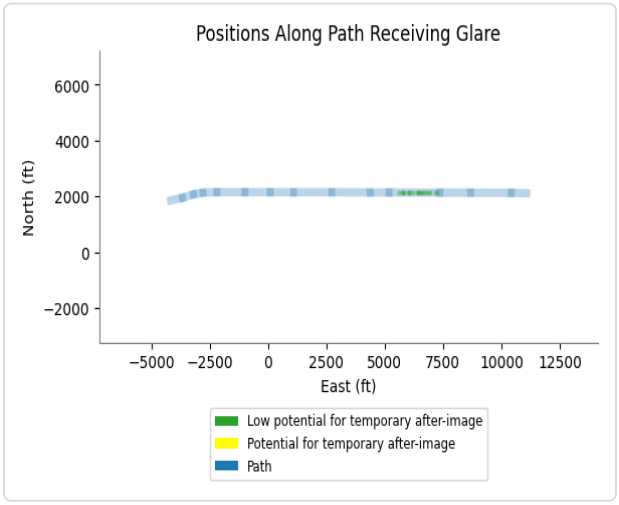
Yellow glare: none

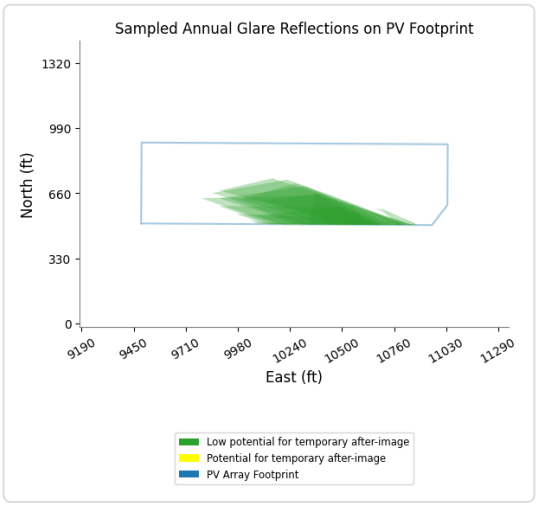
Green glare: 19 min.









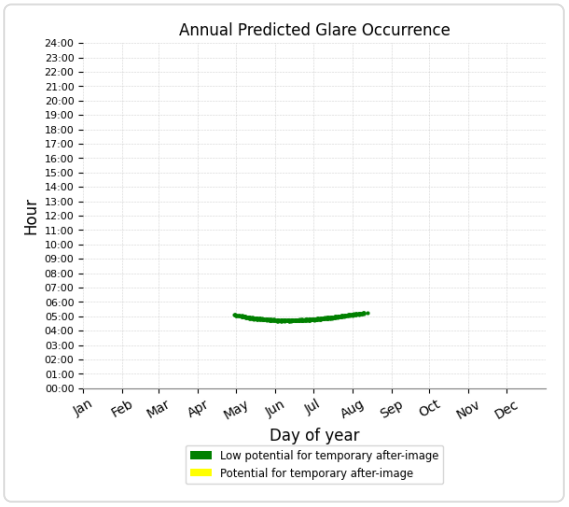


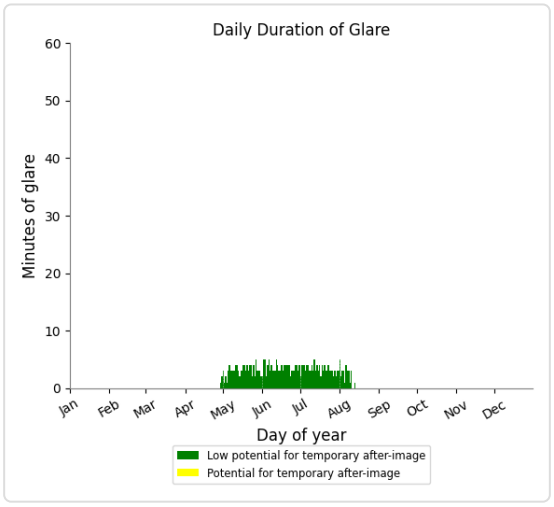
PC ORIGINAL PKG

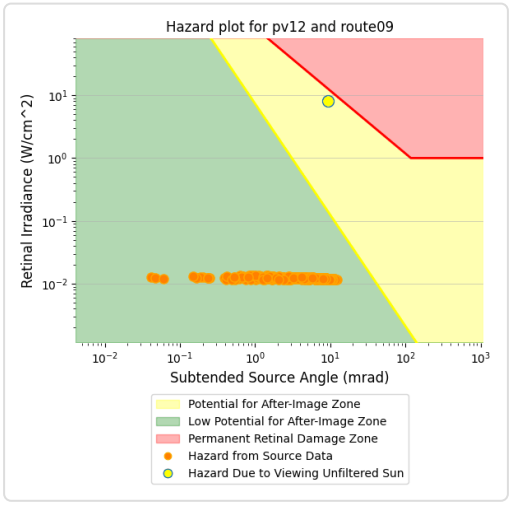
PV12 and Route: Route09

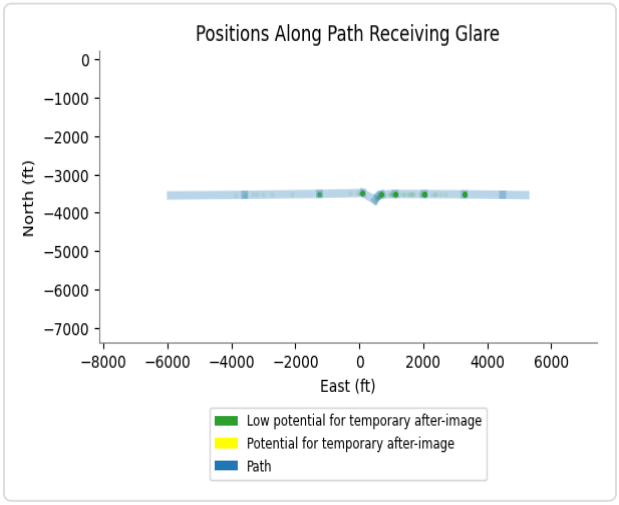
Yellow glare: none

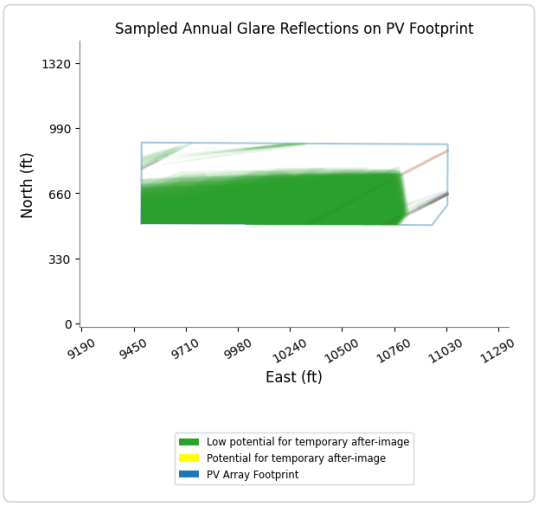
Green glare: 336 min.











PV12 and Route: Route01

No glare found

PV12 and Route: Route02

No glare found

PV12 and Route: Route04

No glare found

PV12 and Route: Route05

No glare found

PV12 and Route: Route07

No glare found

PV12 and Route: Route08

No glare found

PV12 and Route: Route10

No glare found

PV12 and Route: Route11

No glare found

PV12 and Route: Route12

No glare found

PV12 and FP: NJK08

No glare found

PV12 and FP: NJK12

No glare found

PV12 and FP: NJK26

No glare found

PV12 and FP: NJK30

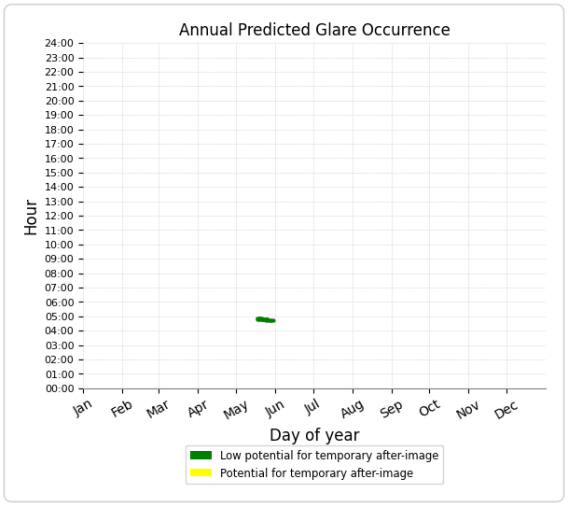
No glare found

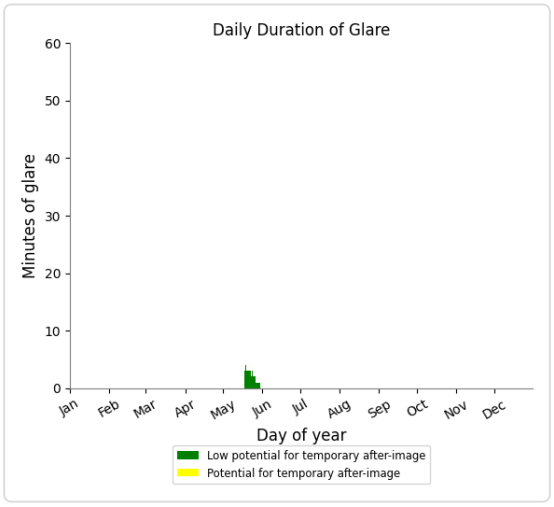
PC ORIGINAL PKG

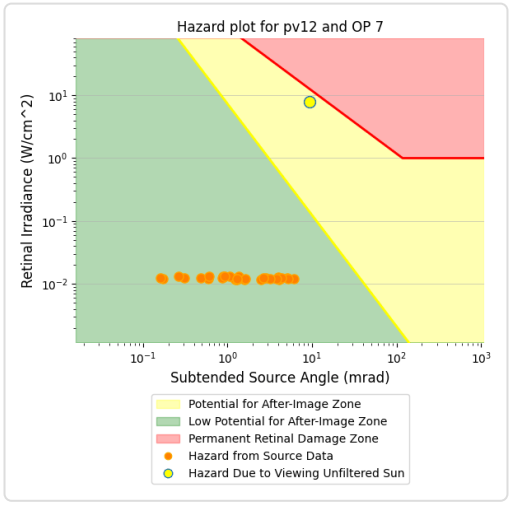
PV12 and OP 7

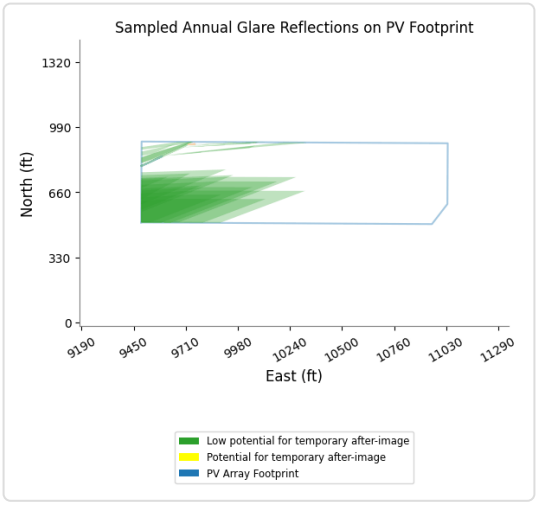
Yellow glare: none

Green glare: 29 min.





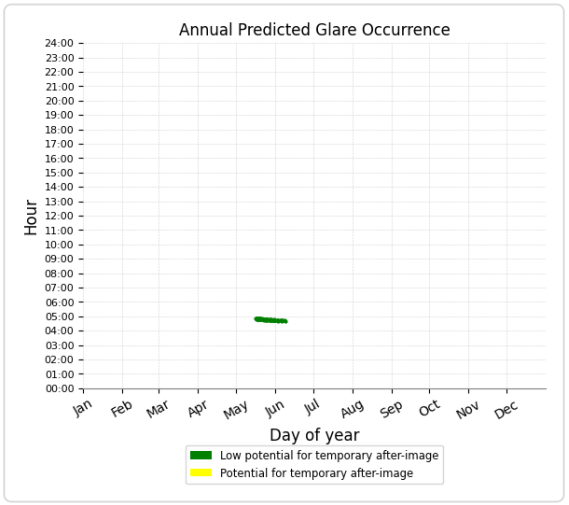


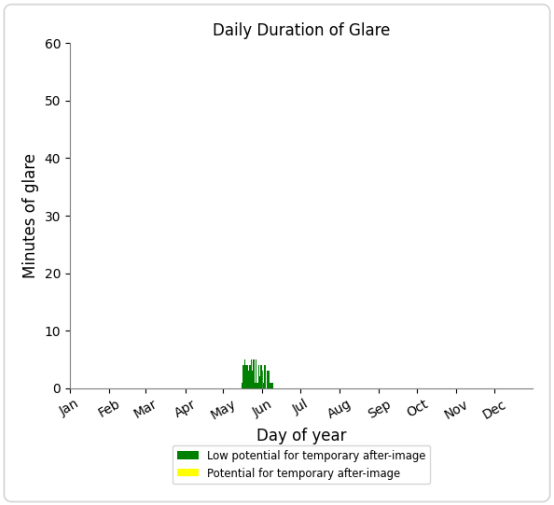


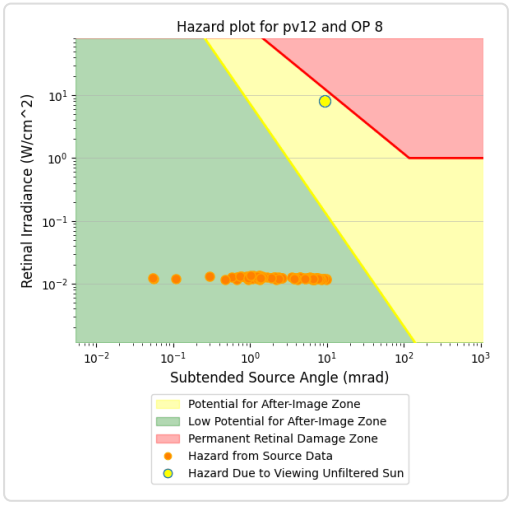
PV12 and OP 8

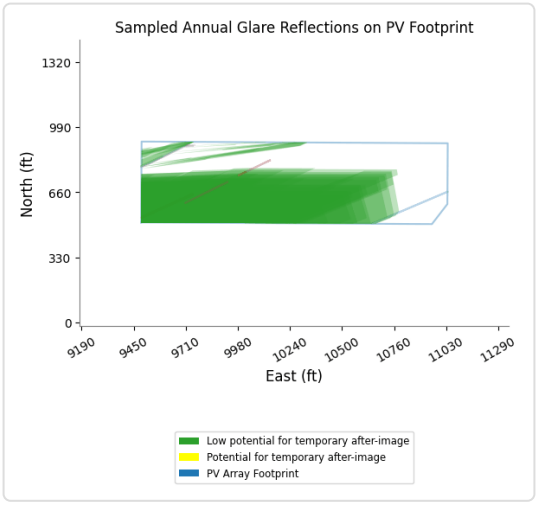
Yellow glare: none

Green glare: 72 min.



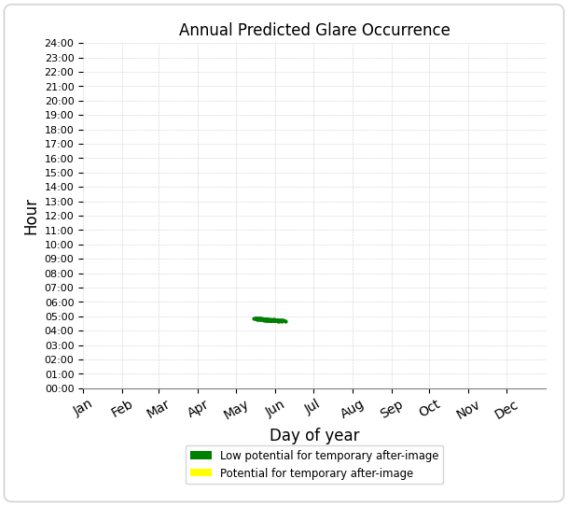


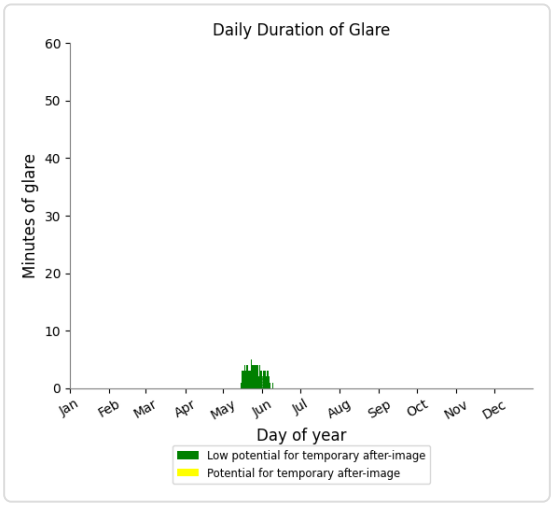


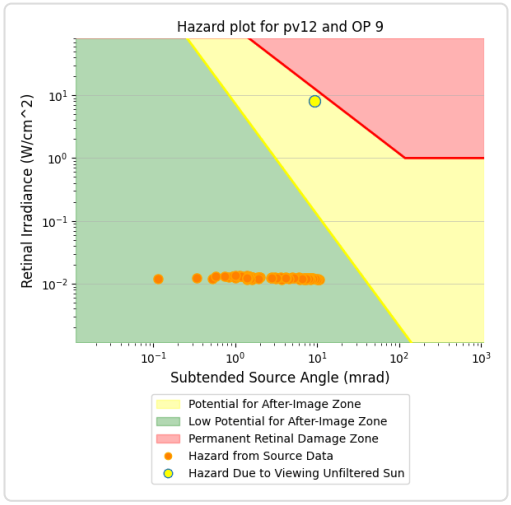


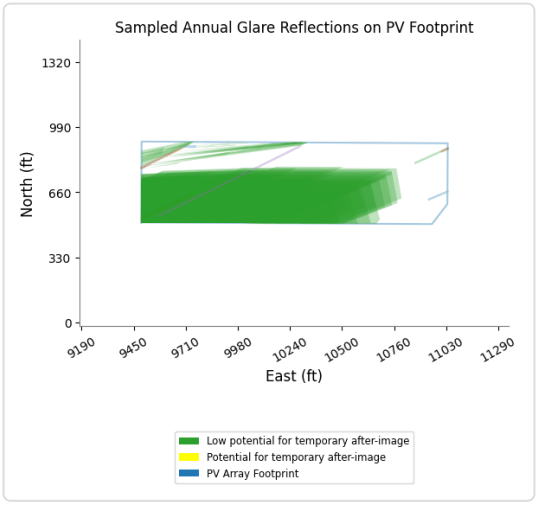
PV12 and OP 9

Yellow glare: none
Green glare: 75 min.









PV12 and OP 1

No glare found

PV12 and OP 2

No glare found

PV12 and OP 3

No glare found

PV12 and OP 4

No glare found

PV12 and OP 5

No glare found

PV12 and OP 6

No glare found

PV12 and OP 10

No glare found

PV12 and OP 11

No glare found

PV12 and OP 12

No glare found

PV12 and OP 13

No glare found

PV12 and OP 14

No glare found

PV12 and OP 15

No glare found

PV12 and OP 16

No glare found

PV12 and OP 17

No glare found

PV12 and OP 18

No glare found

PV12 and OP 19

No glare found

PV12 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV13 low potential for temporary after-image

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 17	368	6.1	0	0.0
OP 18	86	1.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV13 and Route: Route01

No glare found

PC ORIGINAL PKG

PV13 and Route: Route02

No glare found

PV13 and Route: Route04

No glare found

PV13 and Route: Route05

No glare found

PV13 and Route: Route06

No glare found

PV13 and Route: Route07

No glare found

PV13 and Route: Route08

No glare found

PV13 and Route: Route09

No glare found

PV13 and Route: Route10

No glare found

PV13 and Route: Route11

No glare found

PV13 and Route: Route12

No glare found

PV13 and FP: NJK08

No glare found

PV13 and FP: NJK12

No glare found

PV13 and FP: NJK26

No glare found

PV13 and FP: NJK30

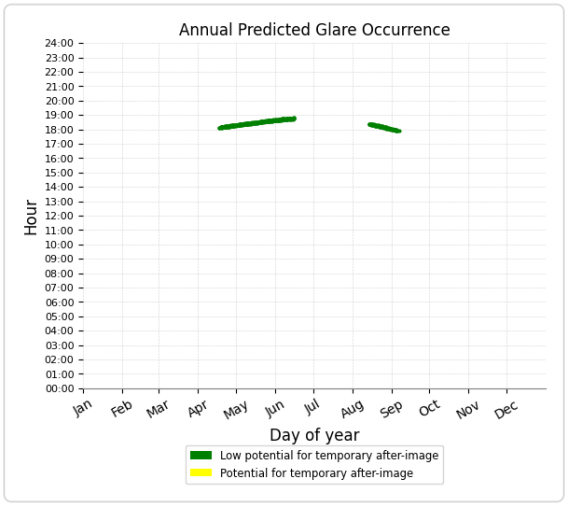
No glare found

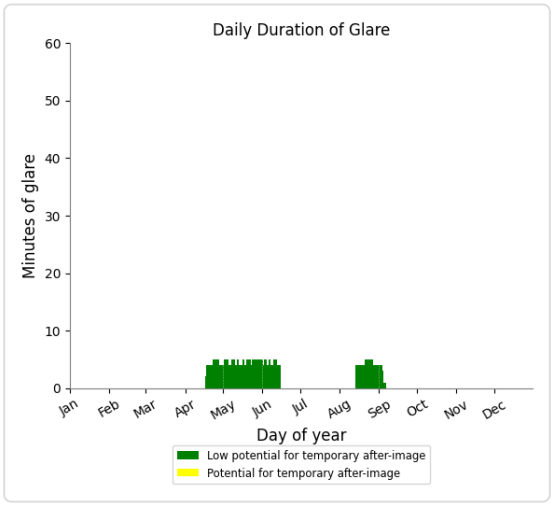
PC ORIGINAL PKG

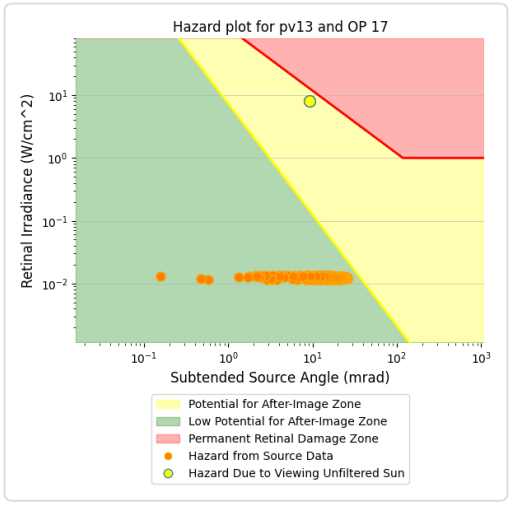
PV13 and OP 17

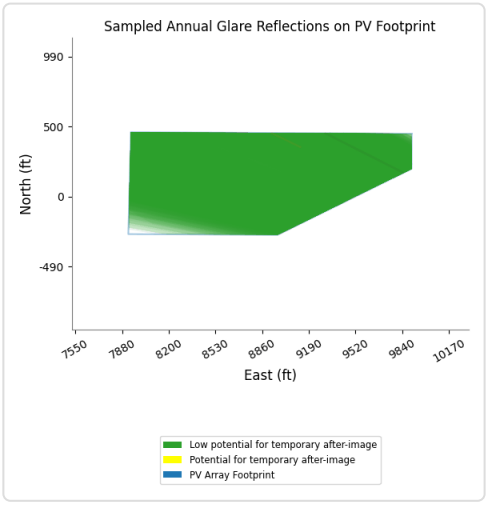
Yellow glare: none

Green glare: 368 min.



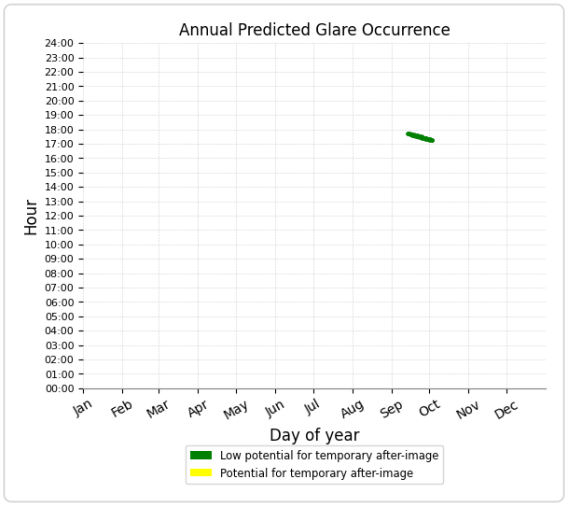


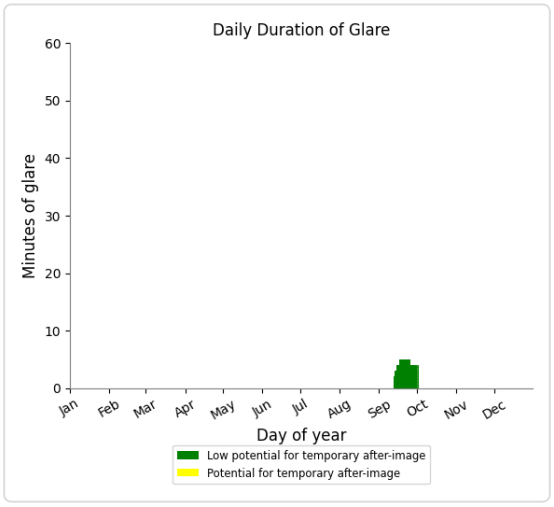


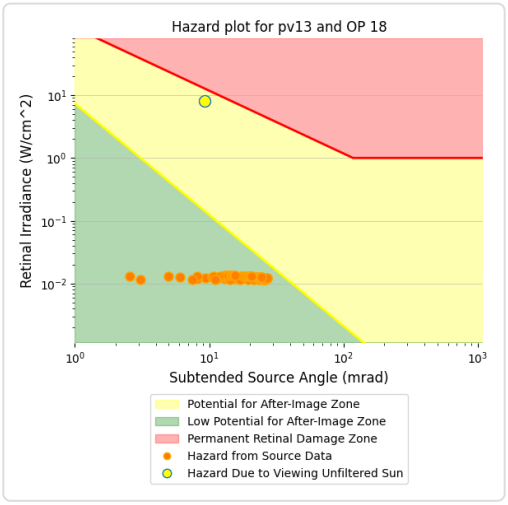


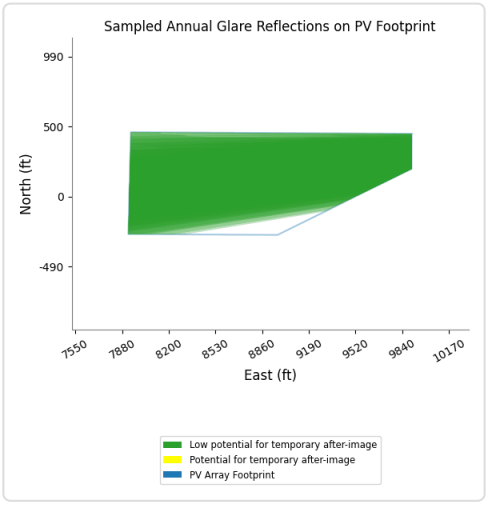
PV13 and OP 18

Yellow glare: none
Green glare: 86 min.









PV13 and OP 1

No glare found

PV13 and OP 2

No glare found

PV13 and OP 3

No glare found

PV13 and OP 4

No glare found

PV13 and OP 5

No glare found

PV13 and OP 6

No glare found

PV13 and OP 7

No glare found

PV13 and OP 8

No glare found

PV13 and OP 9

No glare found

PV13 and OP 10

No glare found

PV13 and OP 11

No glare found

PV13 and OP 12

No glare found

PV13 and OP 13

No glare found

PV13 and OP 14

No glare found

PV13 and OP 15

No glare found

PV13 and OP 16

No glare found

PV13 and OP 19

No glare found

PV13 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV14 potential temporary after-image

Receptor results ordered by category of glare

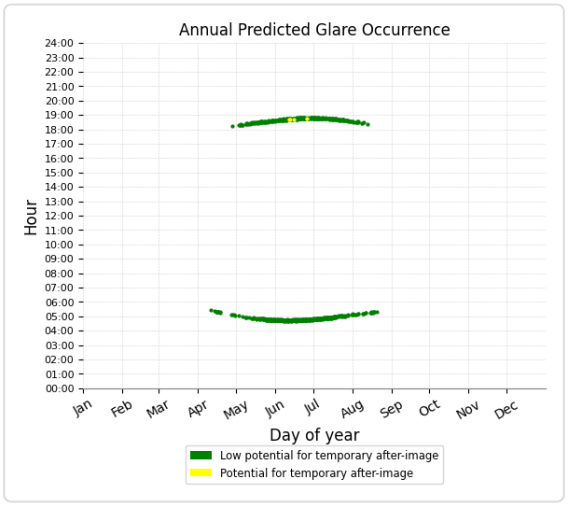
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	610	10.2	4	0.1
Route11	359	6.0	246	4.1
Route05	100	1.7	0	0.0
Route08	55	0.9	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	29	0.5	0	0.0
OP 7	227	3.8	0	0.0
OP 9	241	4.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

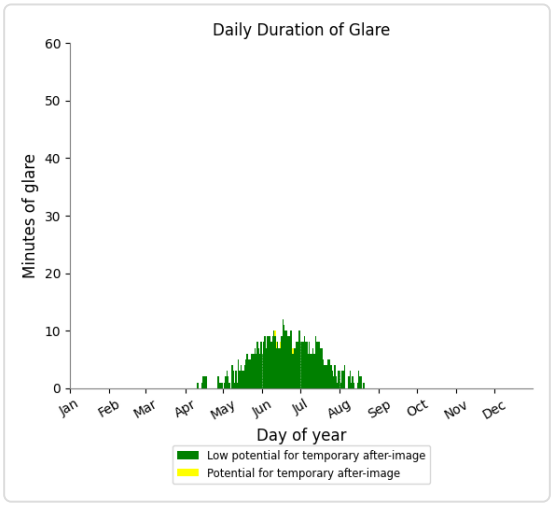
PC ORIGINAL PKG

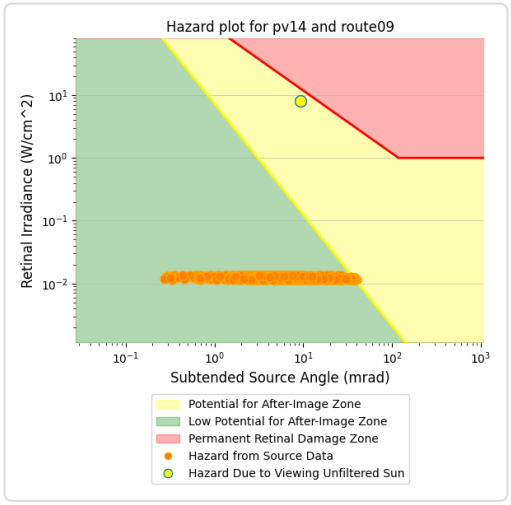
PV14 and Route: Route09

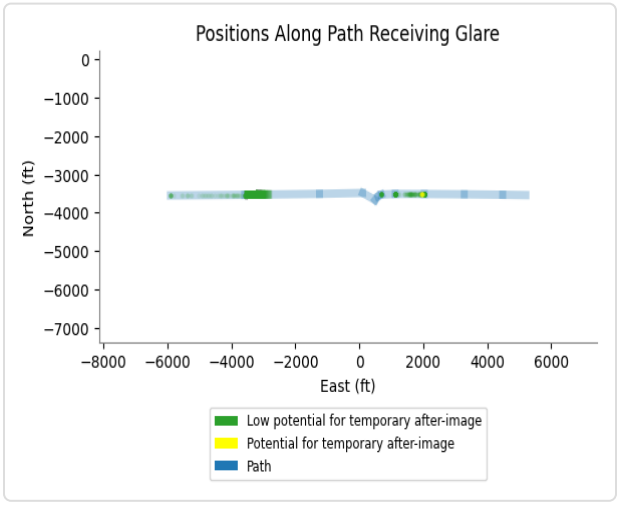
Yellow glare: 4 min.

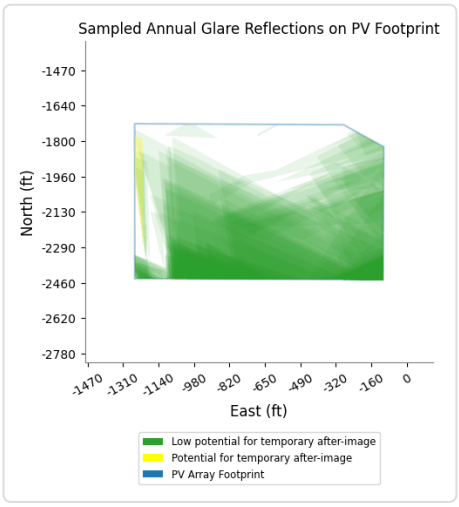
Green glare: 610 min.







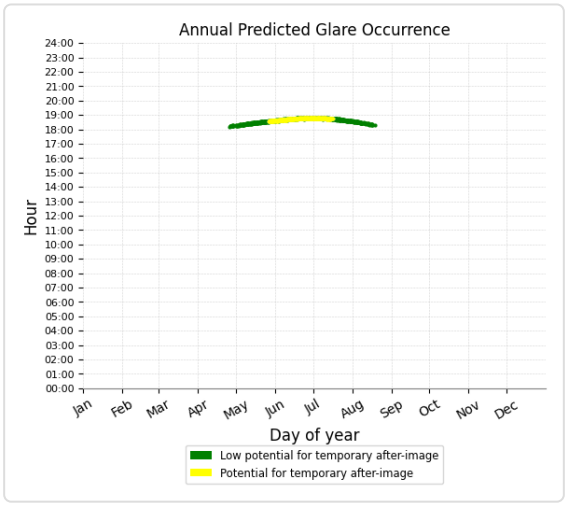


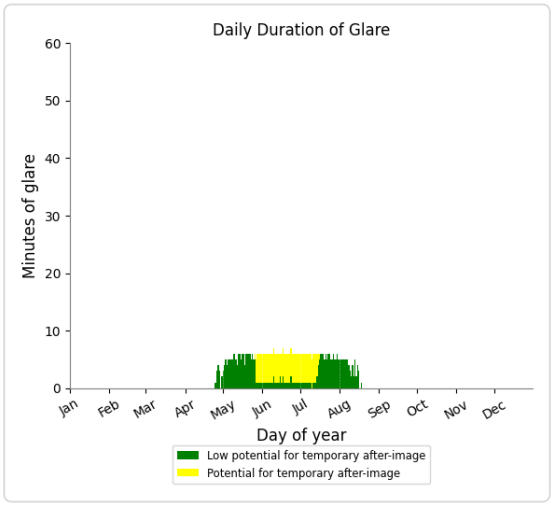


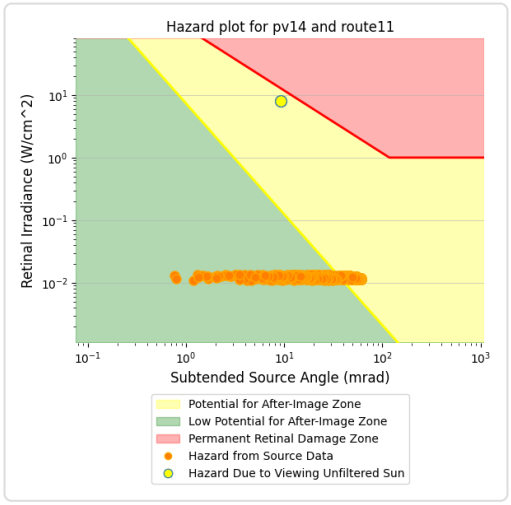
PV14 and Route: Route11

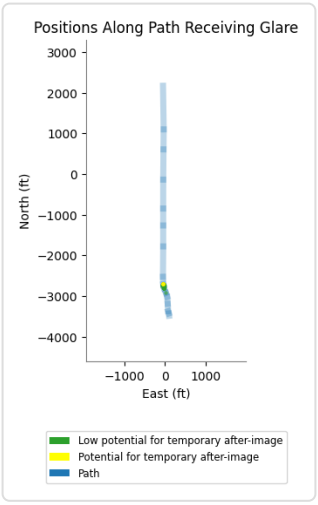
Yellow glare: 246 min.

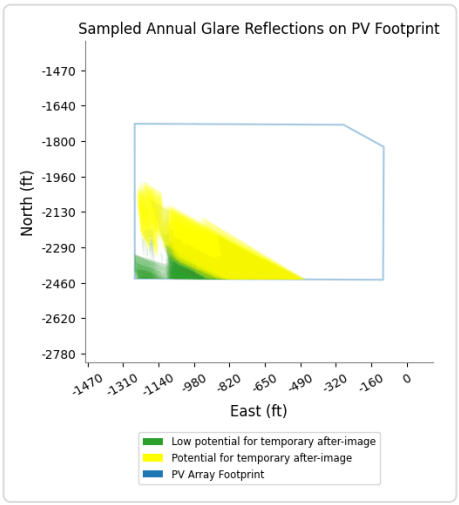
Green glare: 359 min.









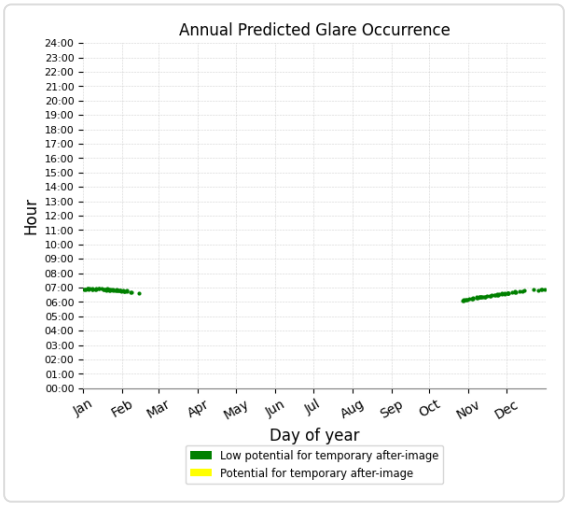


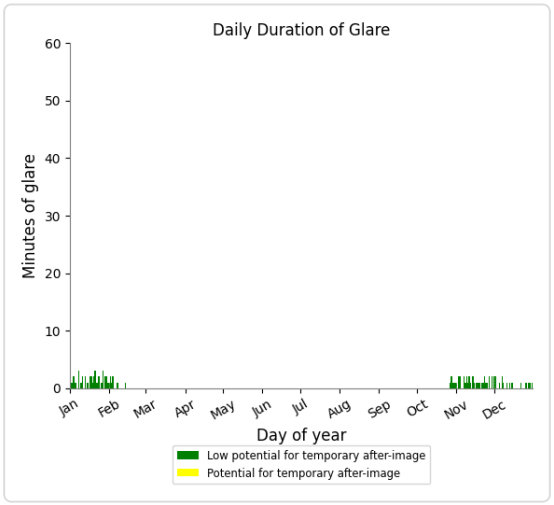
PC ORIGINAL PKG

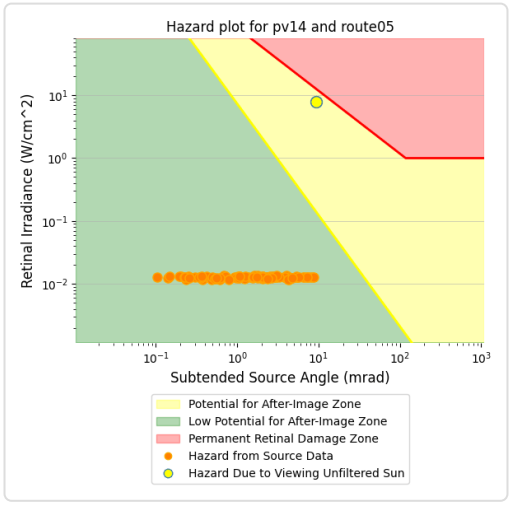
PV14 and Route: Route05

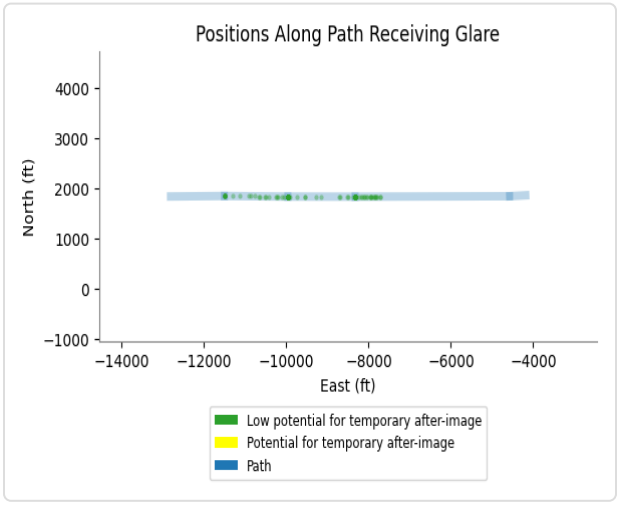
Yellow glare: none

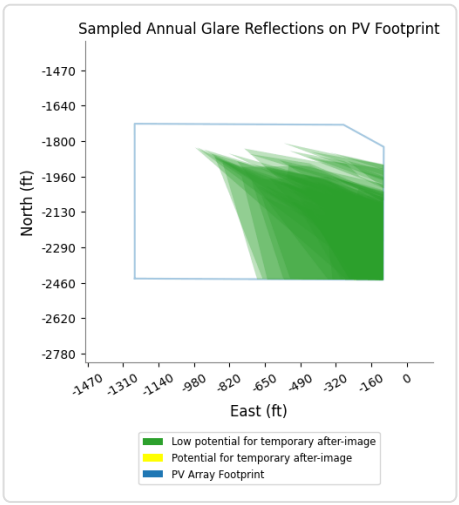
Green glare: 100 min.







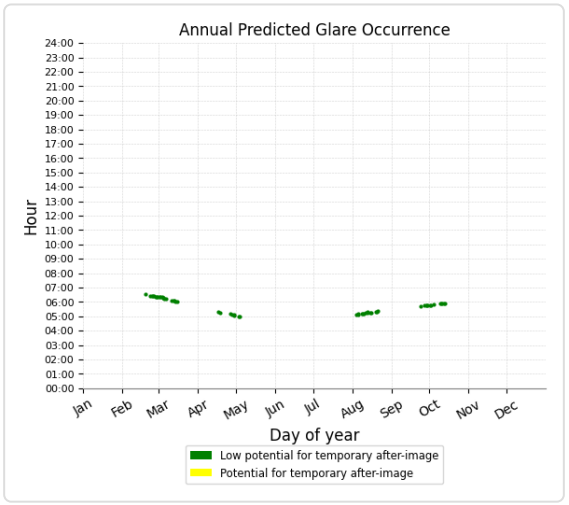


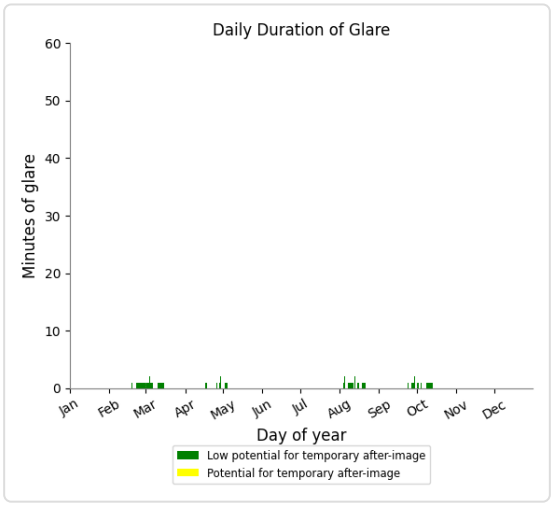


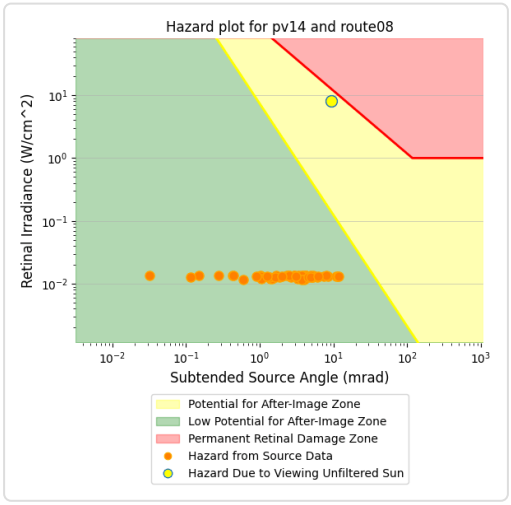
PV14 and Route: Route08

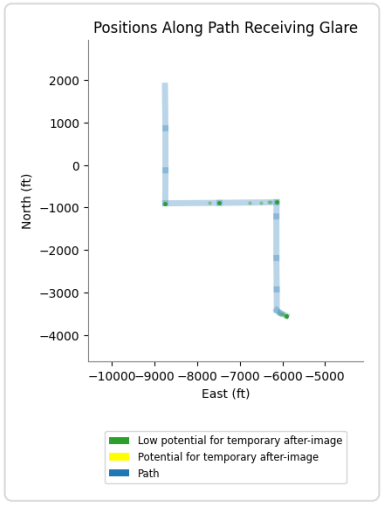
Yellow glare: none

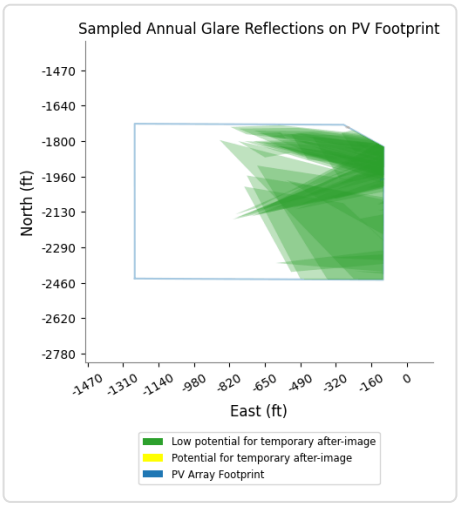
Green glare: 55 min.











PV14 and Route: Route01

No glare found

PV14 and Route: Route02

No glare found

PV14 and Route: Route04

No glare found

PV14 and Route: Route06

No glare found

PV14 and Route: Route07

No glare found

PV14 and Route: Route10

No glare found

PV14 and Route: Route12

No glare found

PV14 and FP: NJK08

No glare found

PV14 and FP: NJK12

No glare found

PV14 and FP: NJK26

No glare found

PV14 and FP: NJK30

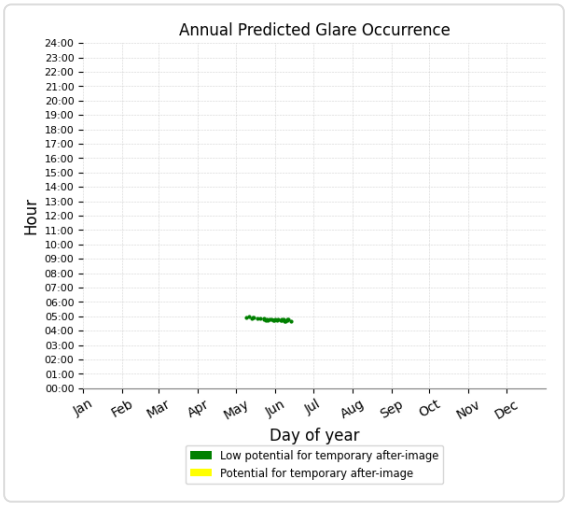
No glare found

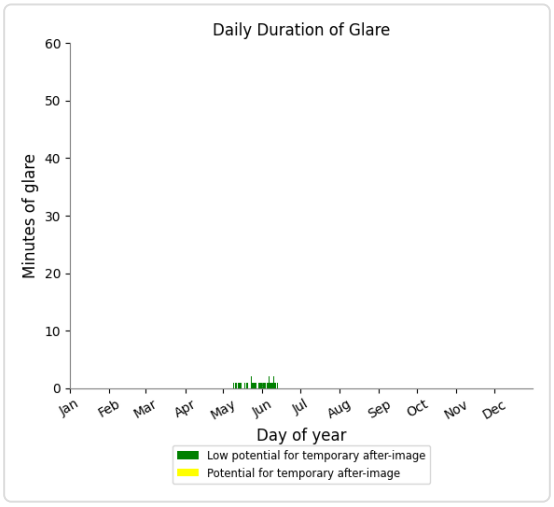
PC ORIGINAL PKG

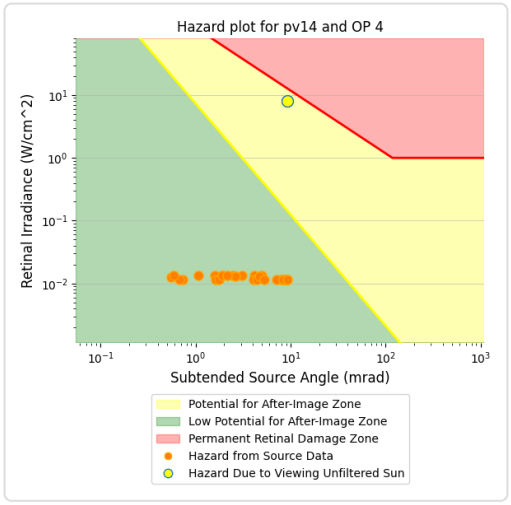
PV14 and OP 4

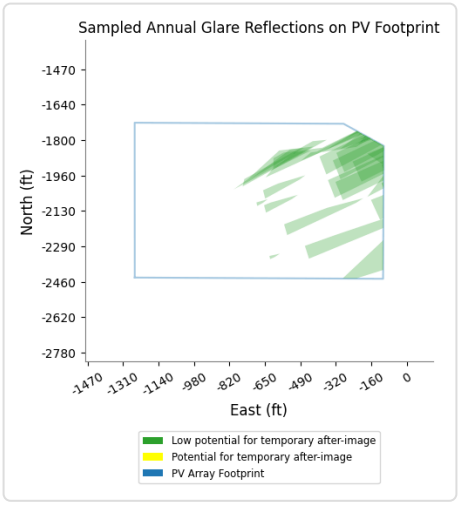
Yellow glare: none

Green glare: 29 min.





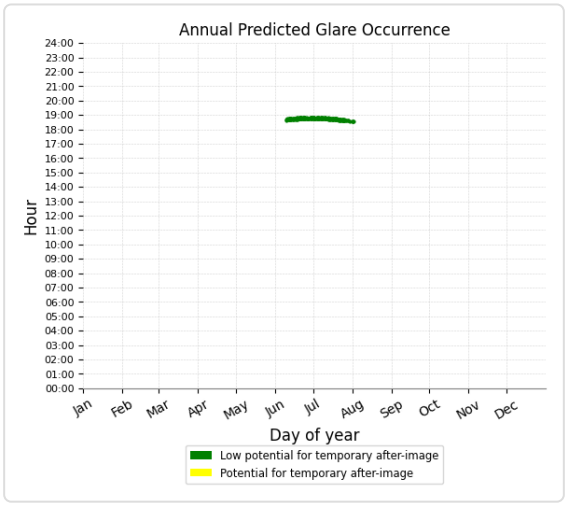


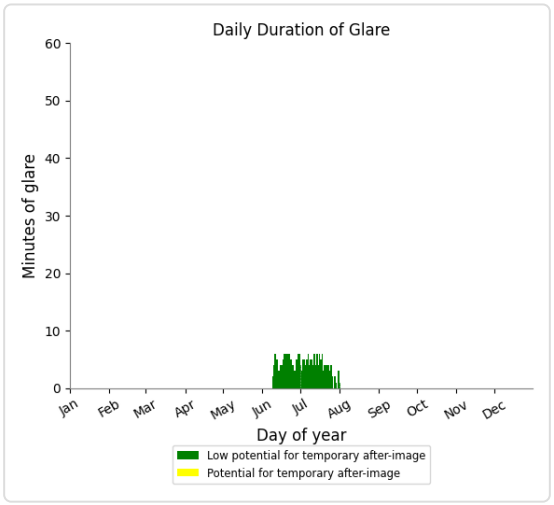


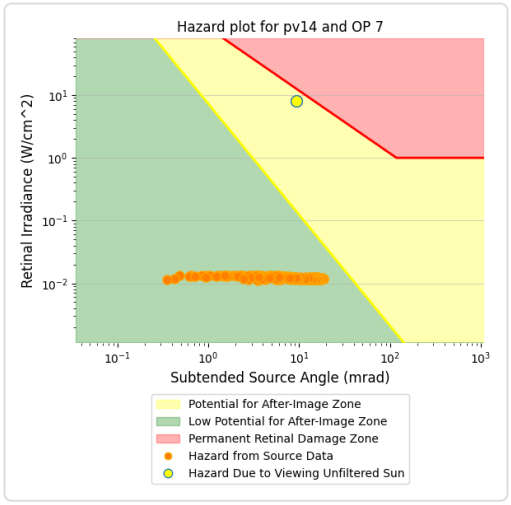
PV14 and OP 7

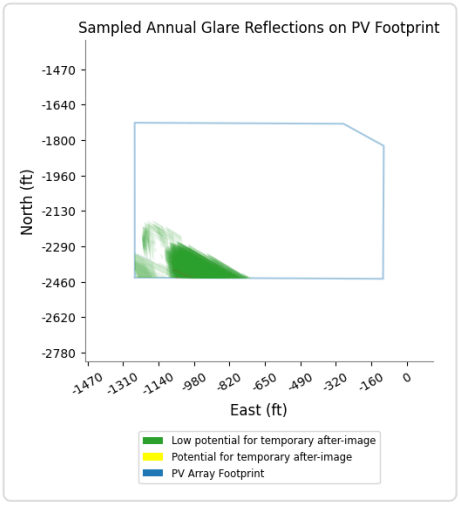
Yellow glare: none

Green glare: 227 min.



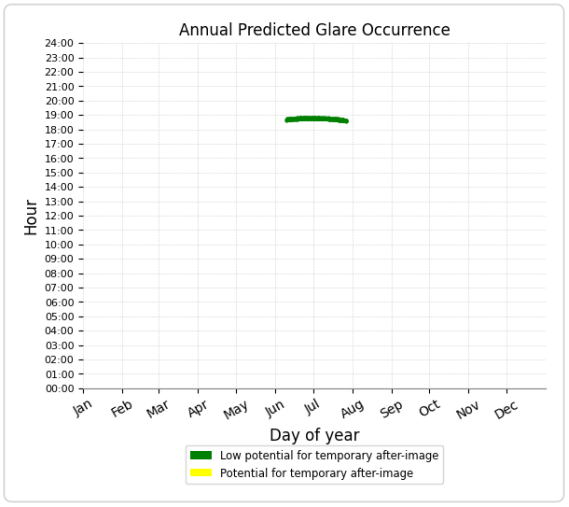


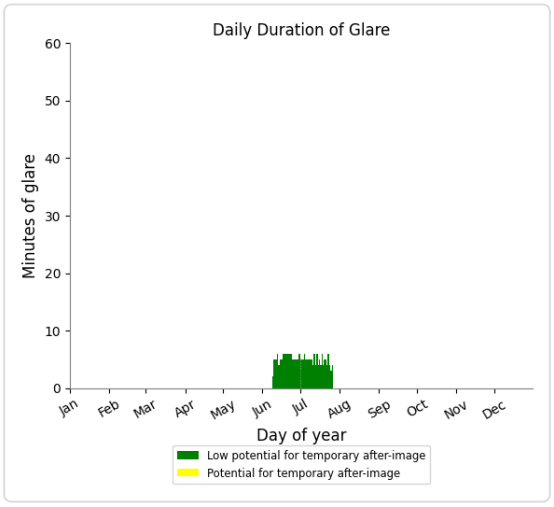


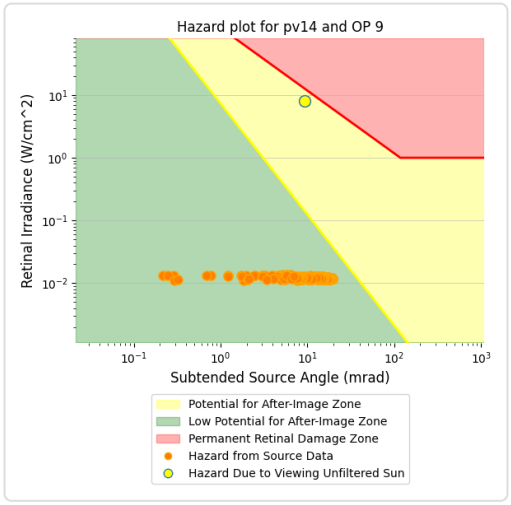


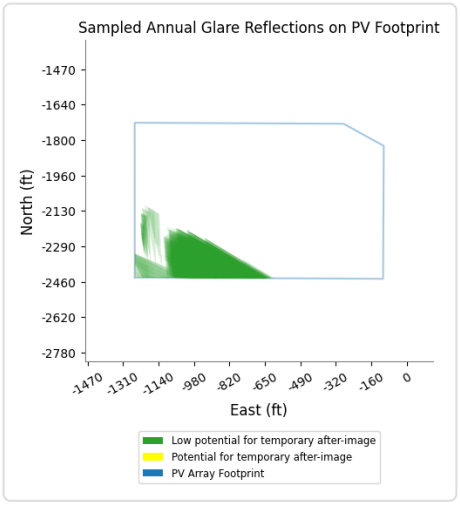
PV14 and OP 9

Yellow glare: none
Green glare: 241 min.









PV14 and OP 1

No glare found

PV14 and OP 2

No glare found

PV14 and OP 3

No glare found

PV14 and OP 5

No glare found

PV14 and OP 6

No glare found

PV14 and OP 8

No glare found

PV14 and OP 10

No glare found

PV14 and OP 11

No glare found

PV14 and OP 12

No glare found

PV14 and OP 13

No glare found

PV14 and OP 14

No glare found

PV14 and OP 15

No glare found

PV14 and OP 16

No glare found

PV14 and OP 17

No glare found

PV14 and OP 18

No glare found

PV14 and OP 19

No glare found

PV14 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV15 potential temporary after-image

Receptor results ordered by category of glare

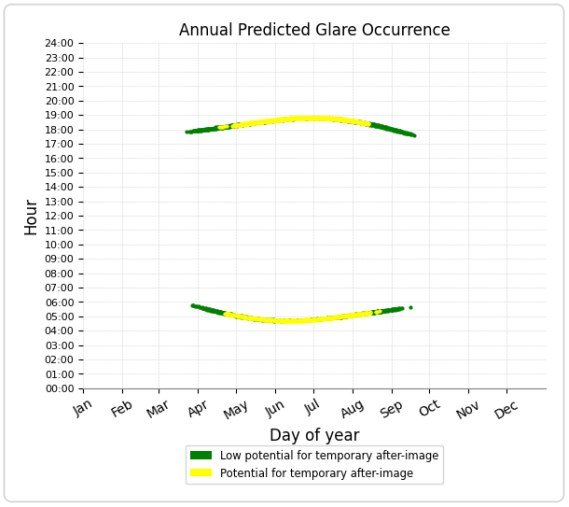
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	674	11.2	886	14.8
Route11	159	2.6	1,428	23.8
Route05	457	7.6	0	0.0
Route08	246	4.1	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 2	34	0.6	0	0.0
OP 7	783	13.1	0	0.0
OP 8	477	8.0	0	0.0
OP 9	566	9.4	0	0.0
OP 17	45	0.8	0	0.0
OP 18	17	0.3	0	0.0
OP 1	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

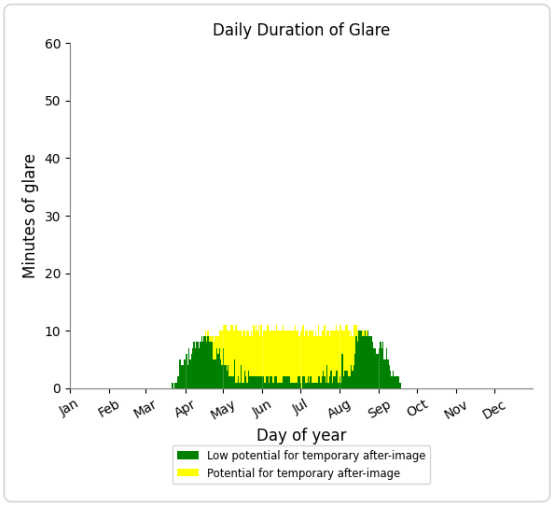
PC ORIGINAL PKG

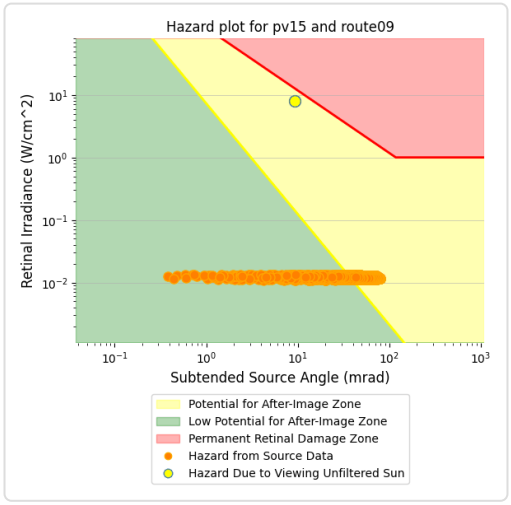
PV15 and Route: Route09

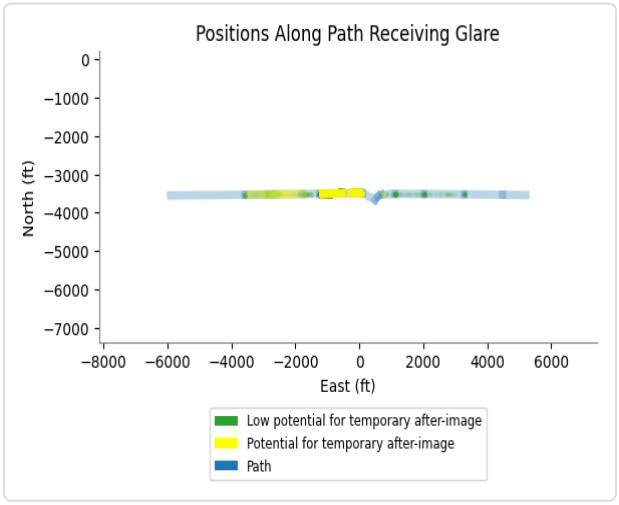
Yellow glare: 886 min.

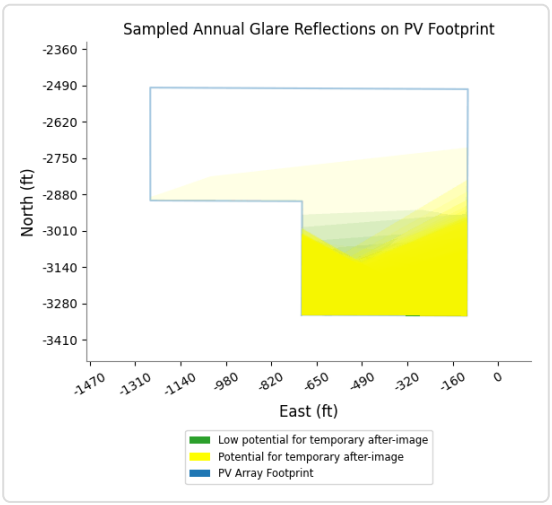
Green glare: 674 min.







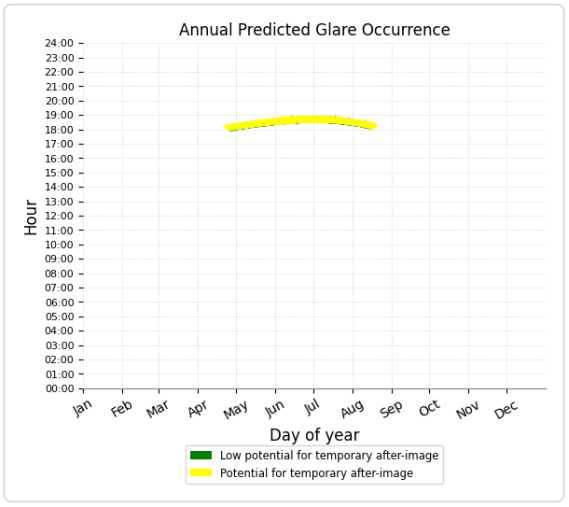


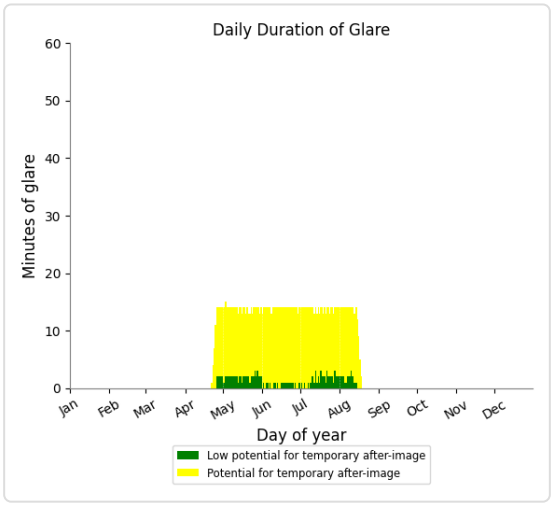


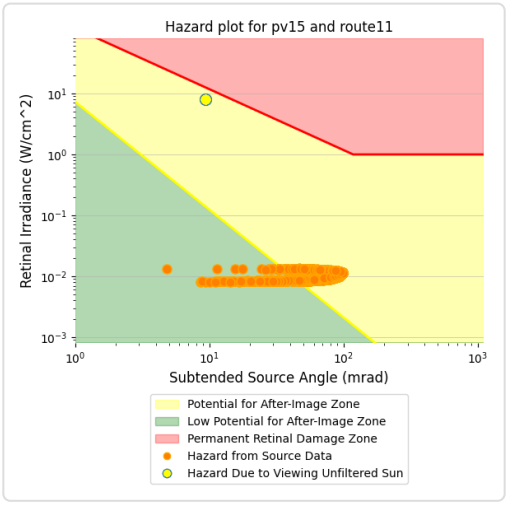
PV15 and Route: Route11

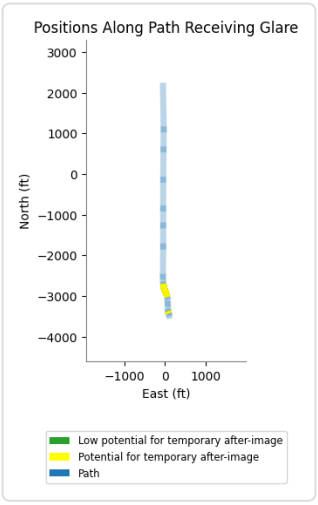
Yellow glare: 1,428 min.

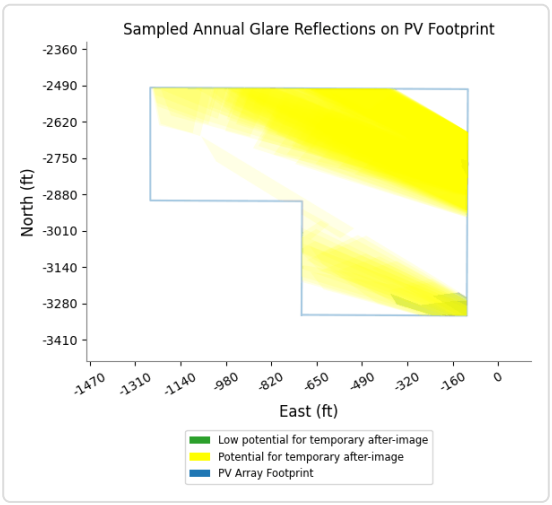
Green glare: 159 min.







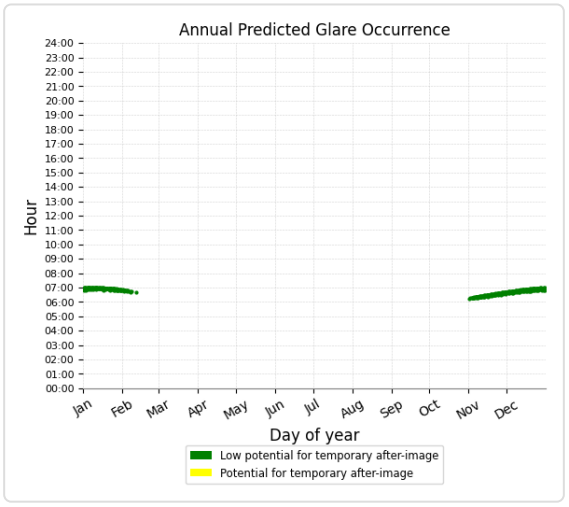


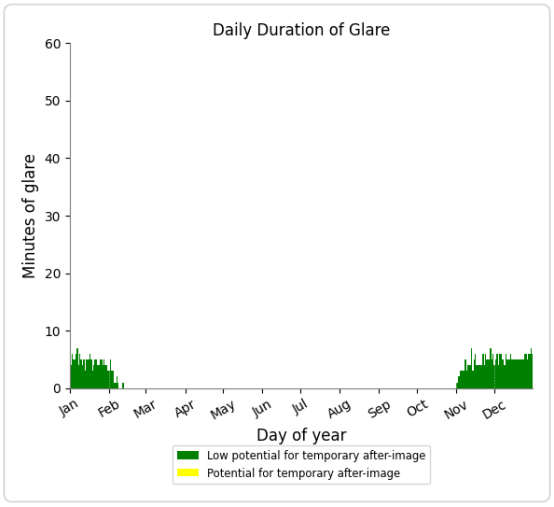


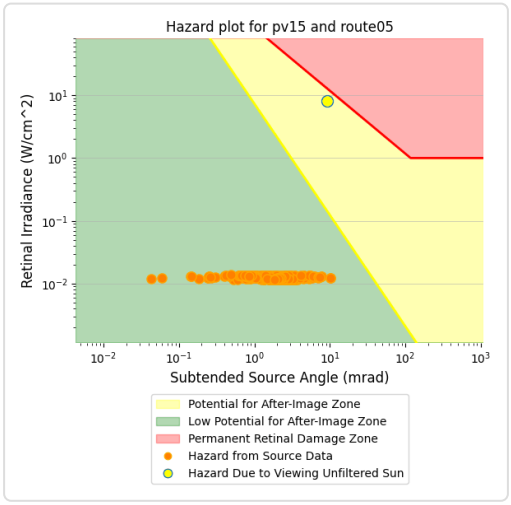
PV15 and Route: Route05

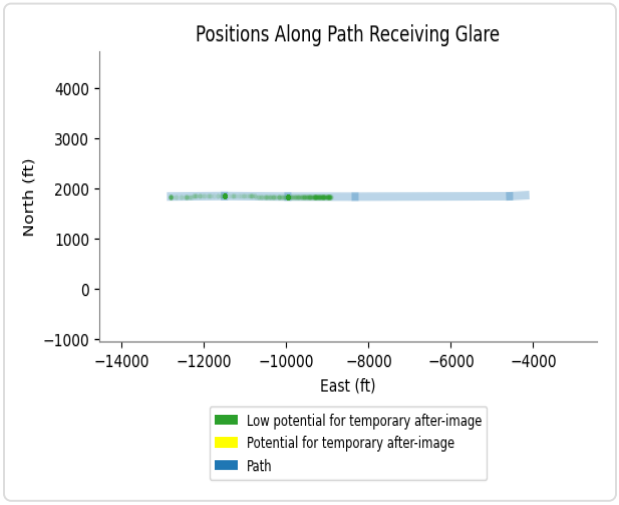
Yellow glare: none

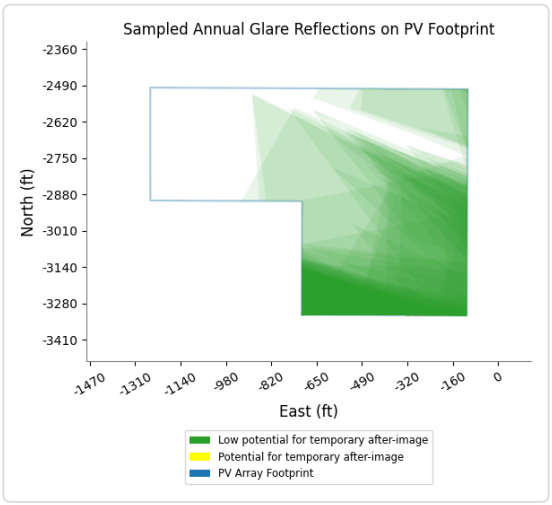
Green glare: 457 min.







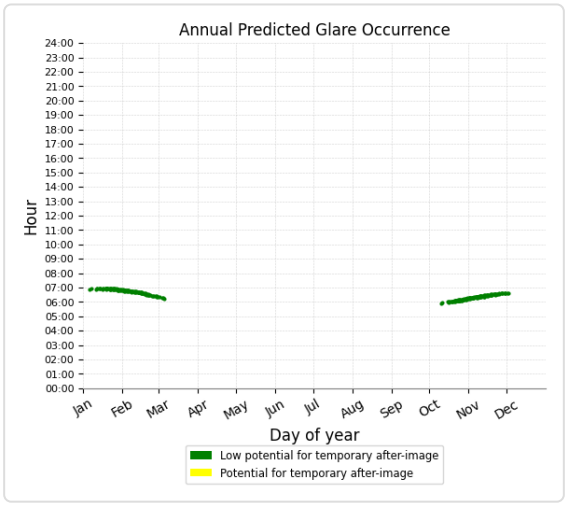


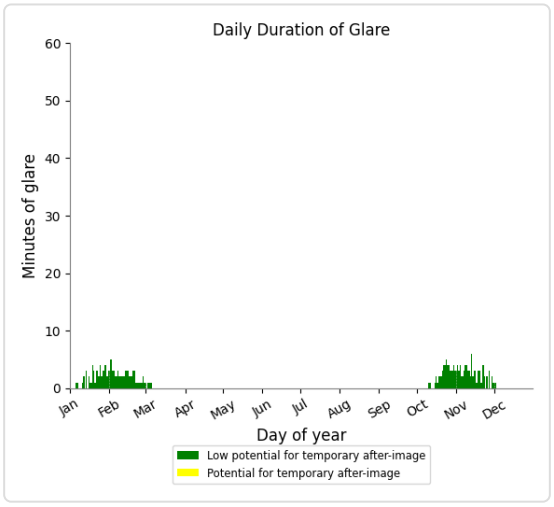


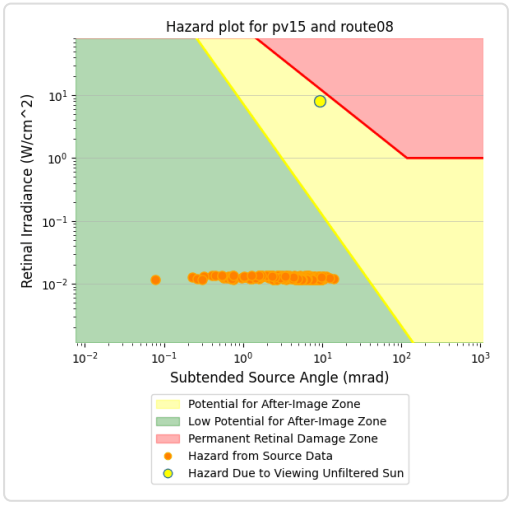
PV15 and Route: Route08

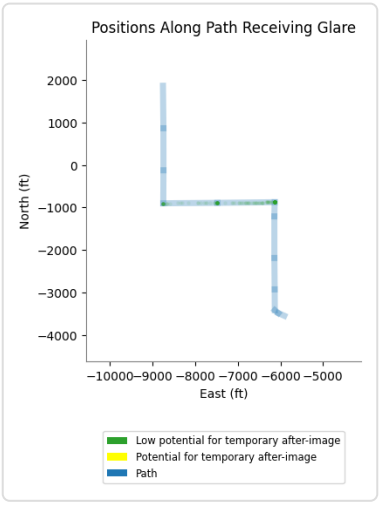
Yellow glare: none

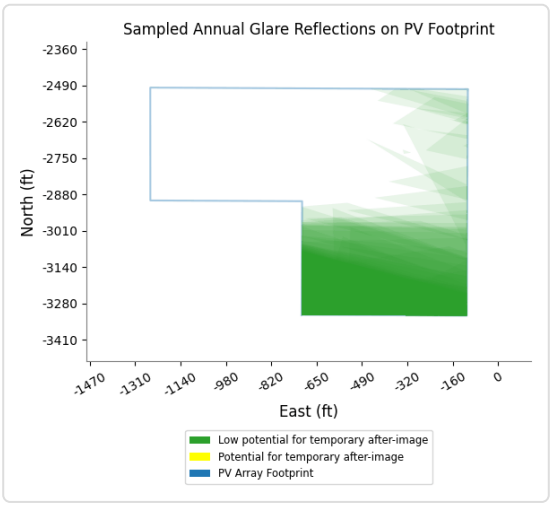
Green glare: 246 min.











PV15 and Route: Route01

No glare found

PV15 and Route: Route02

No glare found

PV15 and Route: Route04

No glare found

PV15 and Route: Route06

No glare found

PV15 and Route: Route07

No glare found

PV15 and Route: Route10

No glare found

PV15 and Route: Route12

No glare found

PV15 and FP: NJK08

No glare found

PV15 and FP: NJK12

No glare found

PV15 and FP: NJK26

No glare found

PV15 and FP: NJK30

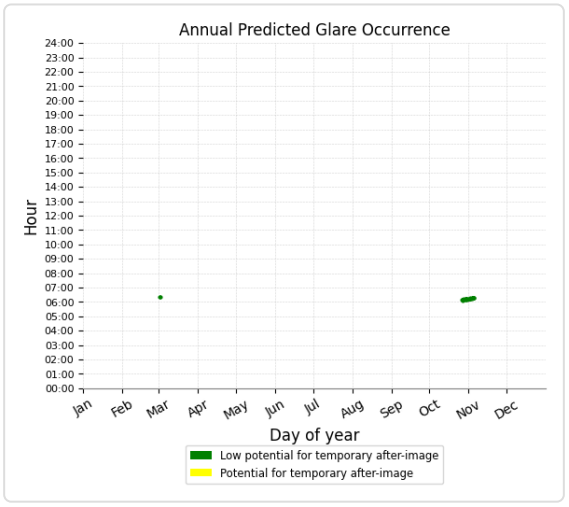
No glare found

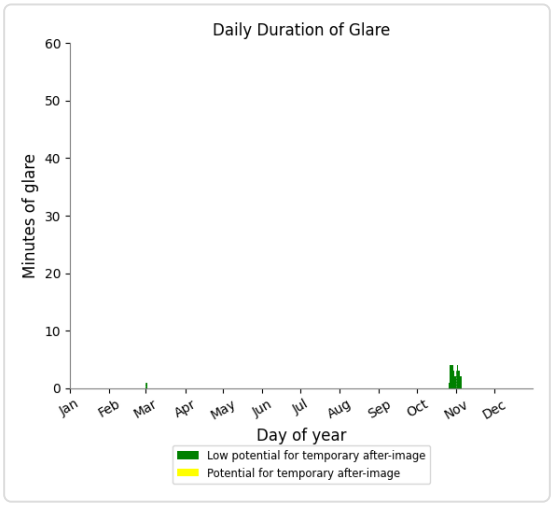
PC ORIGINAL PKG

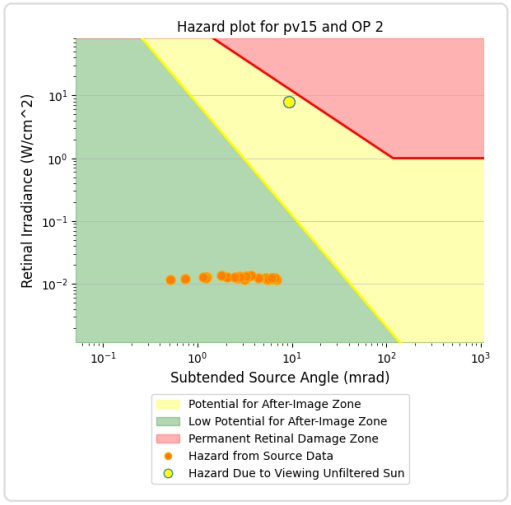
PV15 and OP 2

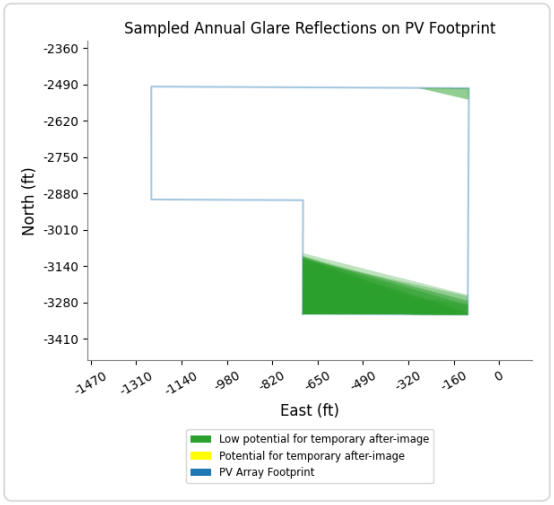
Yellow glare: none

Green glare: 34 min.





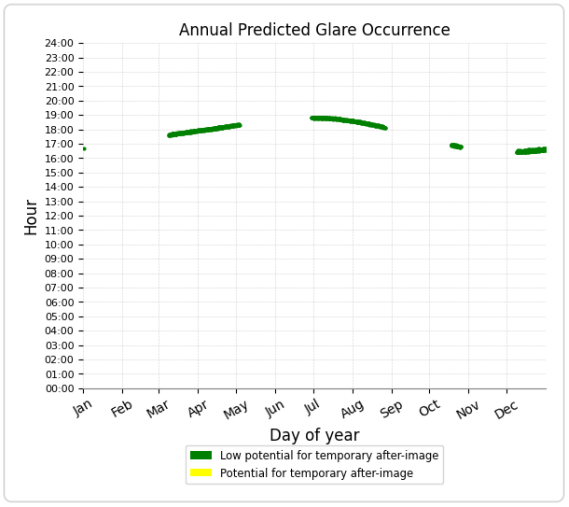


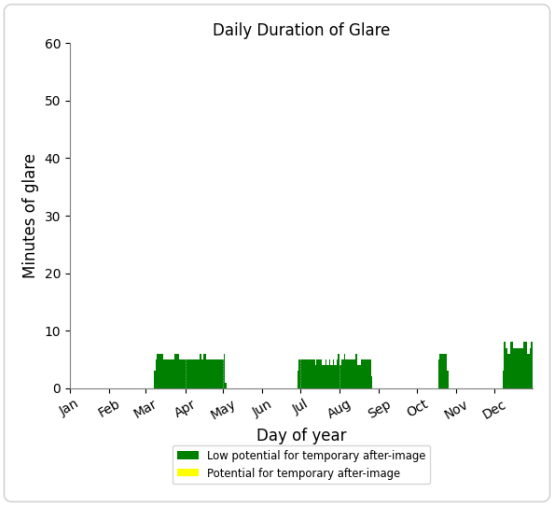


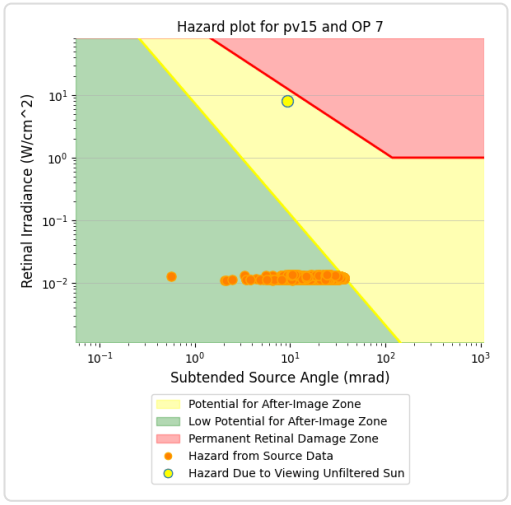
PV15 and OP 7

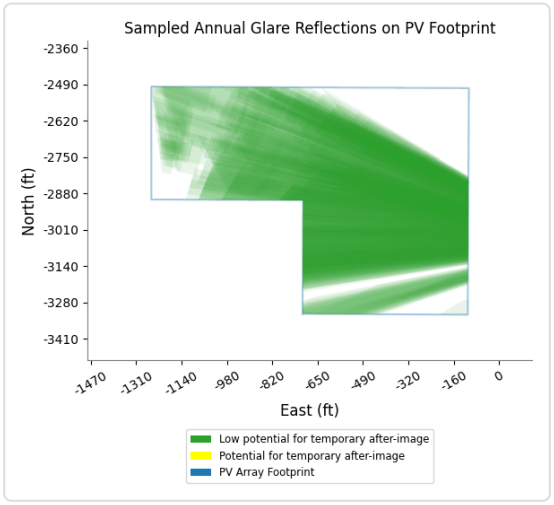
Yellow glare: none

Green glare: 783 min.





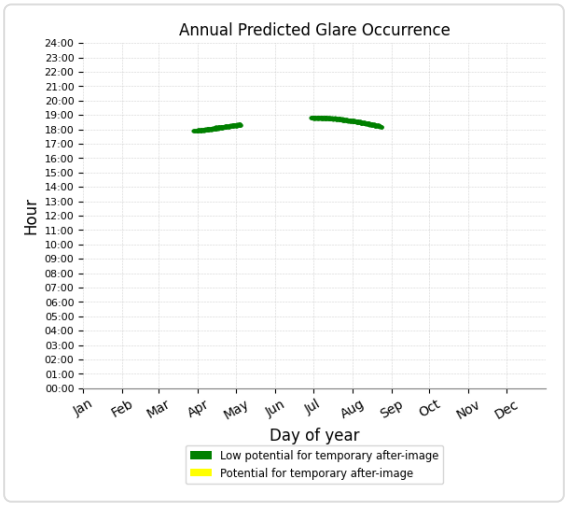


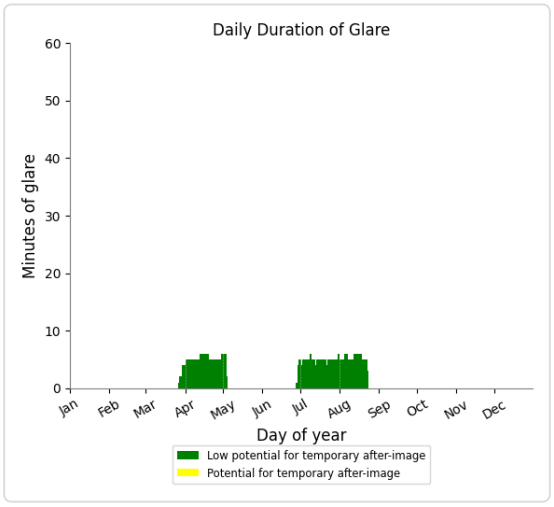


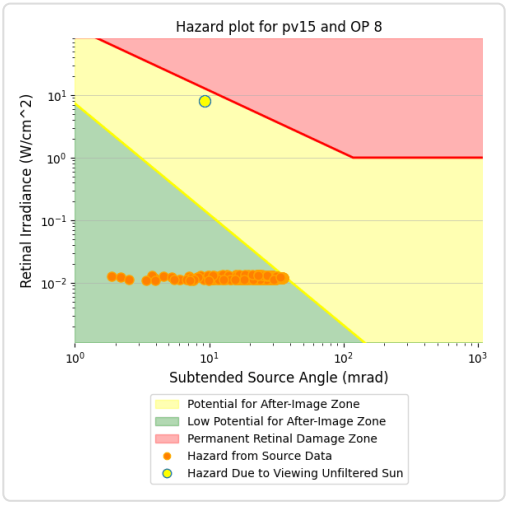
PV15 and OP 8

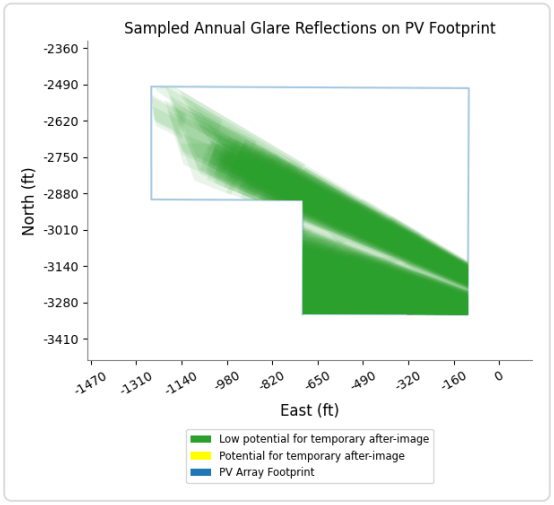
Yellow glare: none

Green glare: 477 min.





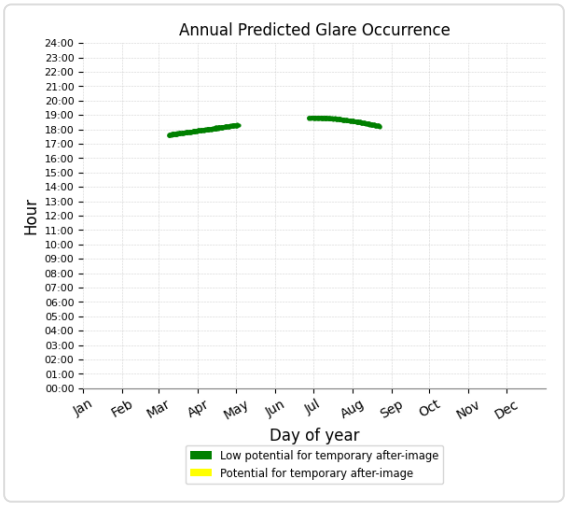


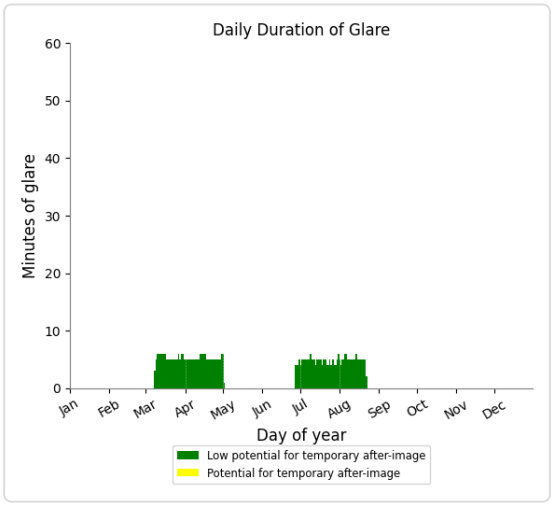


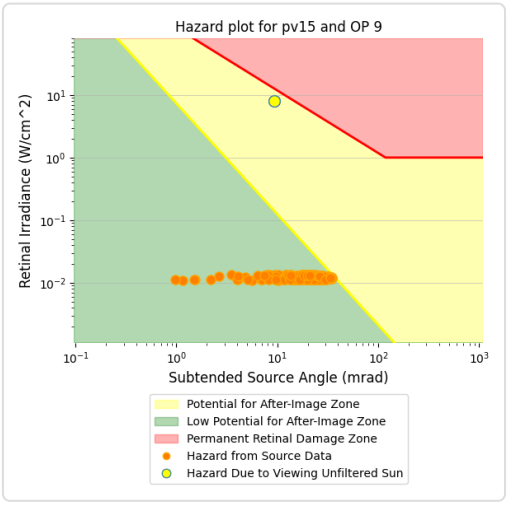
PV15 and OP 9

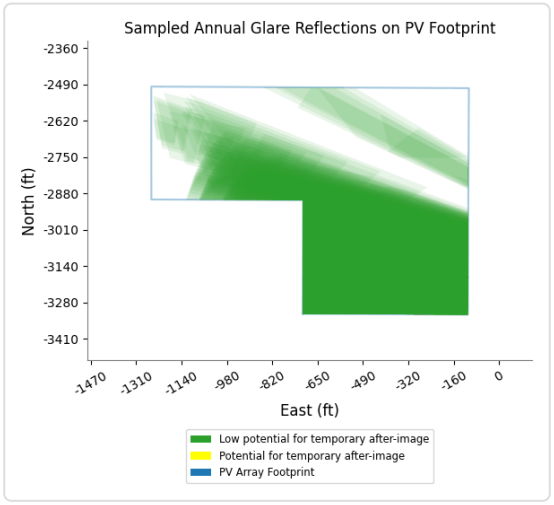
Yellow glare: none

Green glare: 566 min.





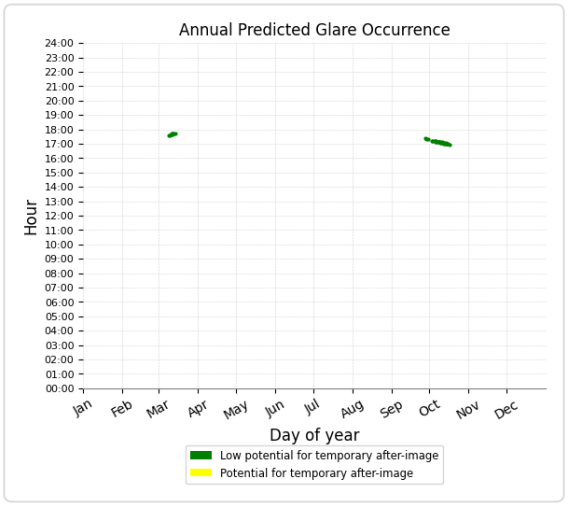


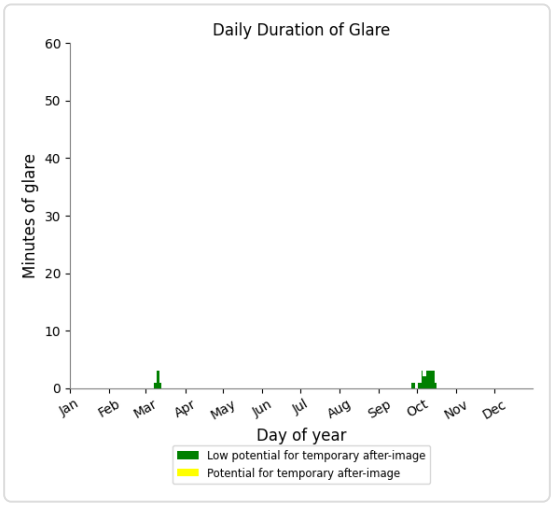


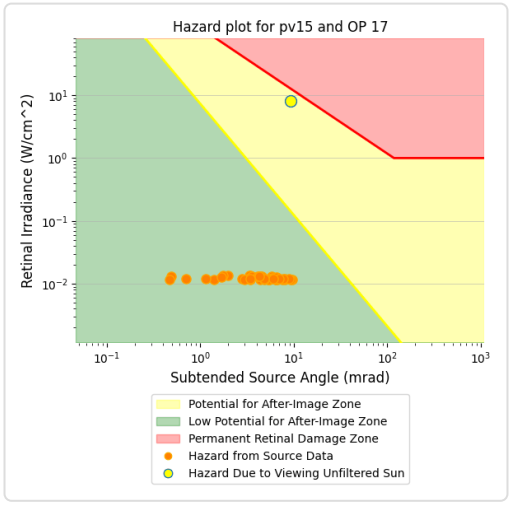
PV15 and OP 17

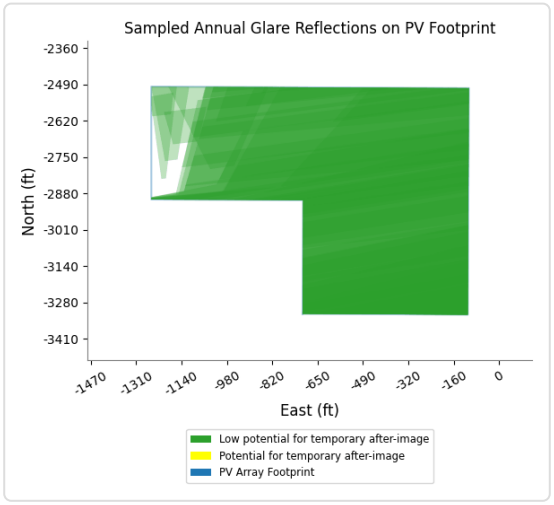
Yellow glare: none

Green glare: 45 min.



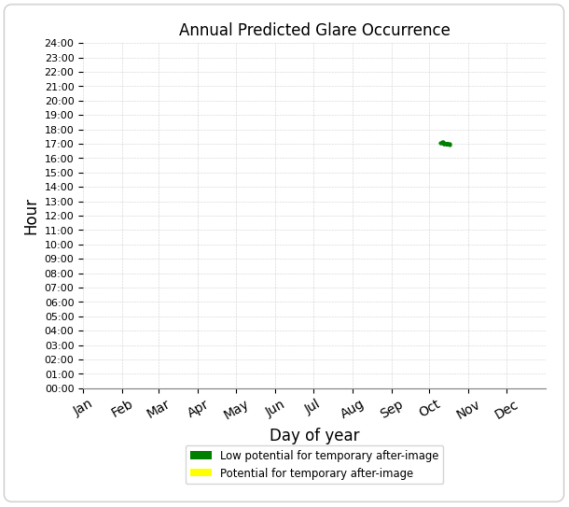


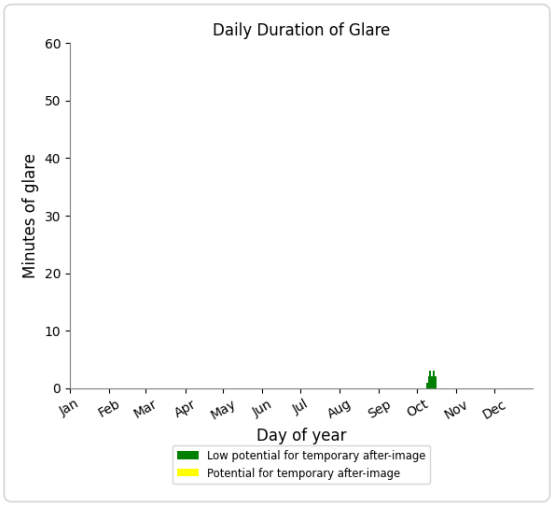


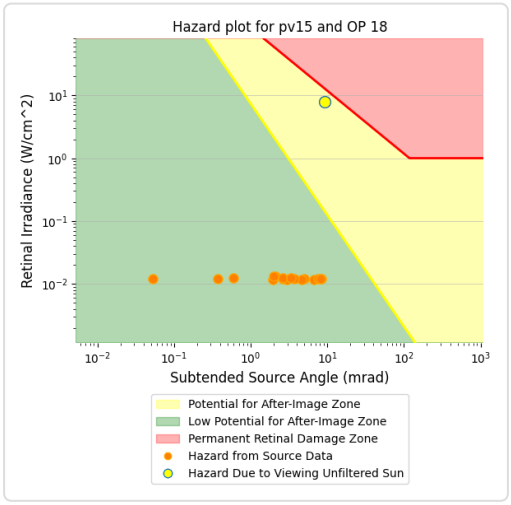


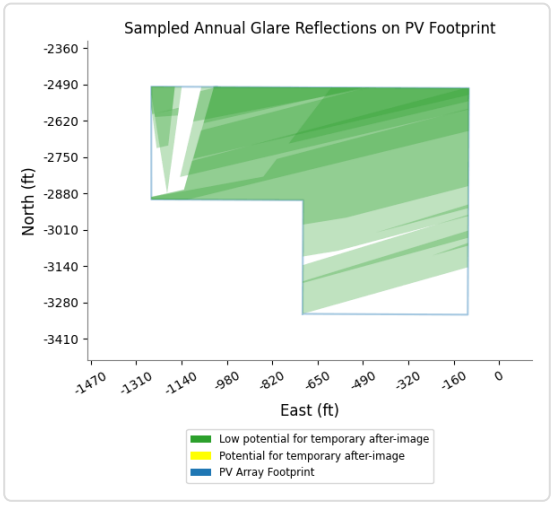
PV15 and OP 18

Yellow glare: none
Green glare: 17 min.









PV15 and OP 1

No glare found

PV15 and OP 3

No glare found

PV15 and OP 4

No glare found

PV15 and OP 5

No glare found

PV15 and OP 6

No glare found

PV15 and OP 10

No glare found

PV15 and OP 11

No glare found

PV15 and OP 12

No glare found

PV15 and OP 13

No glare found

PV15 and OP 14

No glare found

PV15 and OP 15

No glare found

PV15 and OP 16

No glare found

PV15 and OP 19

No glare found

PV15 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV16 potential temporary after-image

Receptor results ordered by category of glare

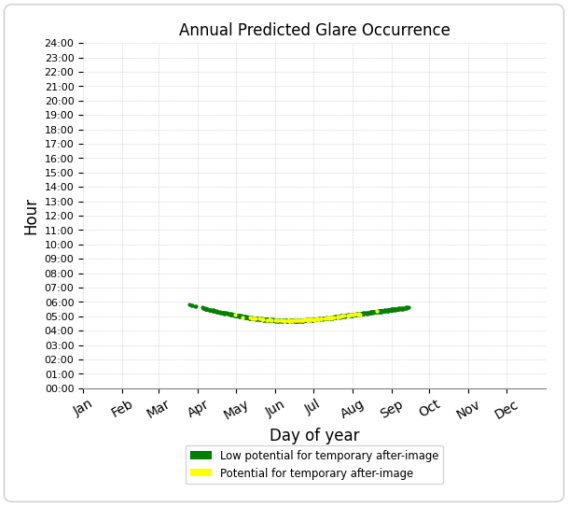
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	444	7.4	82	1.4
Route11	98	1.6	840	14.0
Route05	569	9.5	0	0.0
Route07	33	0.6	0	0.0
Route08	340	5.7	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 2	96	1.6	0	0.0
OP 4	27	0.5	0	0.0
OP 8	133	2.2	0	0.0
OP 9	334	5.6	0	0.0
OP 1	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

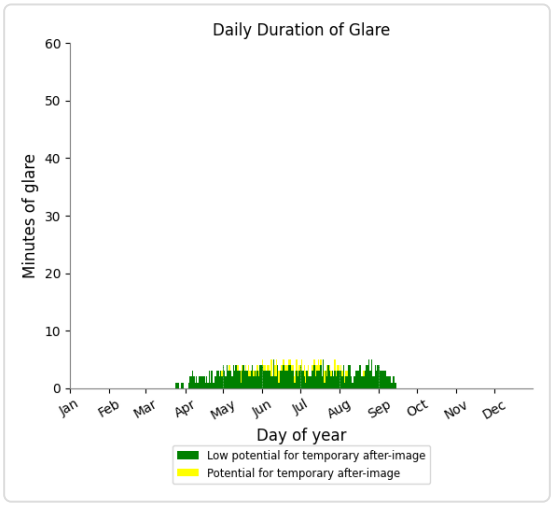
PC ORIGINAL PKG

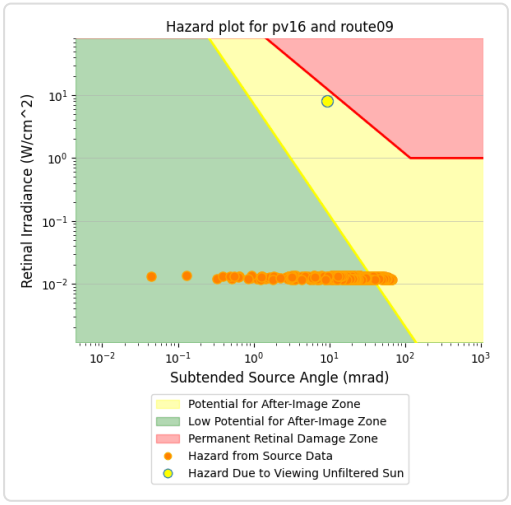
PV16 and Route: Route09

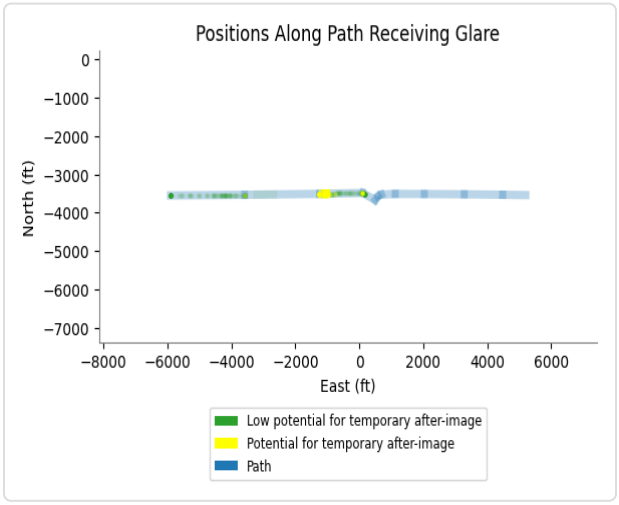
Yellow glare: 82 min.

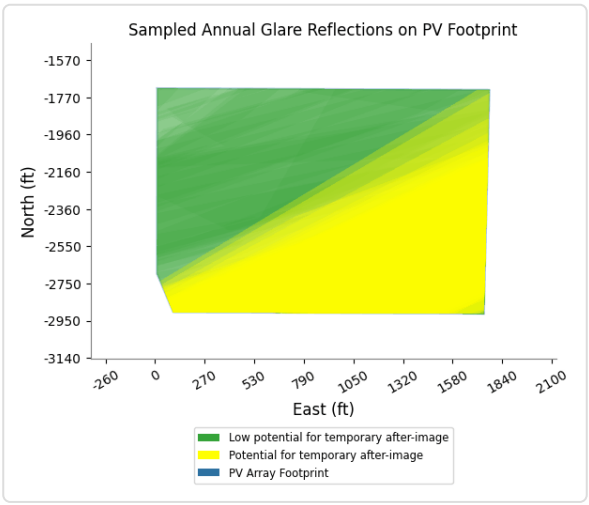
Green glare: 444 min.







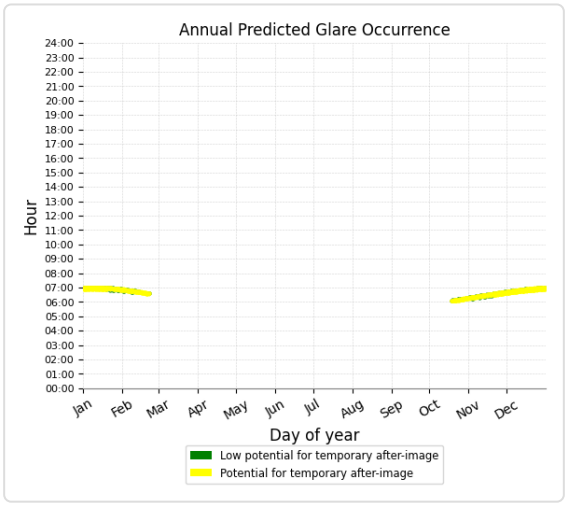


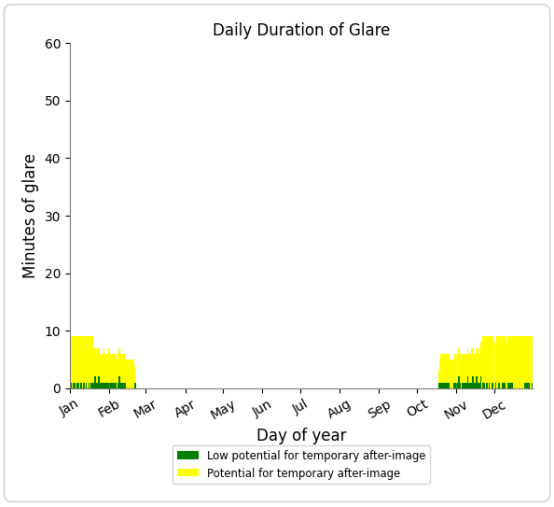


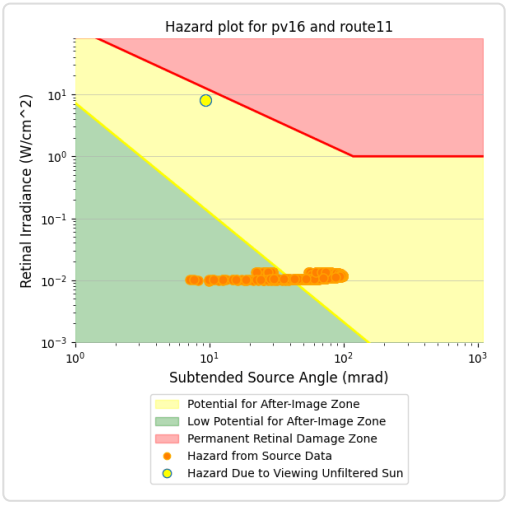
PV16 and Route: Route11

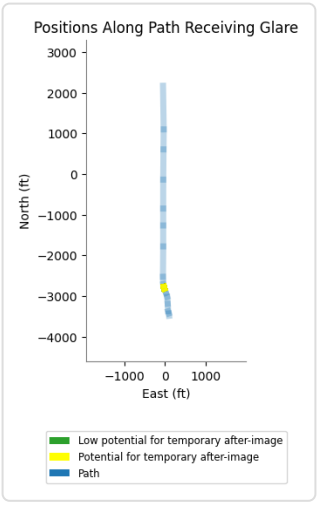
Yellow glare: 840 min.

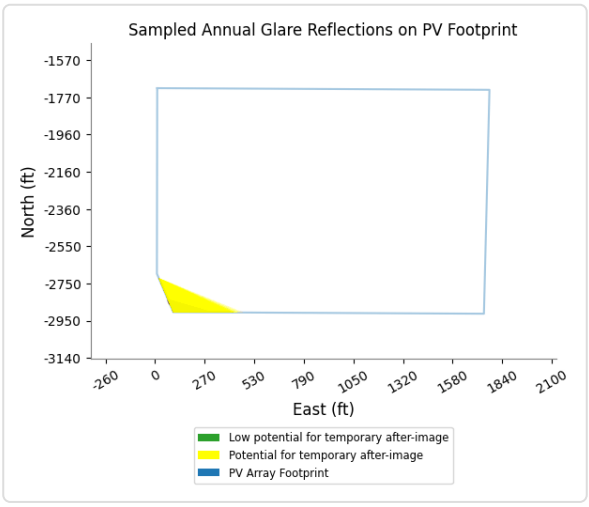
Green glare: 98 min.







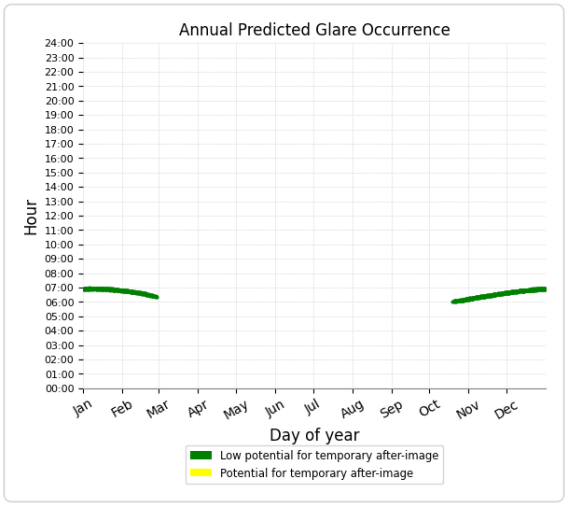


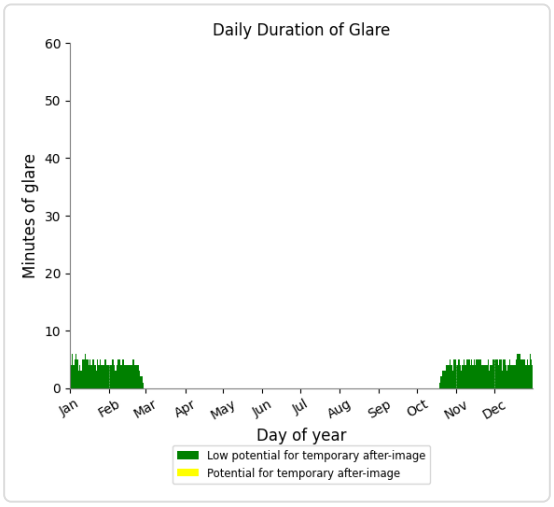


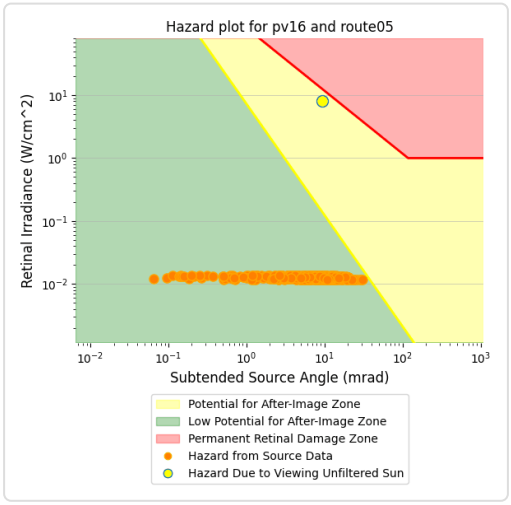
PV16 and Route: Route05

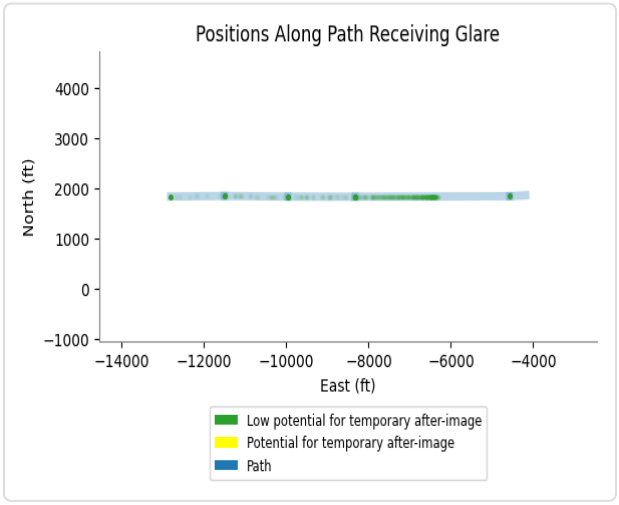
Yellow glare: none

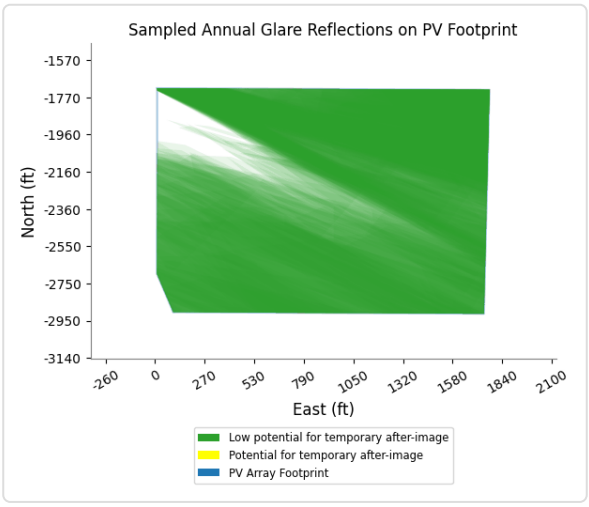
Green glare: 569 min.







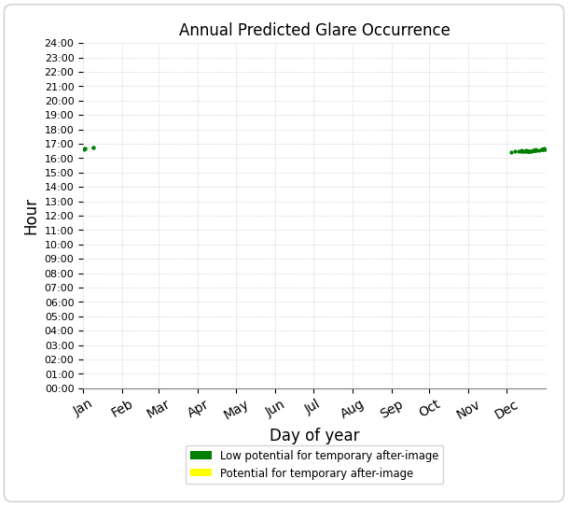


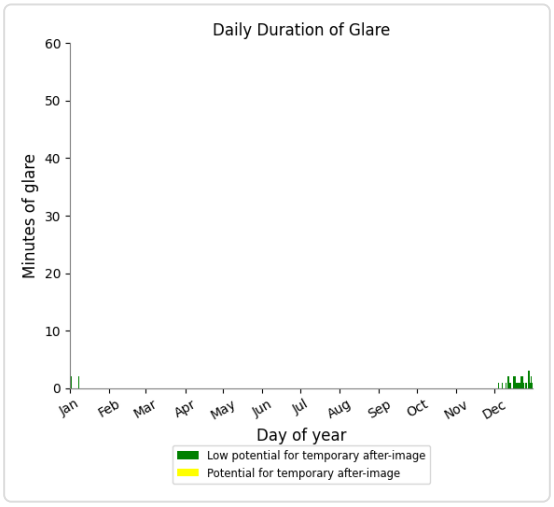


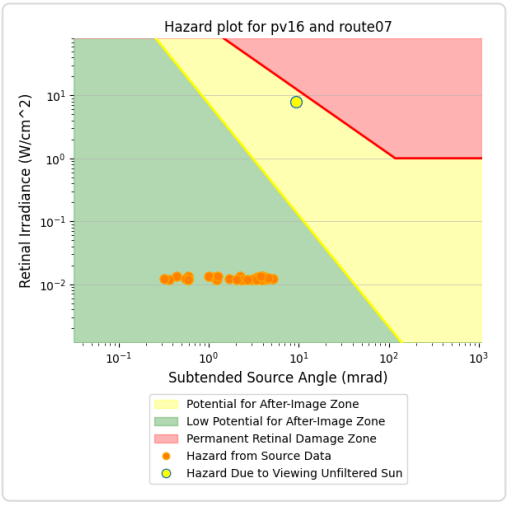
PV16 and Route: Route07

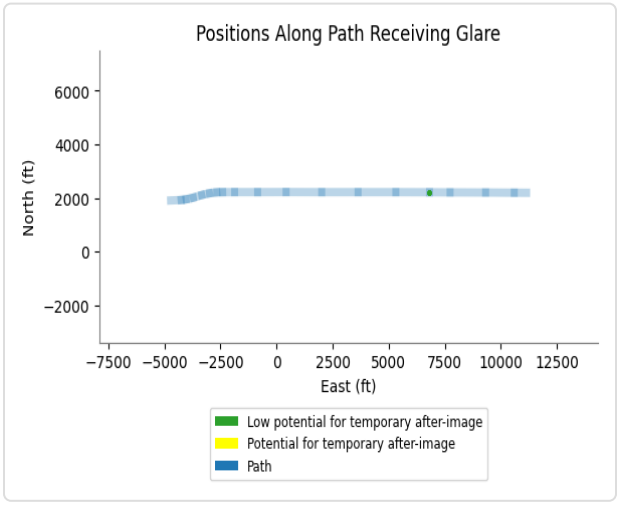
Yellow glare: none

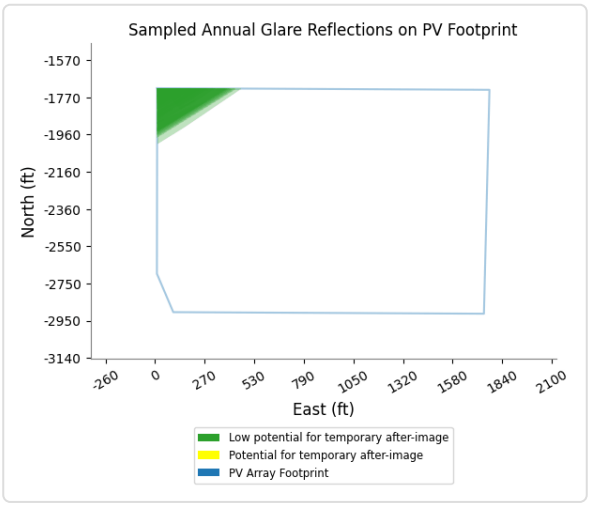
Green glare: 33 min.







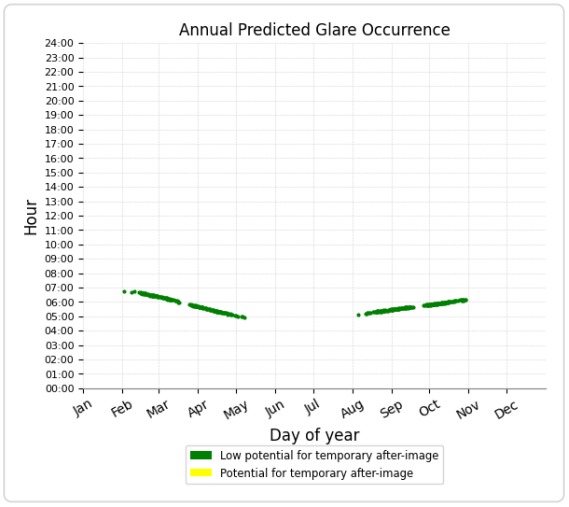


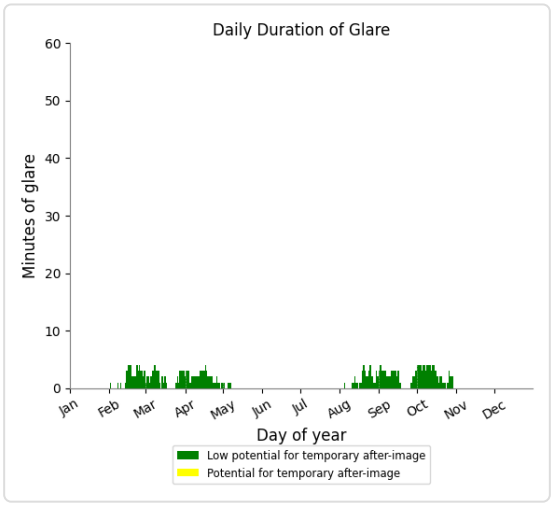


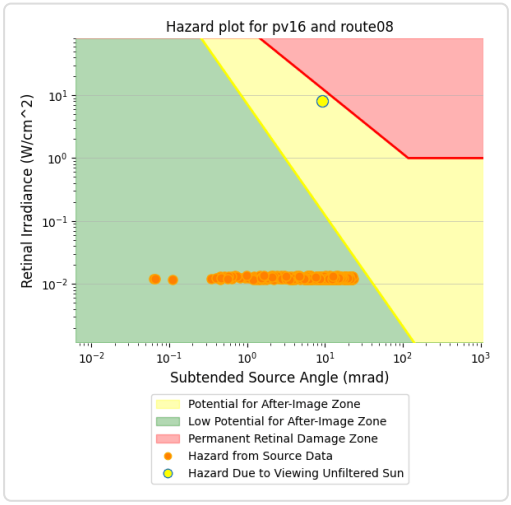
PV16 and Route: Route08

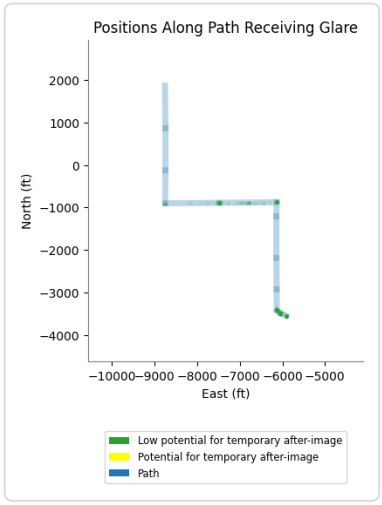
Yellow glare: none

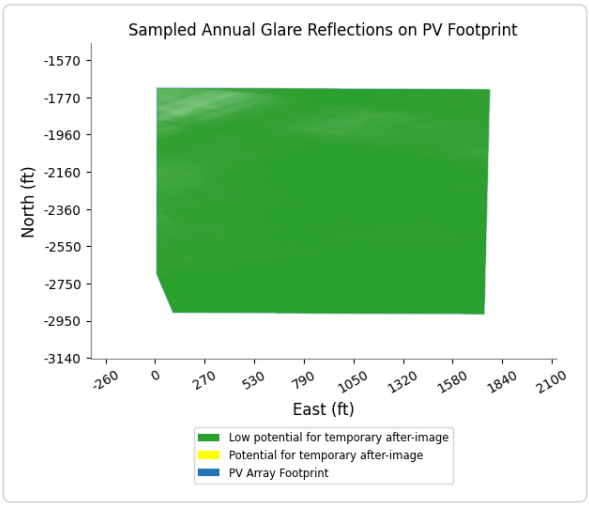
Green glare: 340 min.











PV16 and Route: Route01

No glare found

PV16 and Route: Route02

No glare found

PV16 and Route: Route04

No glare found

PV16 and Route: Route06

No glare found

PV16 and Route: Route10

No glare found

PV16 and Route: Route12

No glare found

PV16 and FP: NJK08

No glare found

PV16 and FP: NJK12

No glare found

PV16 and FP: NJK26

No glare found

PV16 and FP: NJK30

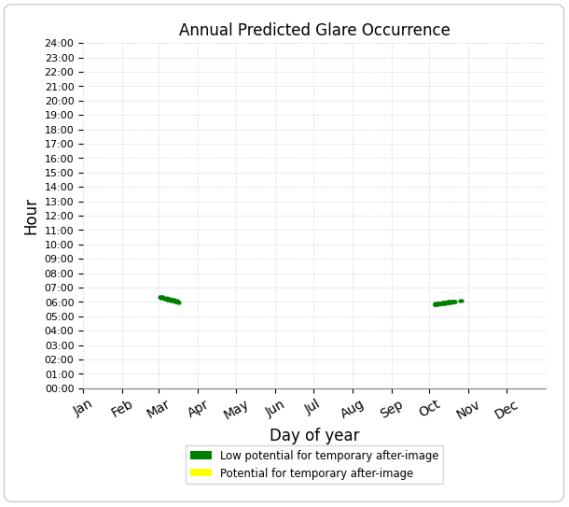
No glare found

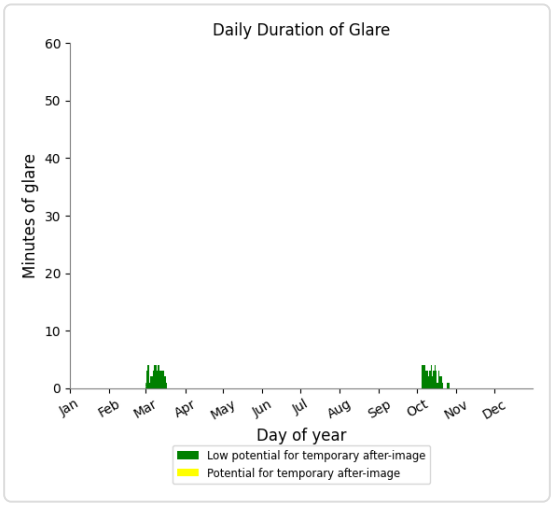
PC ORIGINAL PKG

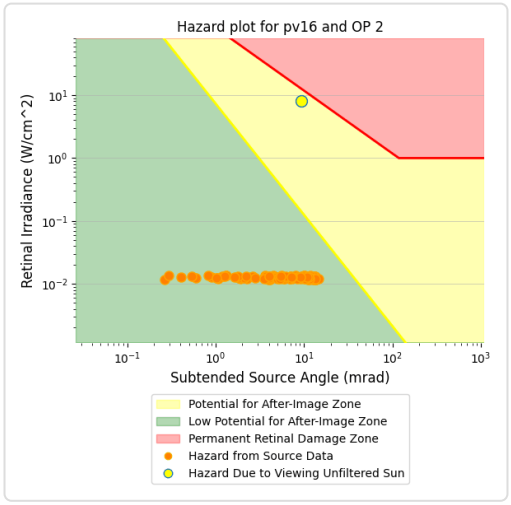
PV16 and OP 2

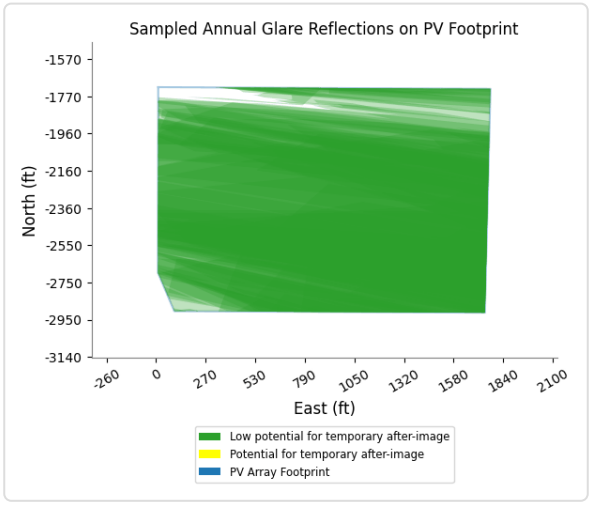
Yellow glare: none

Green glare: 96 min.





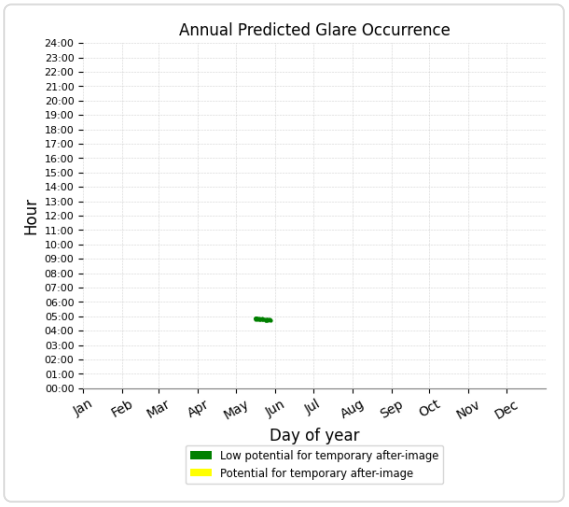


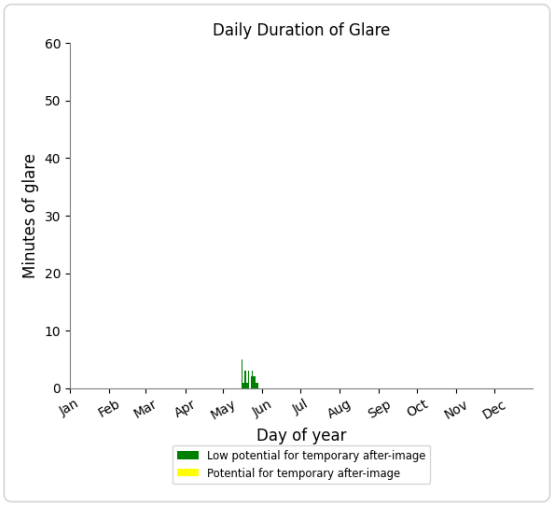


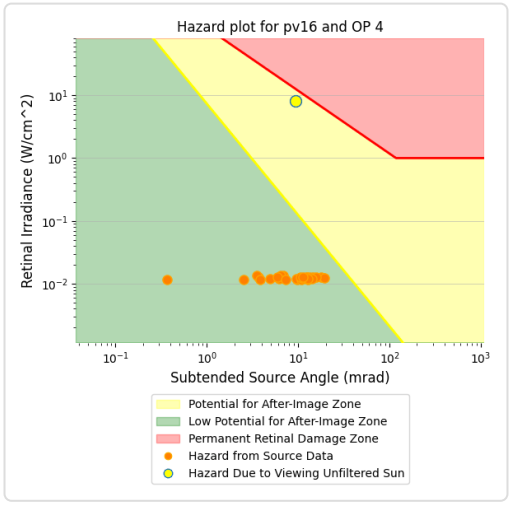
PV16 and OP 4

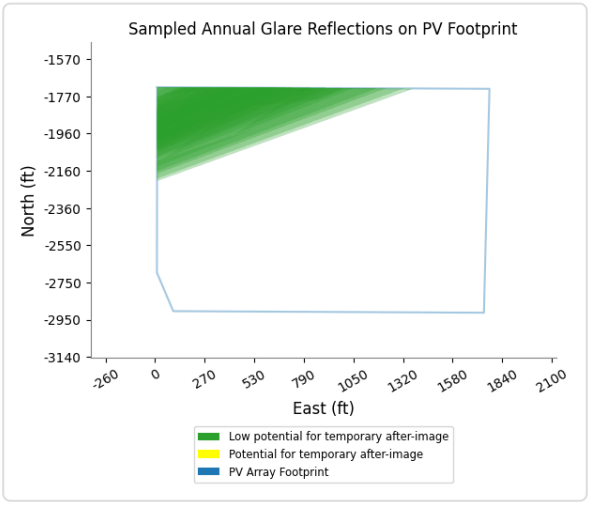
Yellow glare: none

Green glare: 27 min.





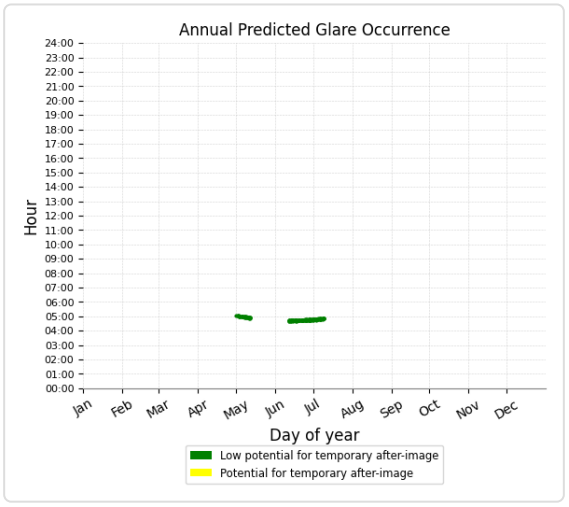


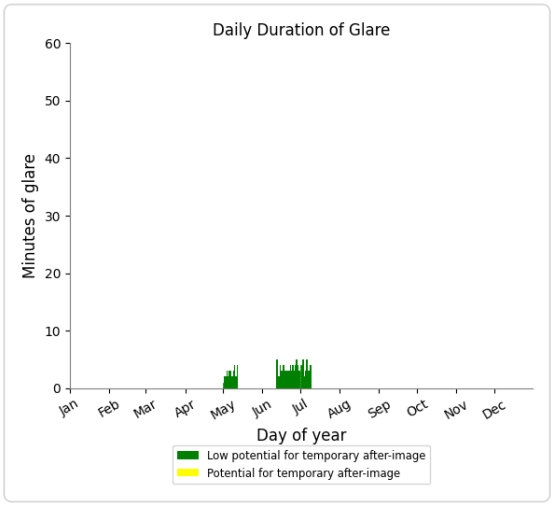


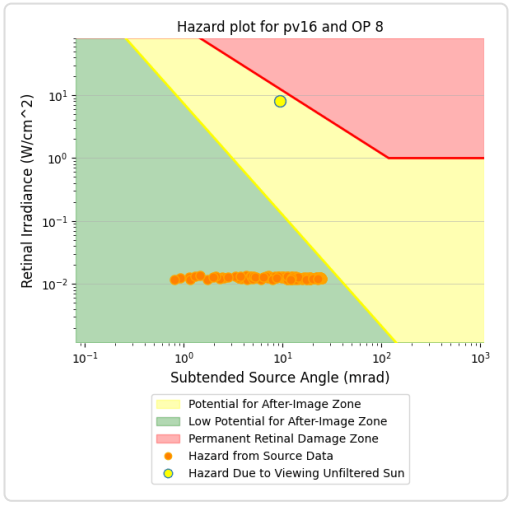
PV16 and OP 8

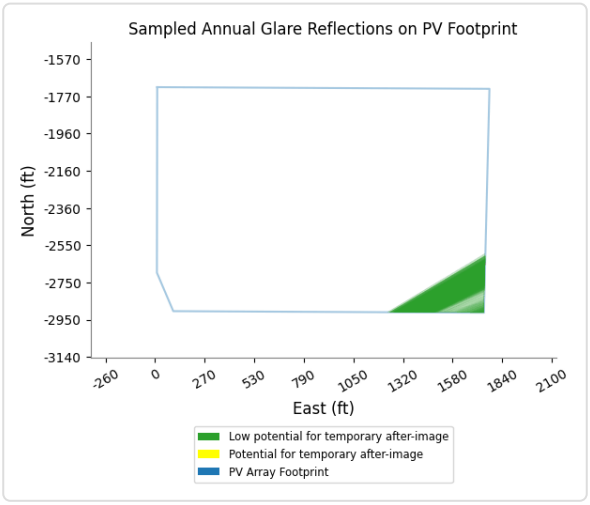
Yellow glare: none

Green glare: 133 min.



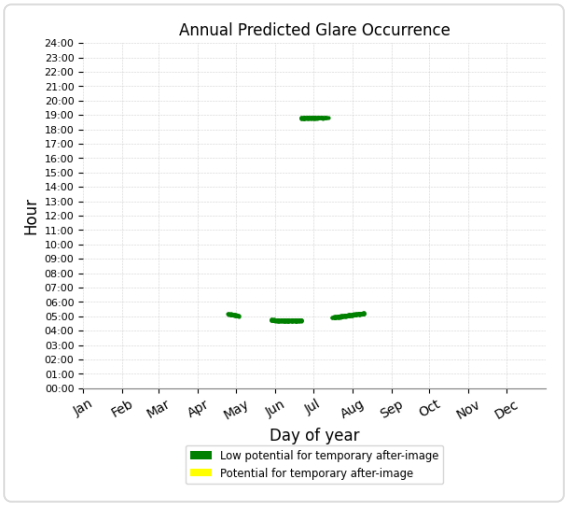


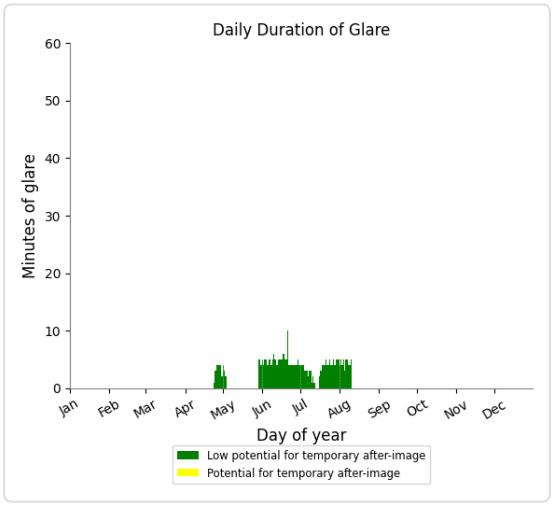


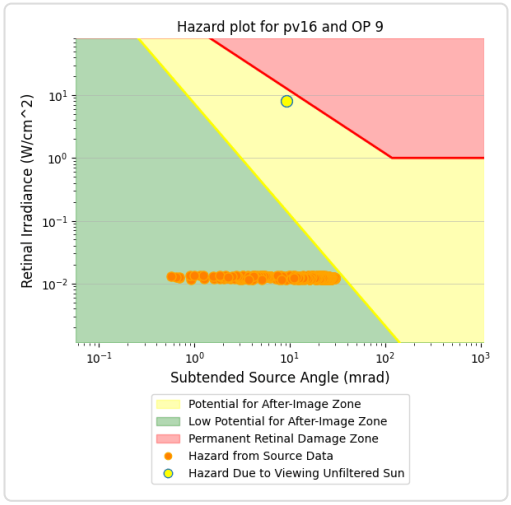


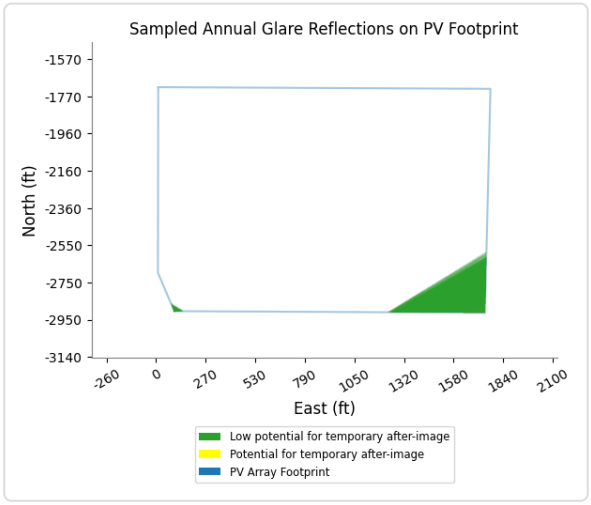
PV16 and OP 9

Yellow glare: none
Green glare: 334 min.









PV16 and OP 1

No glare found

PV16 and OP 3

No glare found

PV16 and OP 5

No glare found

PV16 and OP 6

No glare found

PV16 and OP 7

No glare found

PV16 and OP 10

No glare found

PV16 and OP 11

No glare found

PV16 and OP 12

No glare found

PV16 and OP 13

No glare found

PV16 and OP 14

No glare found

PV16 and OP 15

No glare found

PV16 and OP 16

No glare found

PV16 and OP 17

No glare found

PV16 and OP 18

No glare found

PV16 and OP 19

No glare found

PV16 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV17 low potential for temporary after-image

Receptor results ordered by category of glare

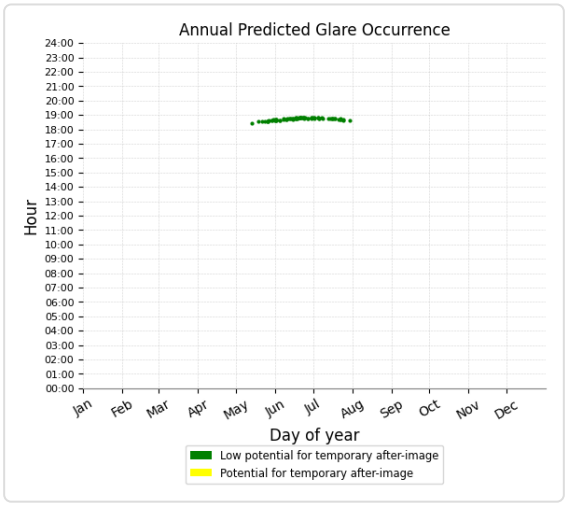
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	76	1.3	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 9	147	2.5	0	0.0
OP 11	154	2.6	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

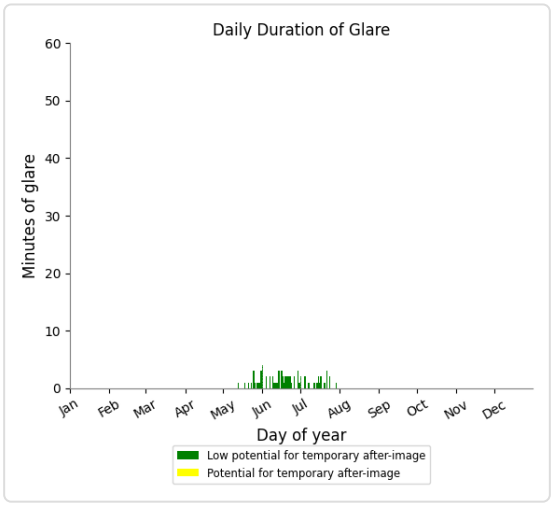
PC ORIGINAL PKG

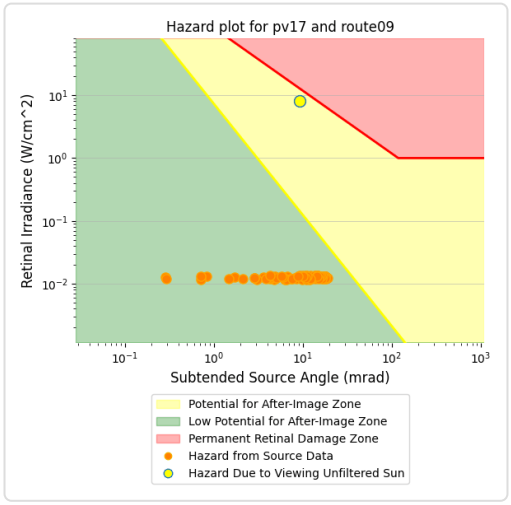
PV17 and Route: Route09

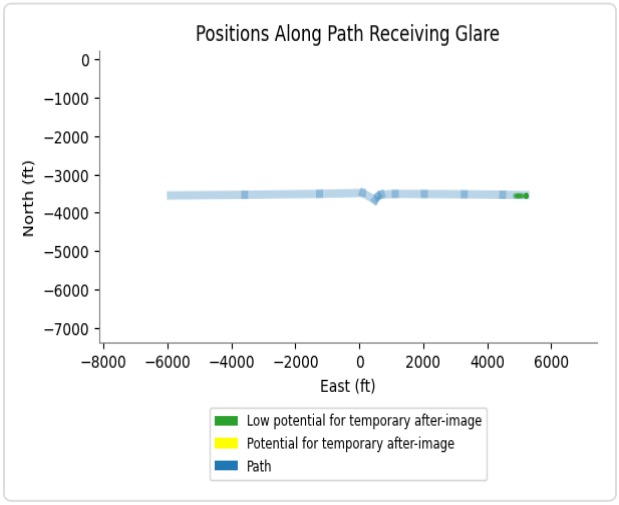
Yellow glare: none

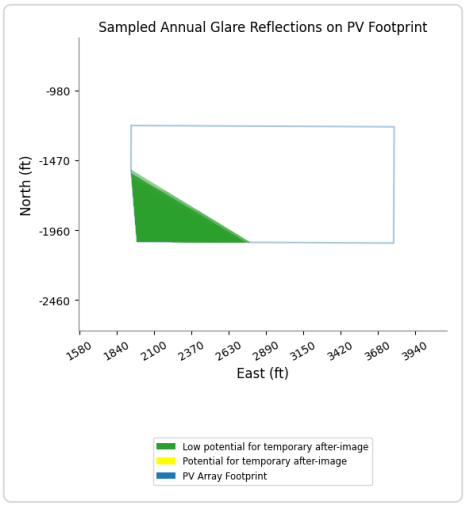
Green glare: 76 min.











PV17 and Route: Route01

No glare found

PV17 and Route: Route02

No glare found

PV17 and Route: Route04

No glare found

PV17 and Route: Route05

No glare found

PV17 and Route: Route06

No glare found

PV17 and Route: Route07

No glare found

PV17 and Route: Route08

No glare found

PV17 and Route: Route10

No glare found

PV17 and Route: Route11

No glare found

PV17 and Route: Route12

No glare found

PV17 and FP: NJK08

No glare found

PV17 and FP: NJK12

No glare found

PV17 and FP: NJK26

No glare found

PV17 and FP: NJK30

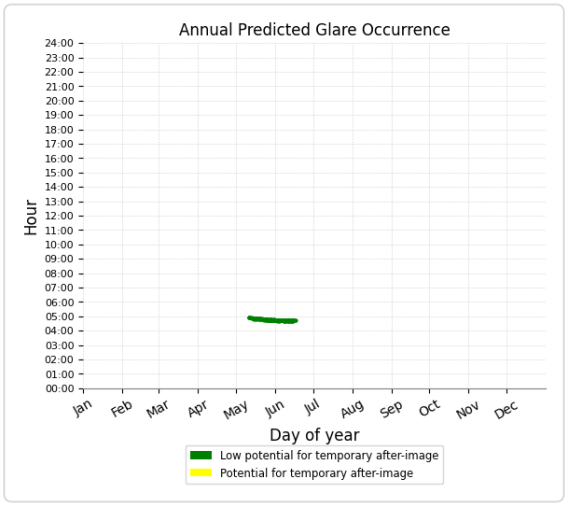
No glare found

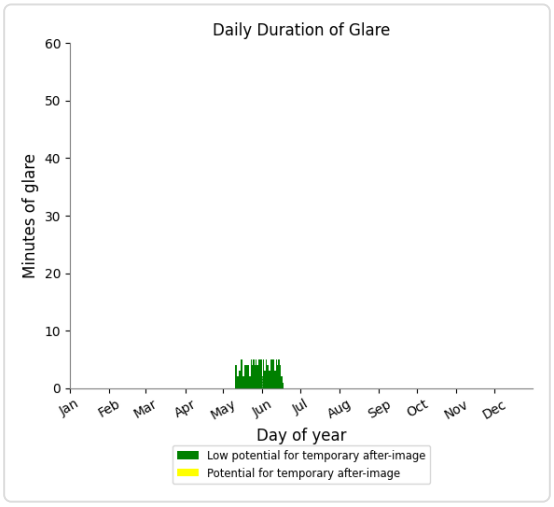
PC ORIGINAL PKG

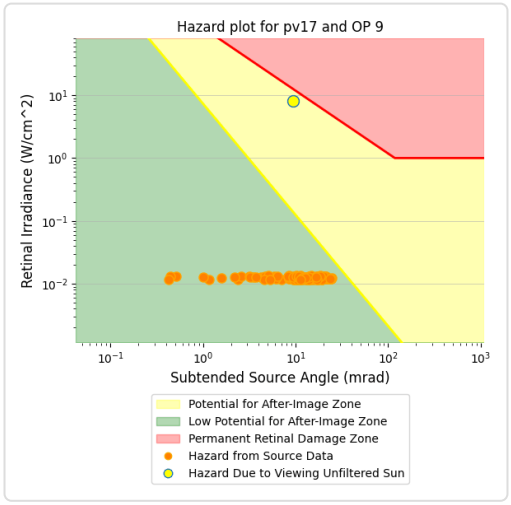
PV17 and OP 9

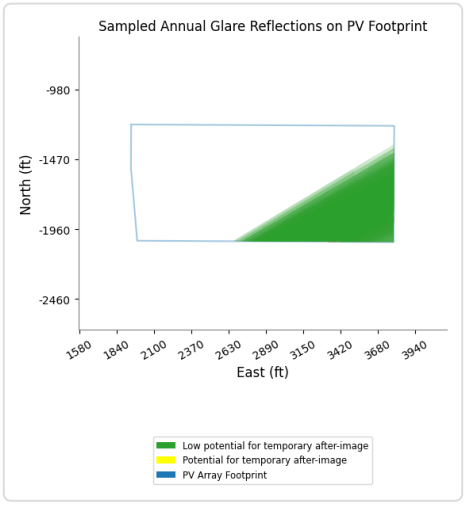
Yellow glare: none

Green glare: 147 min.



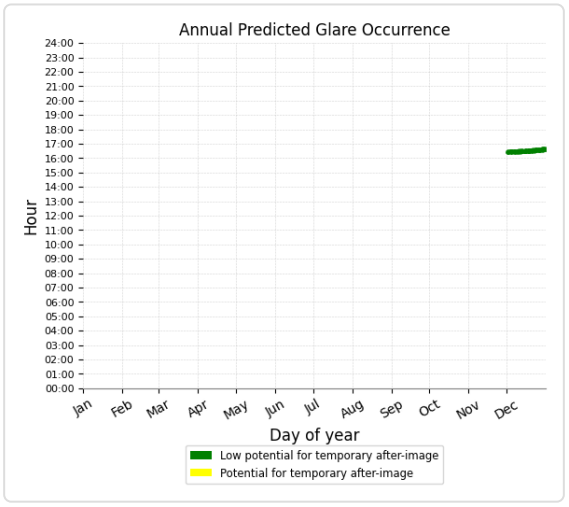


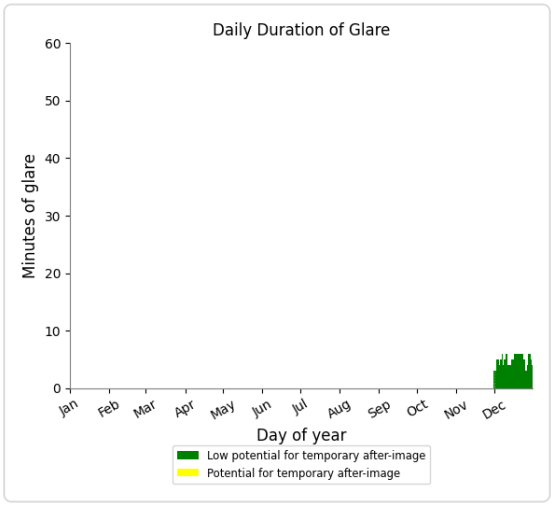


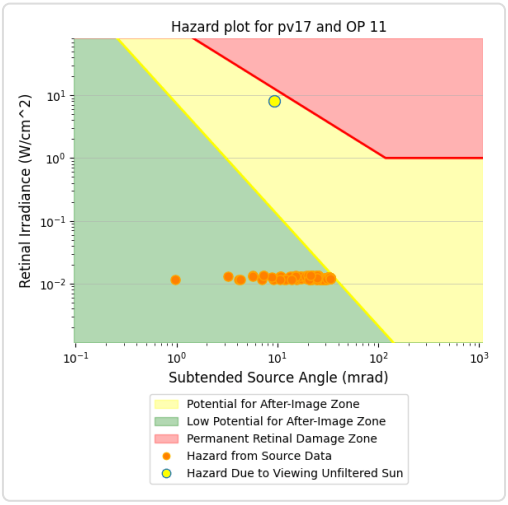


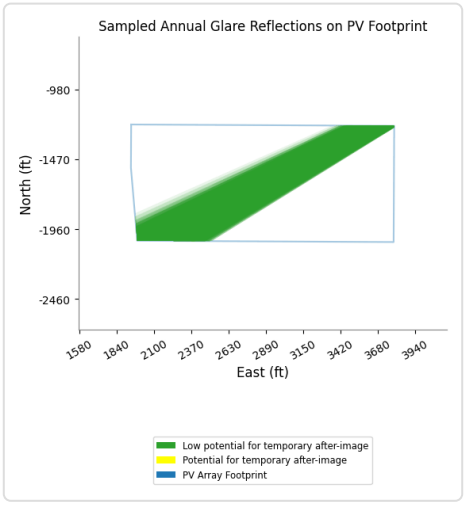
PV17 and OP 11

Yellow glare: none
Green glare: 154 min.









PV17 and OP 1

No glare found

PV17 and OP 2

No glare found

PV17 and OP 3

No glare found

PV17 and OP 4

No glare found

PV17 and OP 5

No glare found

PV17 and OP 6

No glare found

PV17 and OP 7

No glare found

PV17 and OP 8

No glare found

PV17 and OP 10

No glare found

PV17 and OP 12

No glare found

PV17 and OP 13

No glare found

PV17 and OP 14

No glare found

PV17 and OP 15

No glare found

PV17 and OP 16

No glare found

PV17 and OP 17

No glare found

PV17 and OP 18

No glare found

PV17 and OP 19

No glare found

PV17 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV18 potential temporary after-image

Receptor results ordered by category of glare

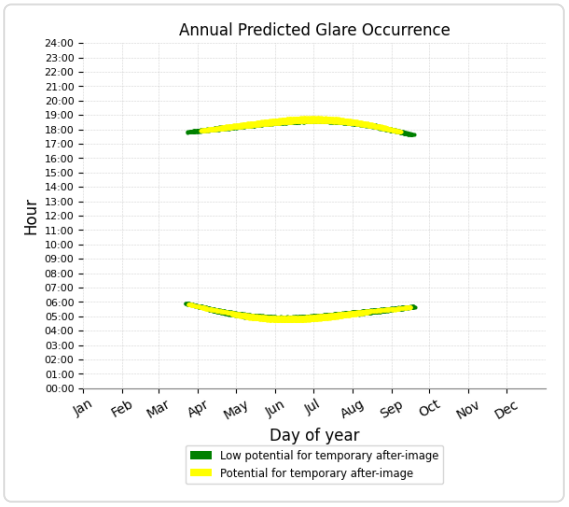
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	950	15.8	3,204	53.4
Route05	26	0.4	0	0.0
Route08	250	4.2	0	0.0
Route11	142	2.4	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	179	3.0	0	0.0
OP 7	544	9.1	0	0.0
OP 8	410	6.8	0	0.0
OP 9	557	9.3	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

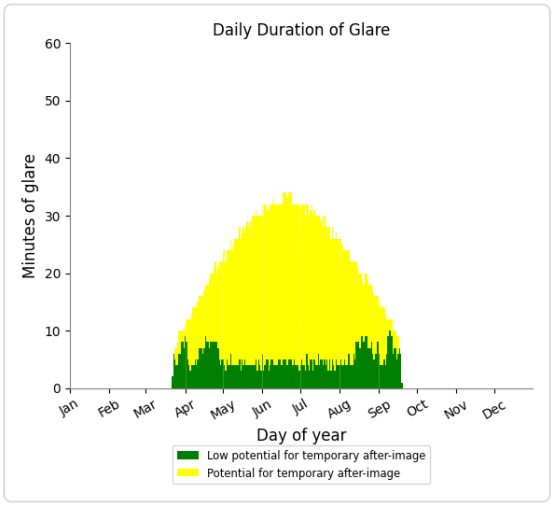
PC ORIGINAL PKG

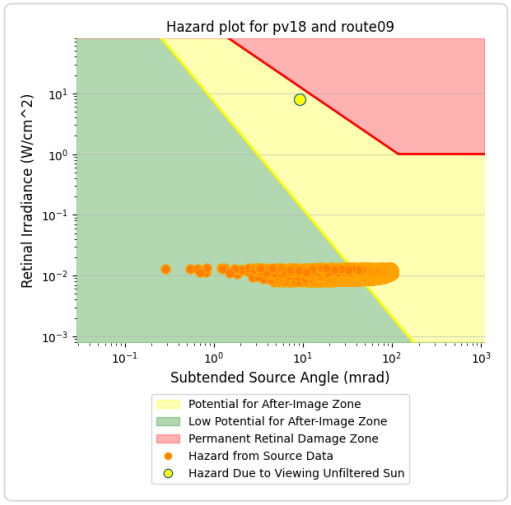
PV18 and Route: Route09

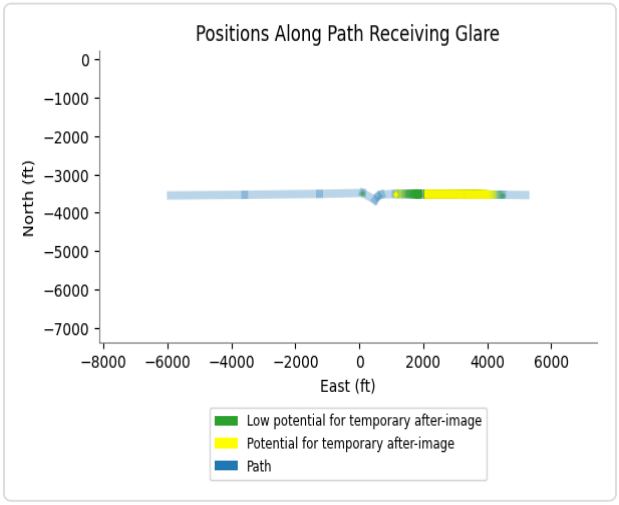
Yellow glare: 3,204 min.

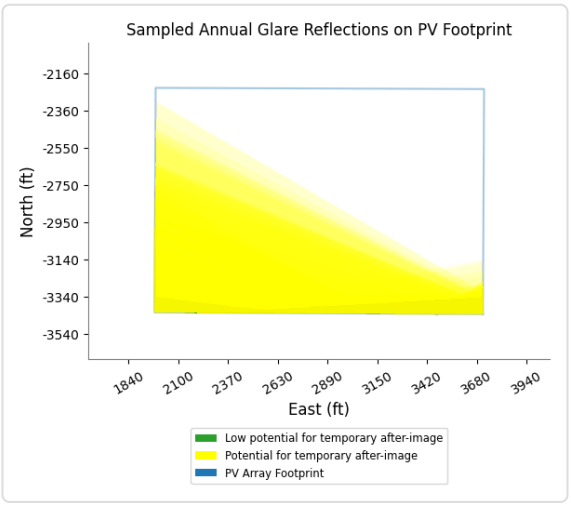
Green glare: 950 min.







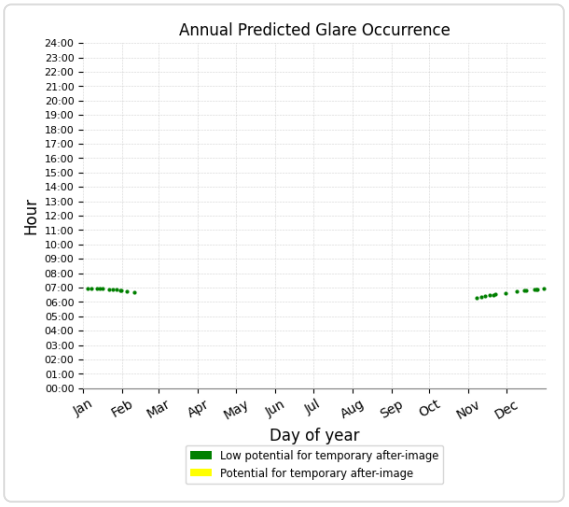


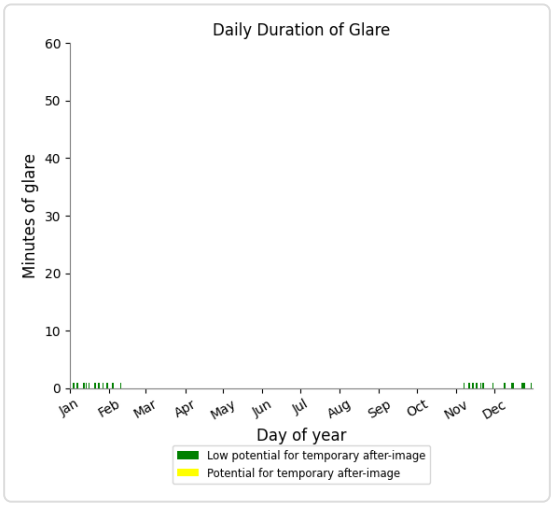


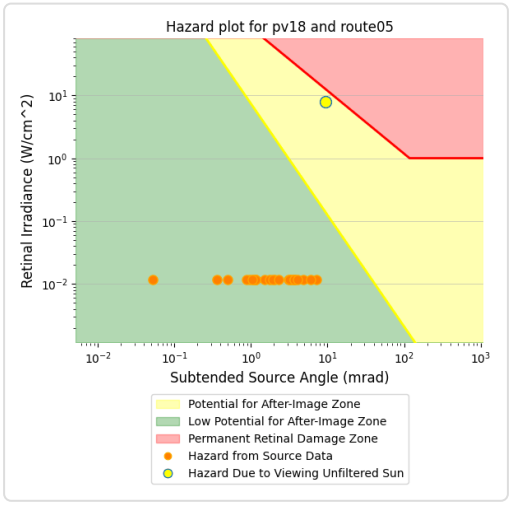
PV18 and Route: Route05

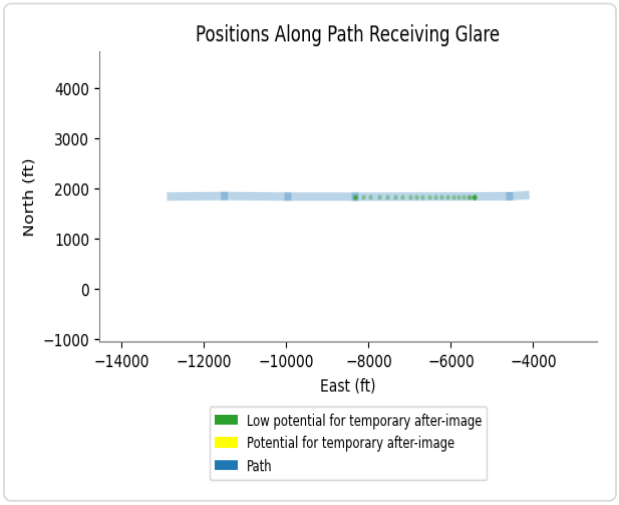
Yellow glare: none

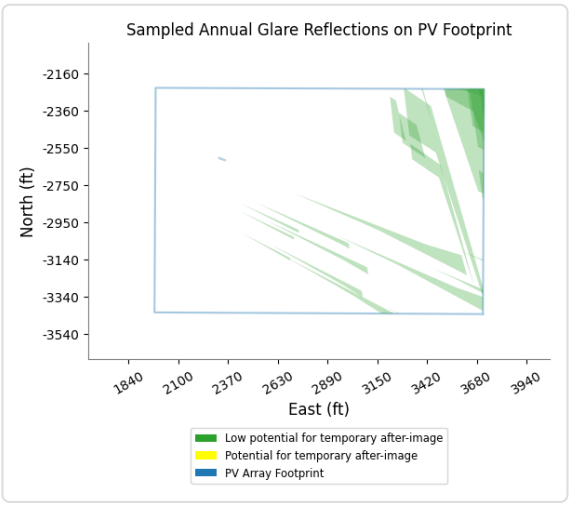
Green glare: 26 min.







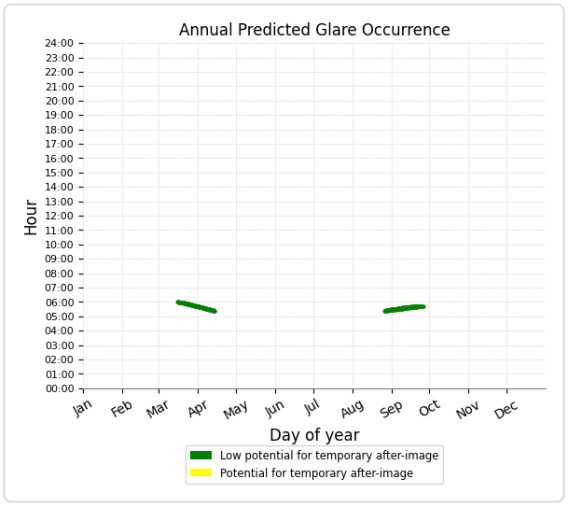


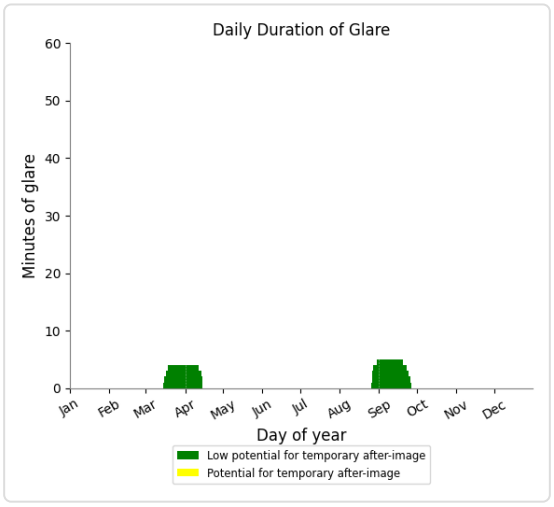


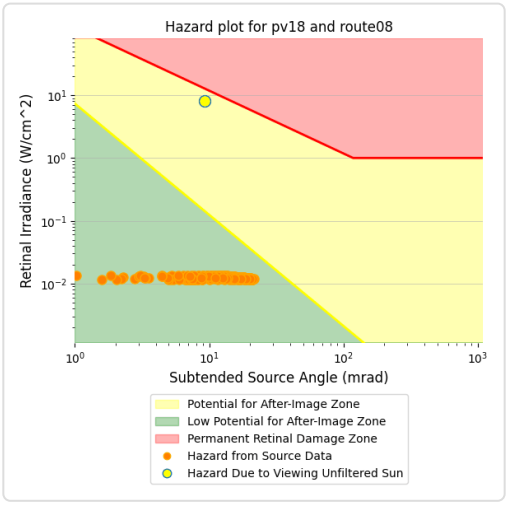
PV18 and Route: Route08

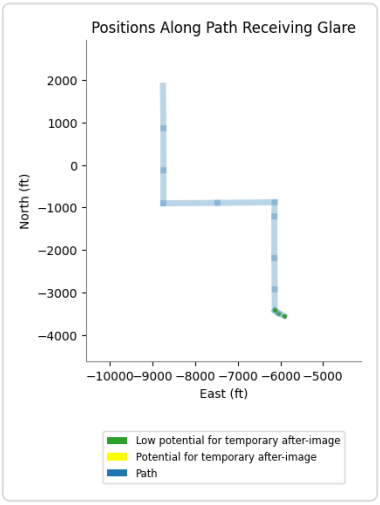
Yellow glare: none

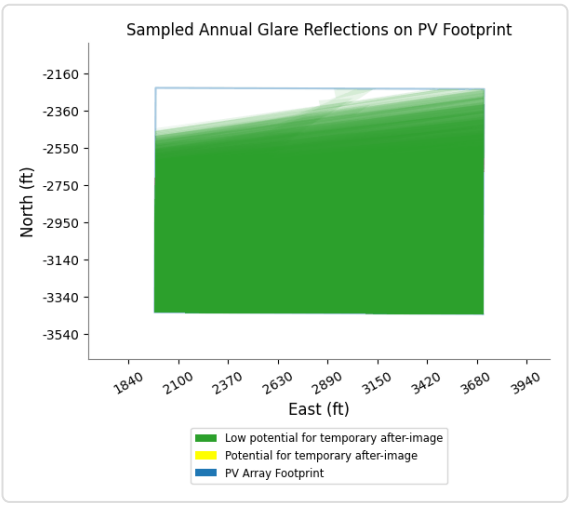
Green glare: 250 min.







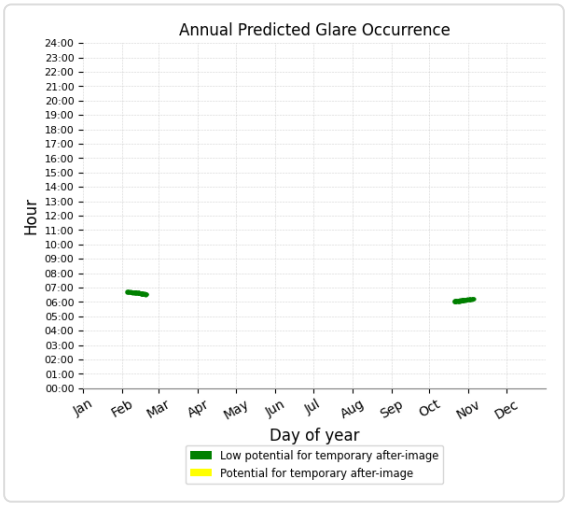


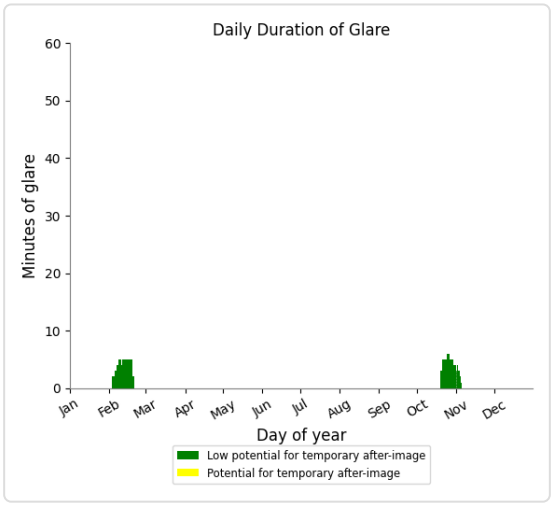


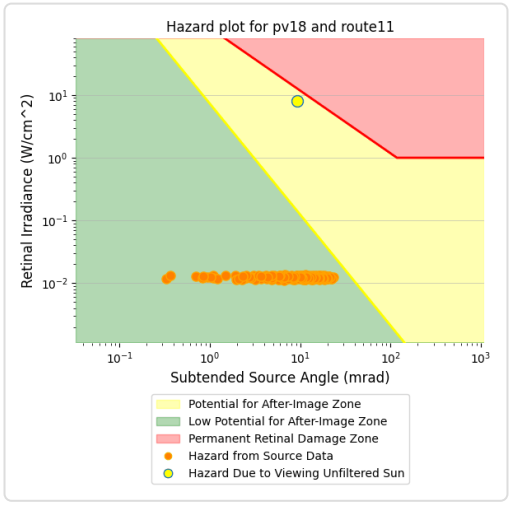
PV18 and Route: Route11

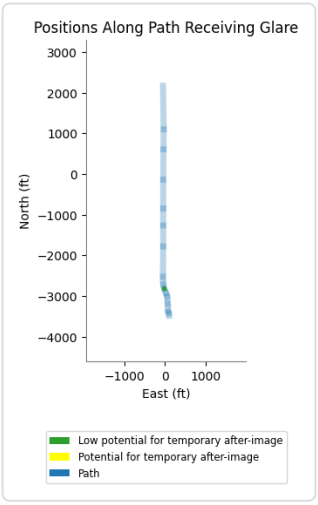
Yellow glare: none

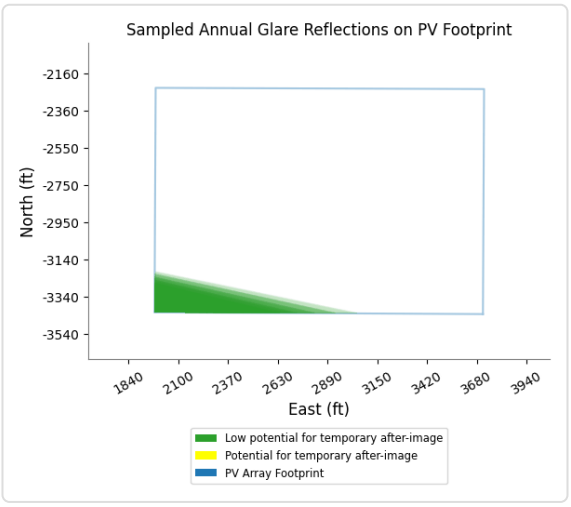
Green glare: 142 min.











PV18 and Route: Route01

No glare found

PC ORIGINAL PKG

PV18 and Route: Route02

No glare found

PV18 and Route: Route04

No glare found

PV18 and Route: Route06

No glare found

PV18 and Route: Route07

No glare found

PV18 and Route: Route10

No glare found

PV18 and Route: Route12

No glare found

PV18 and FP: NJK08

No glare found

PV18 and FP: NJK12

No glare found

PV18 and FP: NJK26

No glare found

PV18 and FP: NJK30

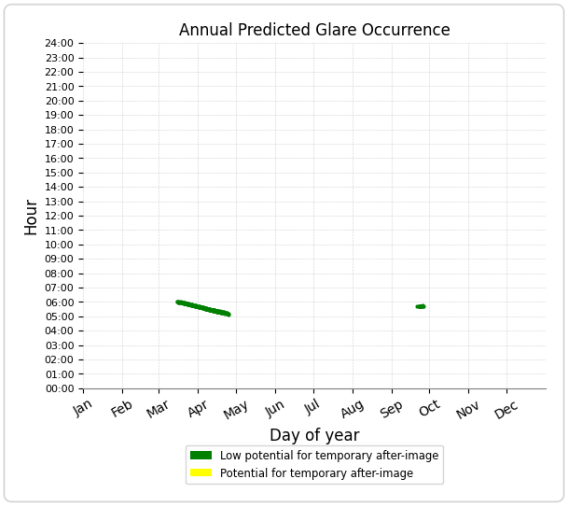
No glare found

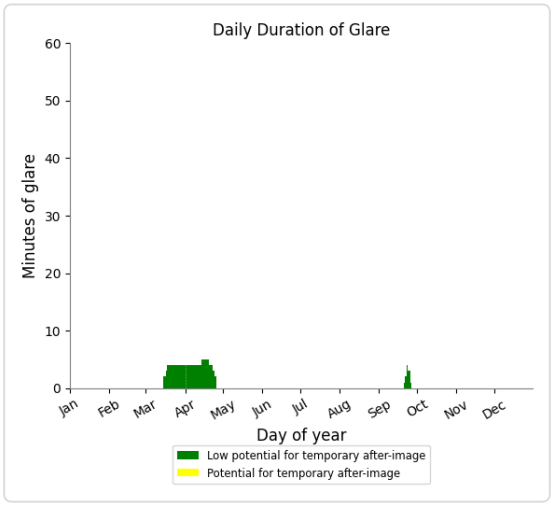
PC ORIGINAL PKG

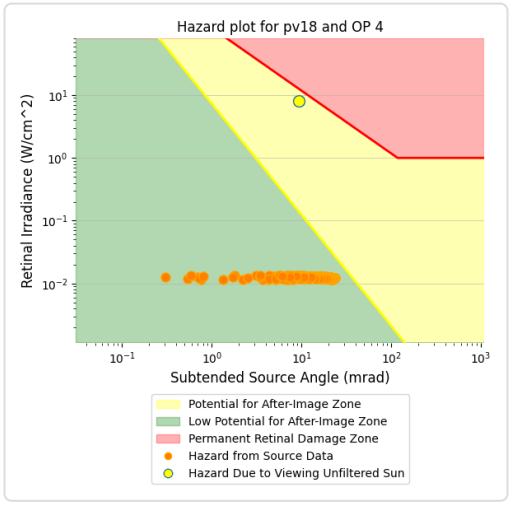
PV18 and OP 4

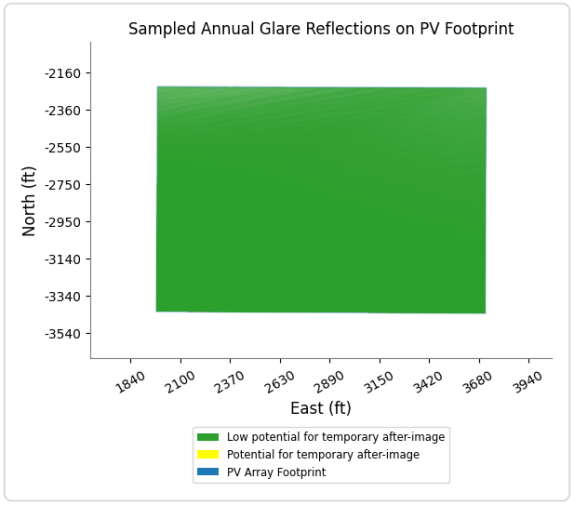
Yellow glare: none

Green glare: 179 min.





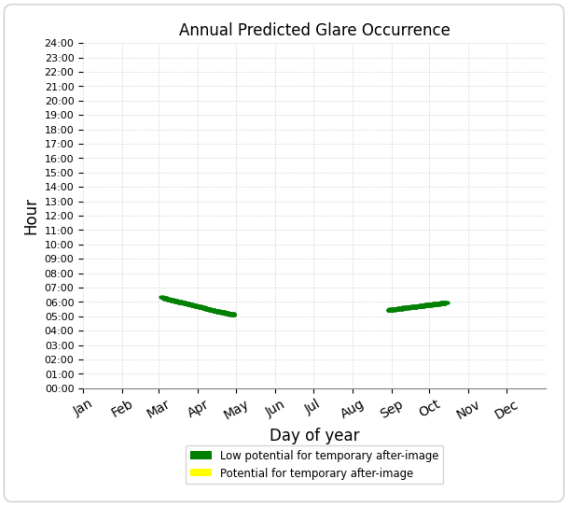


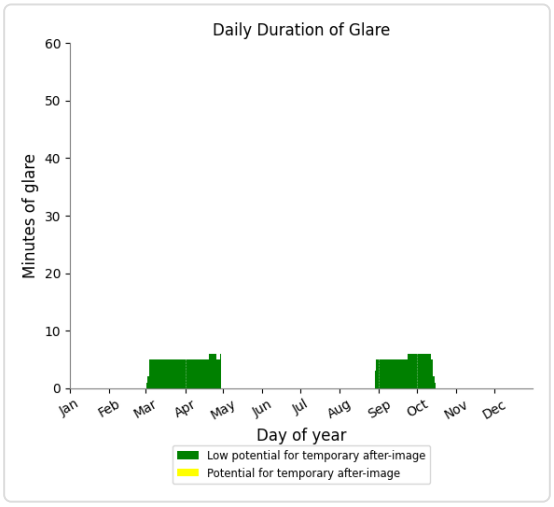


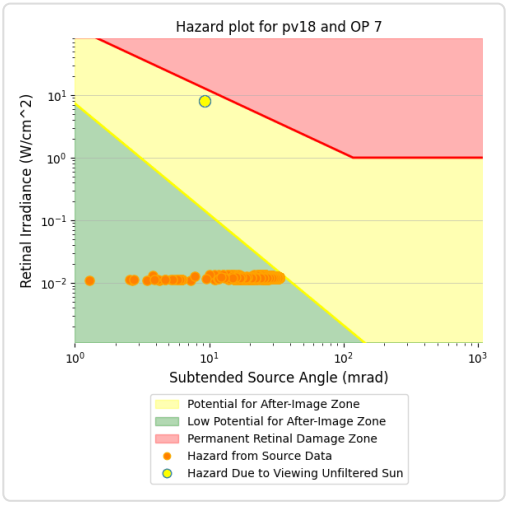
PV18 and OP 7

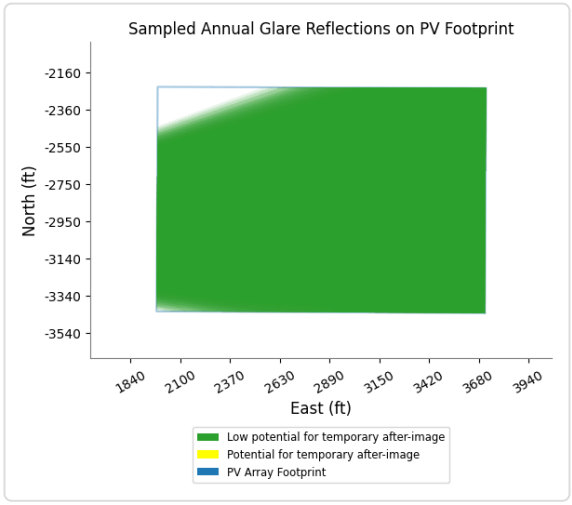
Yellow glare: none

Green glare: 544 min.





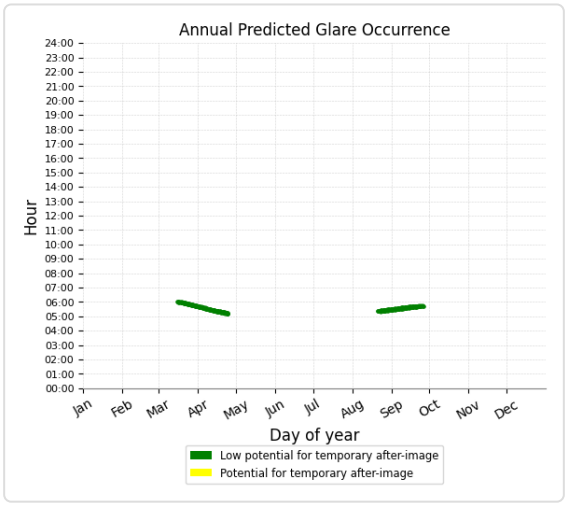


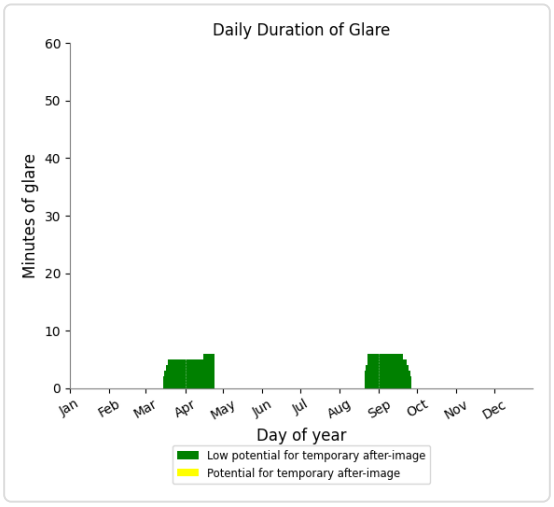


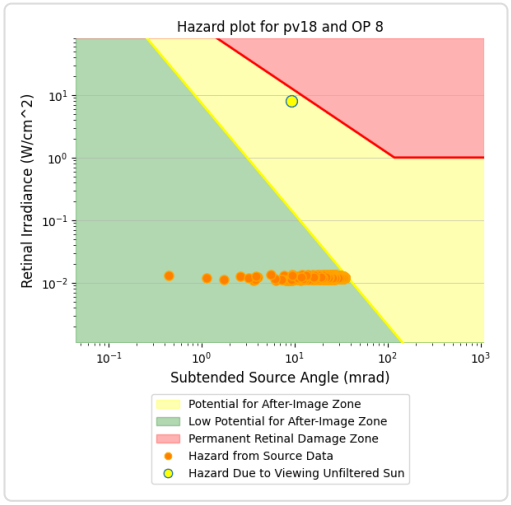
PV18 and OP 8

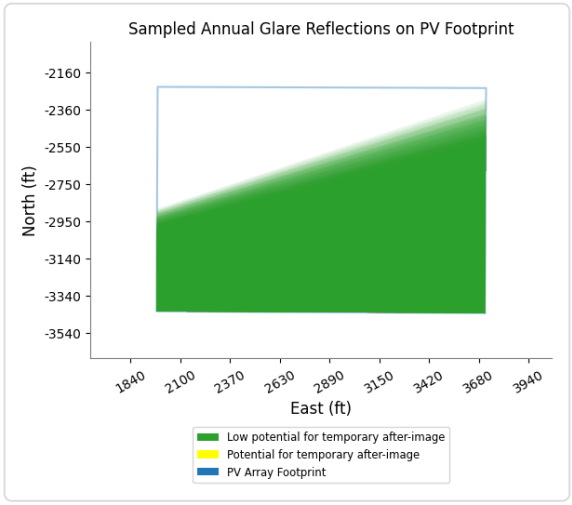
Yellow glare: none

Green glare: 410 min.





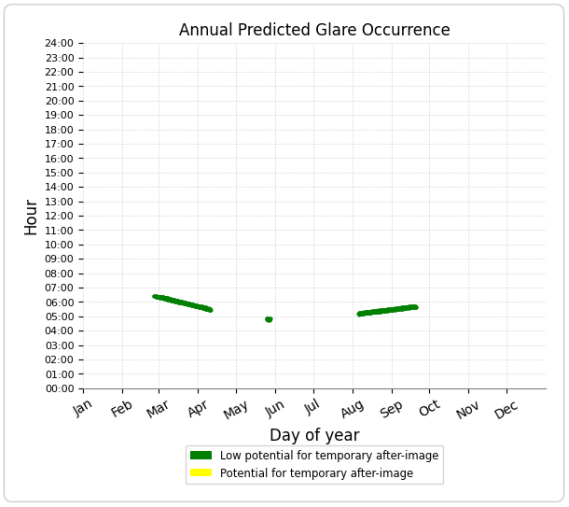


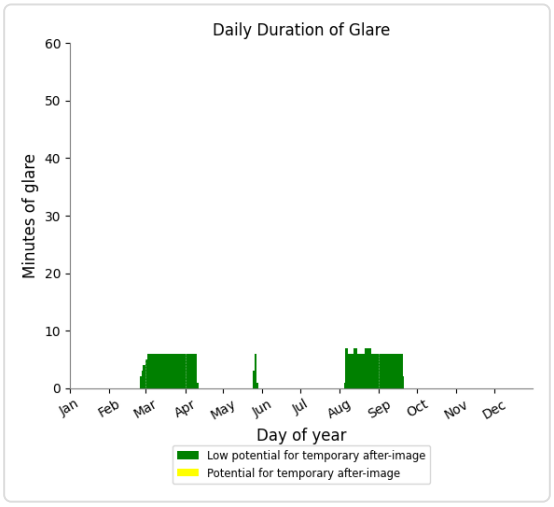


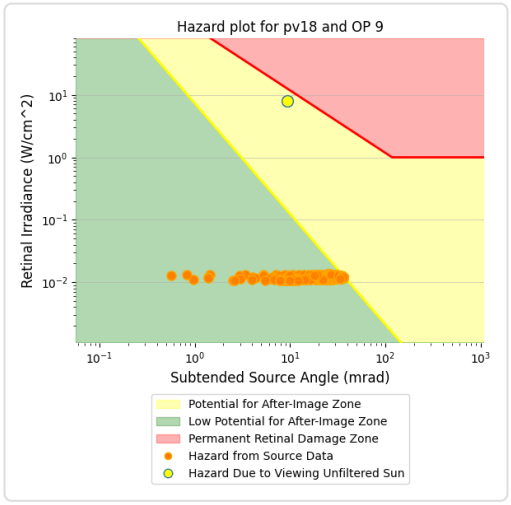
PV18 and OP 9

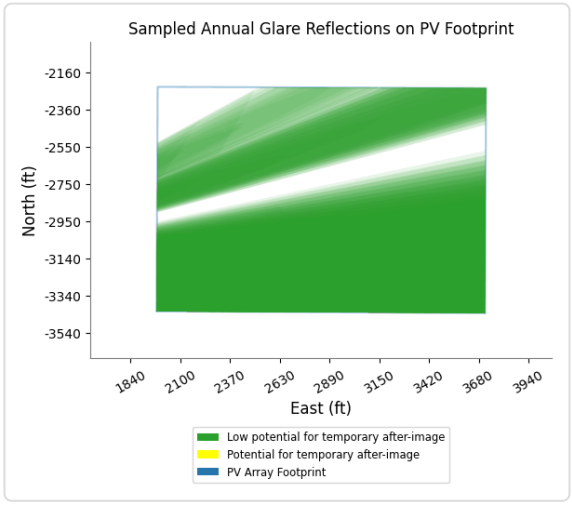
Yellow glare: none

Green glare: 557 min.









PV18 and OP 1

No glare found

PV18 and OP 2

No glare found

PV18 and OP 3

No glare found

PV18 and OP 5

No glare found

PV18 and OP 6

No glare found

PV18 and OP 10

No glare found

PV18 and OP 11

No glare found

PV18 and OP 12

No glare found

PV18 and OP 13

No glare found

PV18 and OP 14

No glare found

PV18 and OP 15

No glare found

PV18 and OP 16

No glare found

PV18 and OP 17

No glare found

PV18 and OP 18

No glare found

PV18 and OP 19

No glare found

PV18 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV19 potential temporary after-image

Receptor results ordered by category of glare

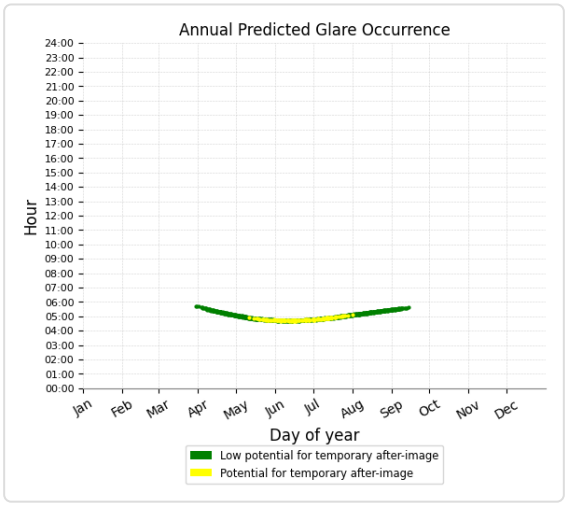
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	591	9.8	120	2.0
Route05	38	0.6	0	0.0
Route06	18	0.3	0	0.0
Route08	99	1.6	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 2	19	0.3	0	0.0
OP 8	63	1.1	0	0.0
OP 9	69	1.1	0	0.0
OP 1	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

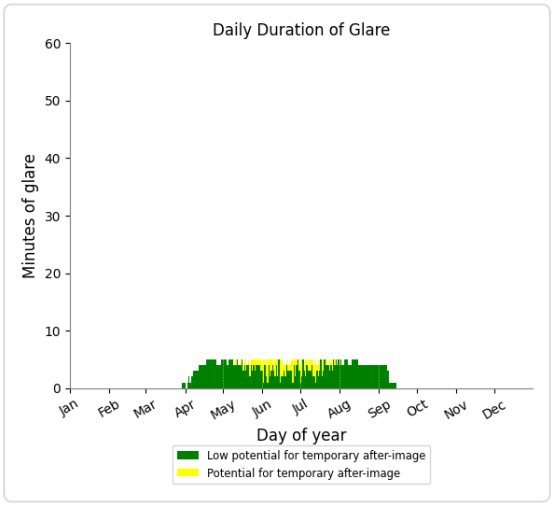
PC ORIGINAL PKG

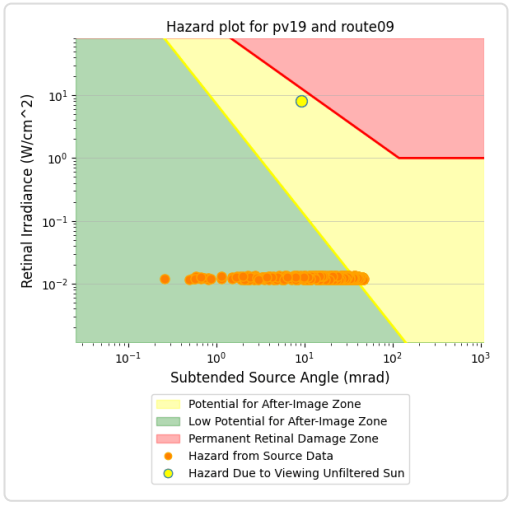
PV19 and Route: Route09

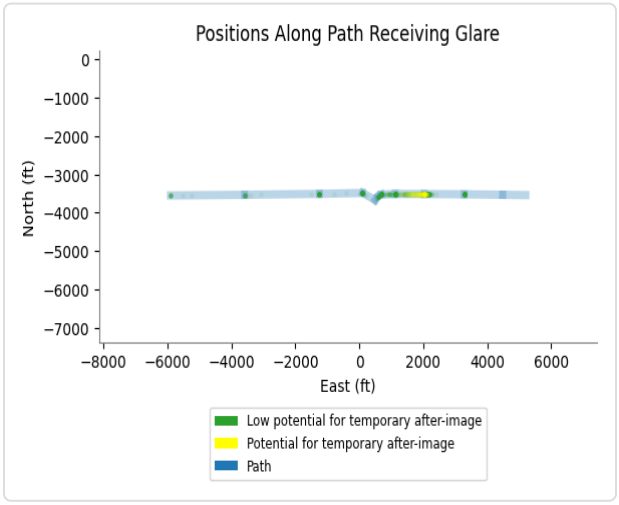
Yellow glare: 120 min.

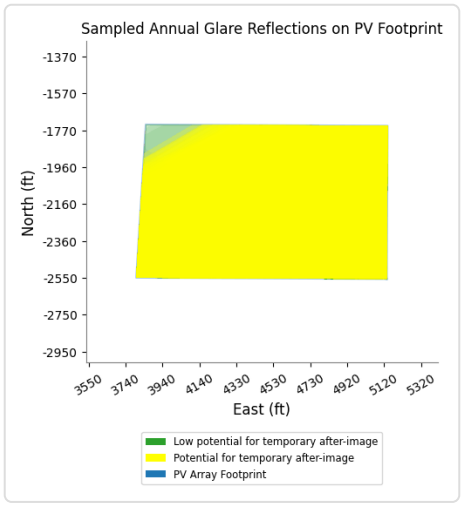
Green glare: 591 min.









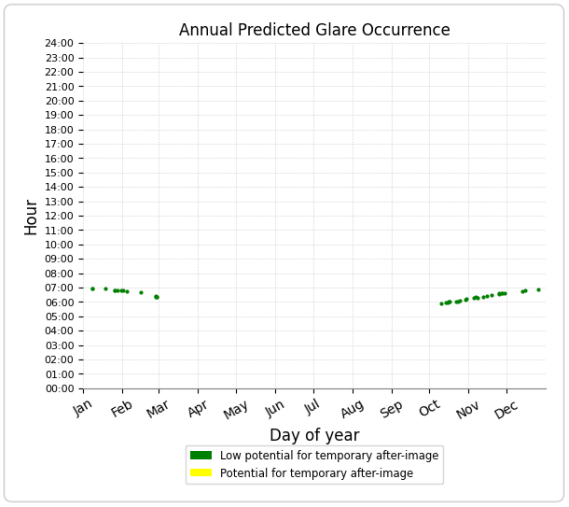


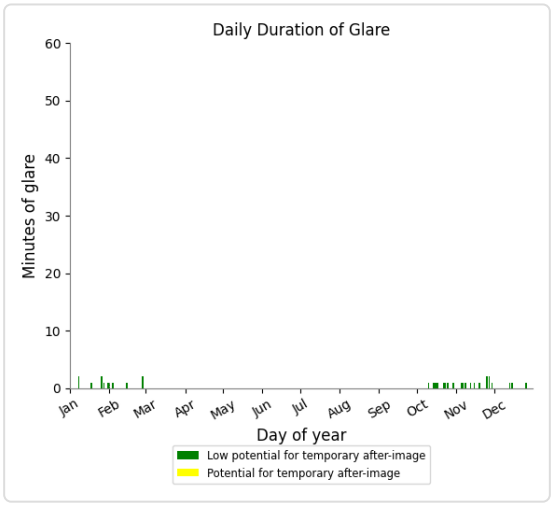
PC ORIGINAL PKG

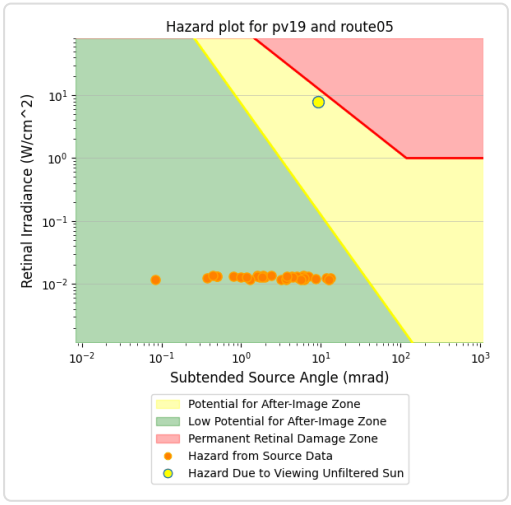
PV19 and Route: Route05

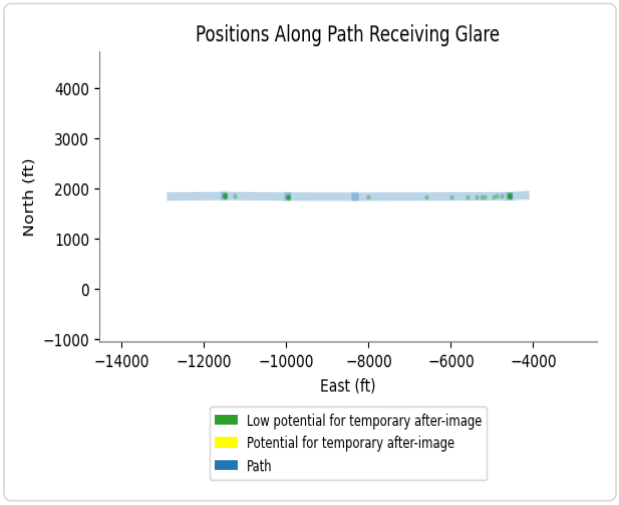
Yellow glare: none

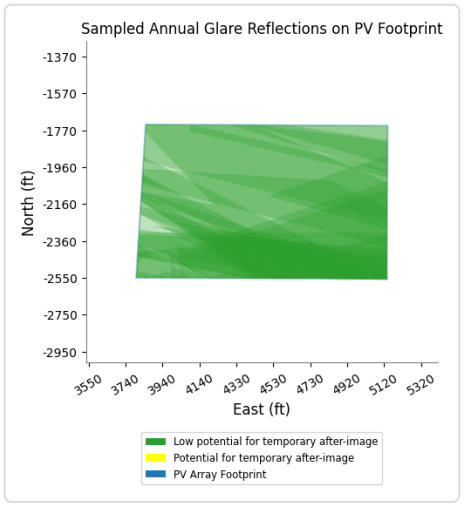
Green glare: 38 min.







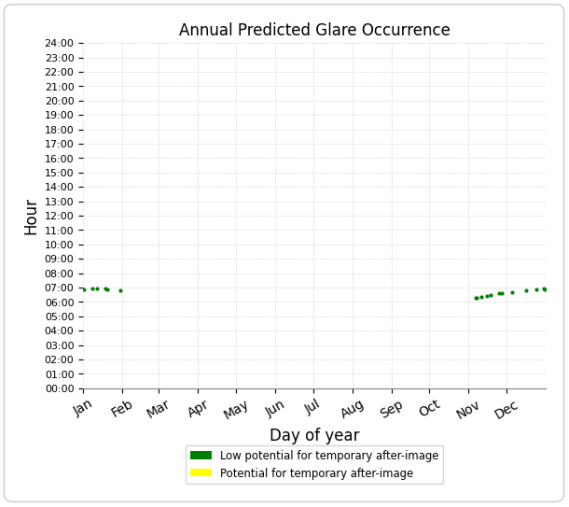


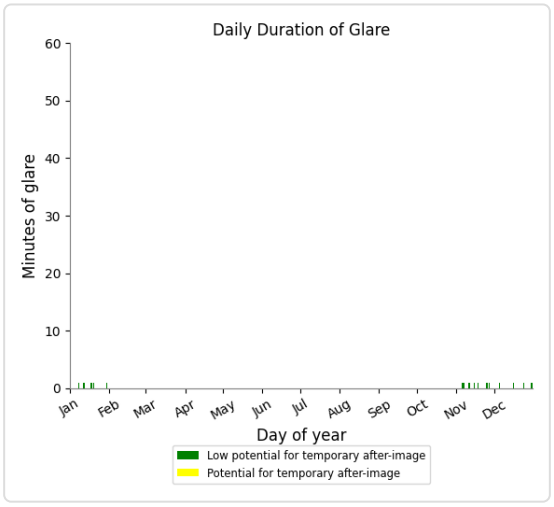


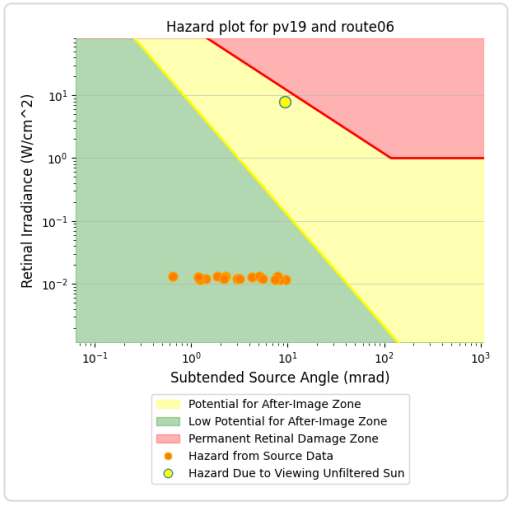
PV19 and Route: Route06

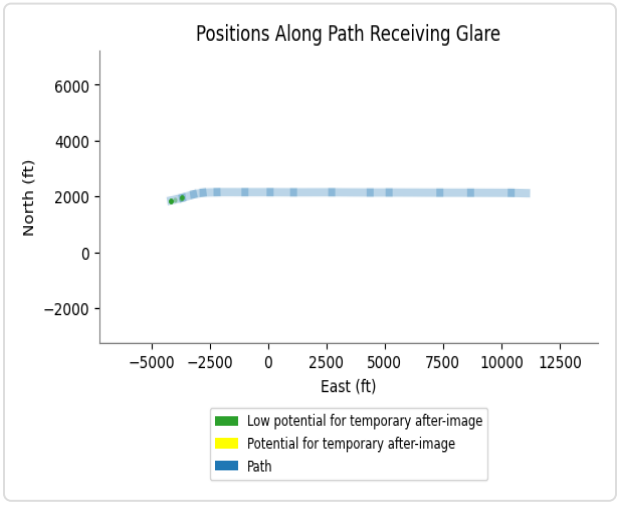
Yellow glare: none

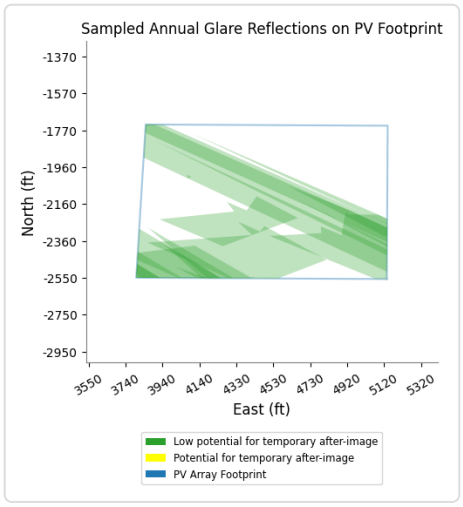
Green glare: 18 min.







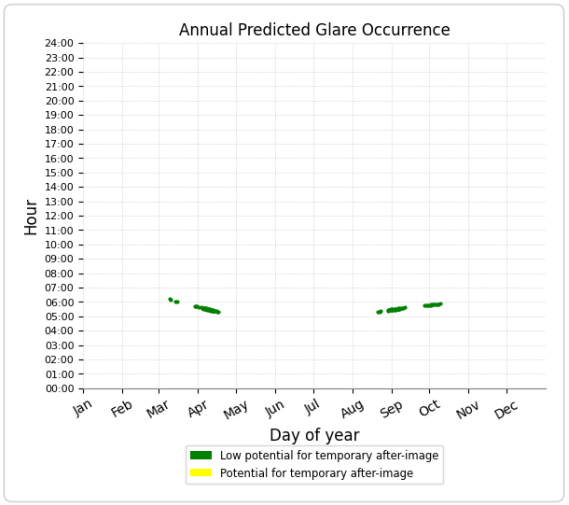


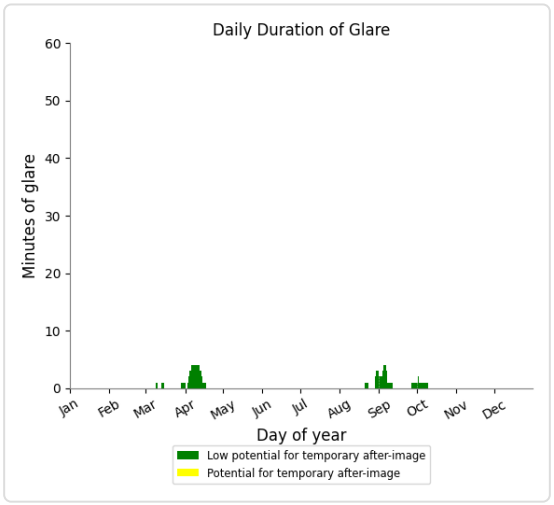


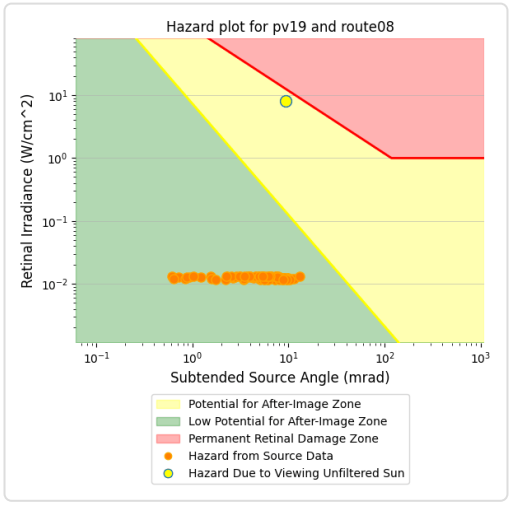
PV19 and Route: Route08

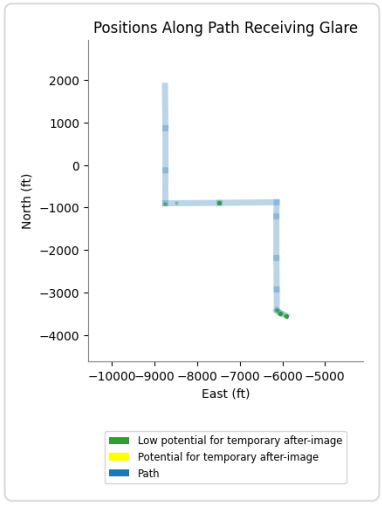
Yellow glare: none

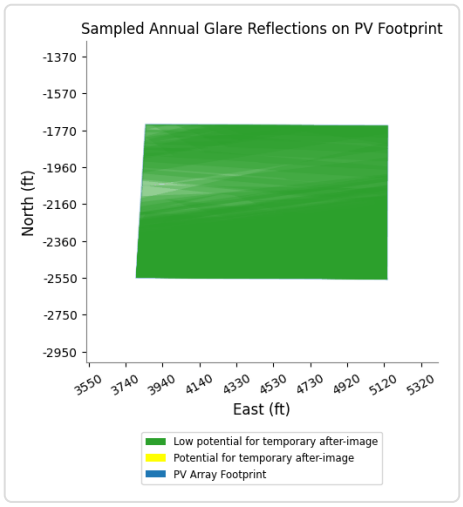
Green glare: 99 min.











PV19 and Route: Route01

No glare found

PV19 and Route: Route02

No glare found

PV19 and Route: Route04

No glare found

PV19 and Route: Route07

No glare found

PV19 and Route: Route10

No glare found

PV19 and Route: Route11

No glare found

PV19 and Route: Route12

No glare found

PV19 and FP: NJK08

No glare found

PV19 and FP: NJK12

No glare found

PV19 and FP: NJK26

No glare found

PV19 and FP: NJK30

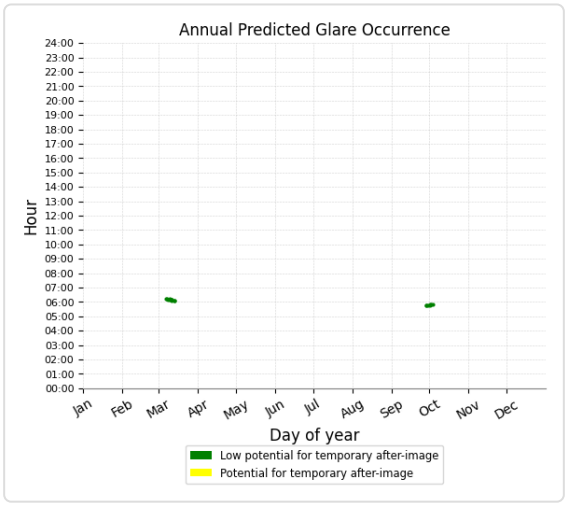
No glare found

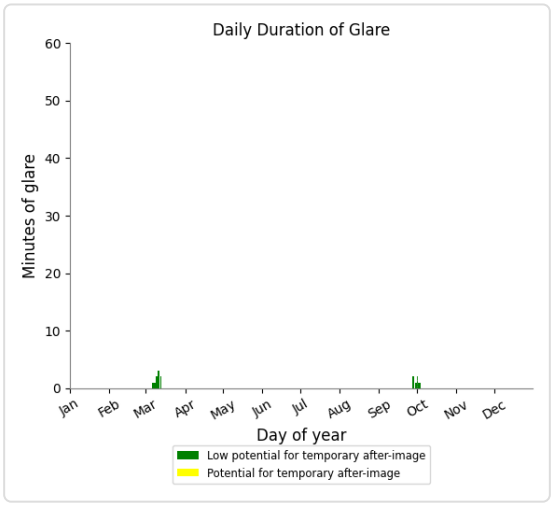
PC ORIGINAL PKG

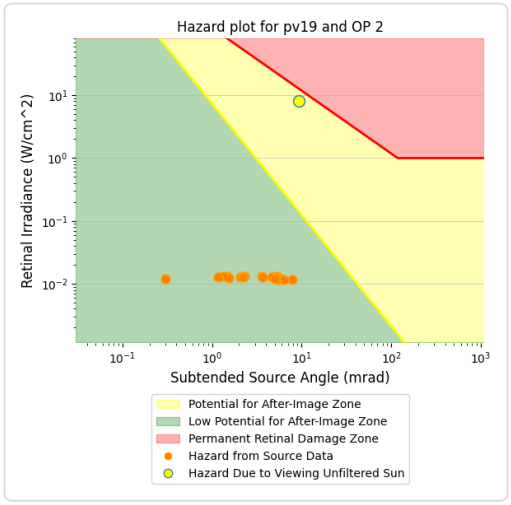
PV19 and OP 2

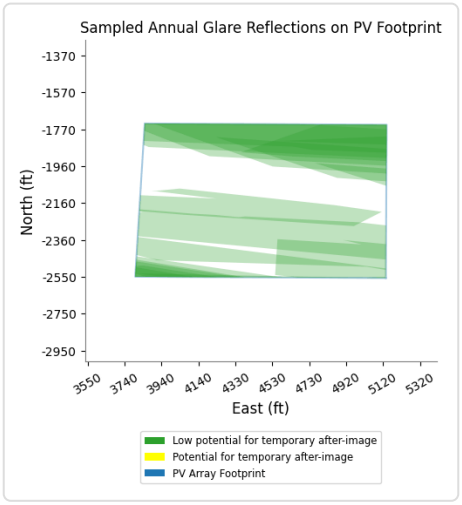
Yellow glare: none

Green glare: 19 min.





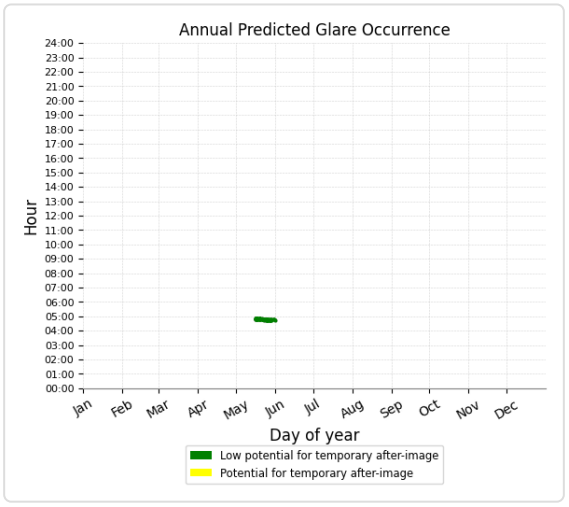


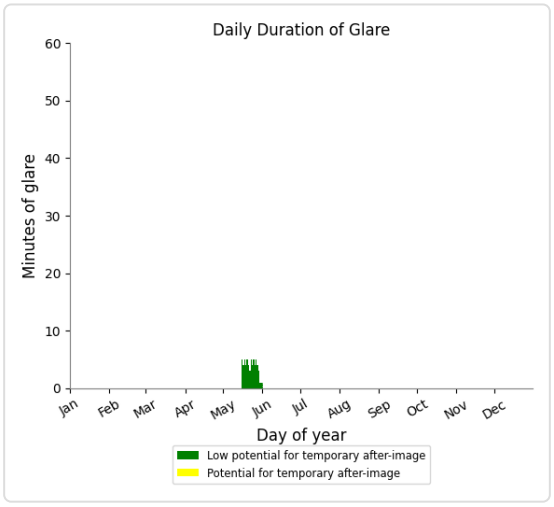


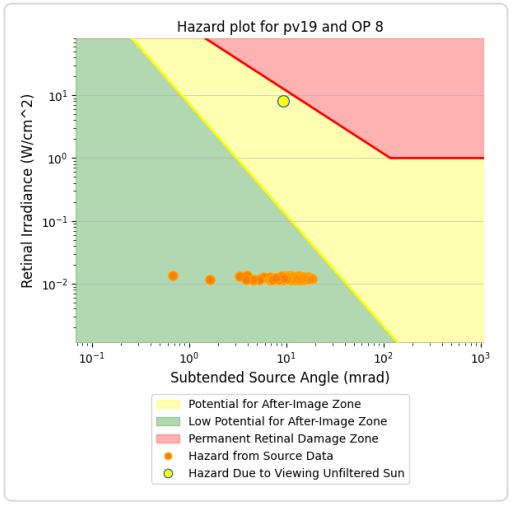
PV19 and OP 8

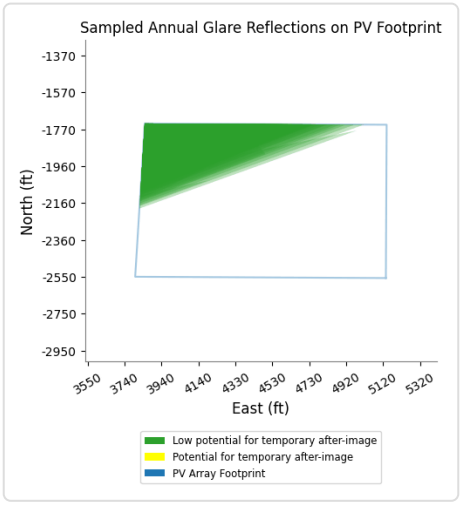
Yellow glare: none

Green glare: 63 min.





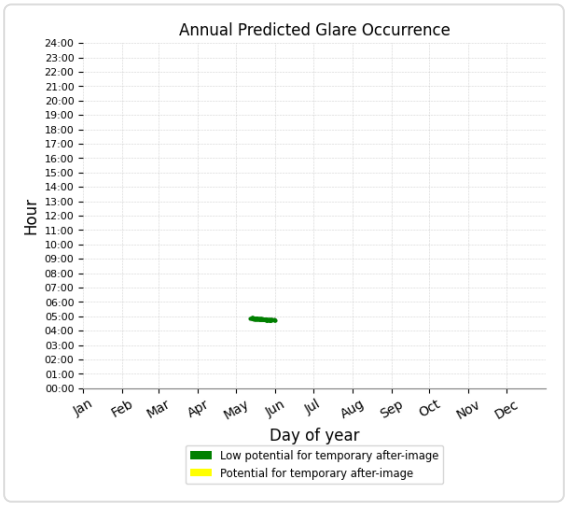


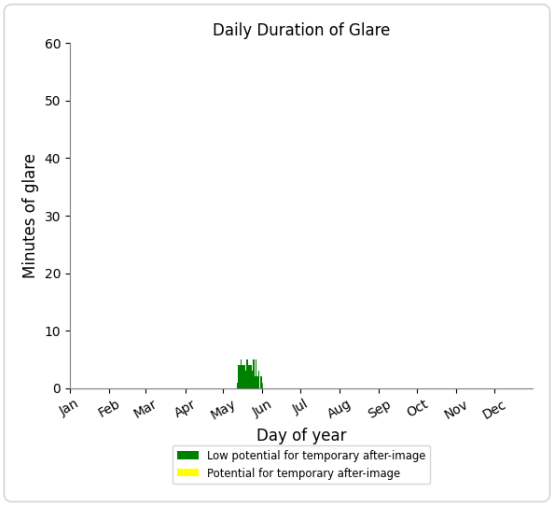


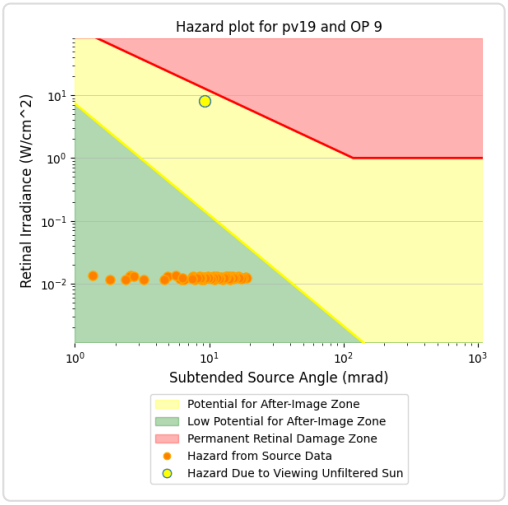
PC ORIGINAL PKG

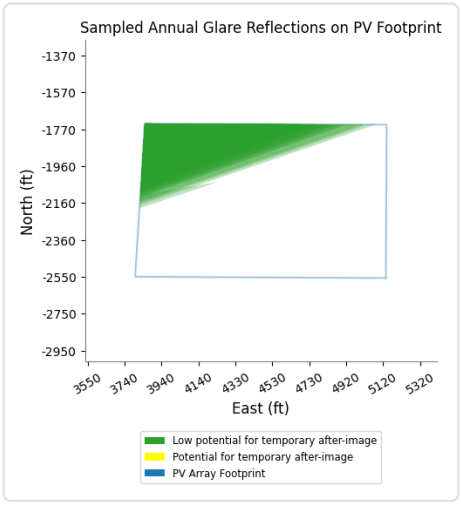
PV19 and OP 9

Yellow glare: none
Green glare: 69 min.









PV19 and OP 1

No glare found

PV19 and OP 3

No glare found

PV19 and OP 4

No glare found

PV19 and OP 5

No glare found

PV19 and OP 6

No glare found

PV19 and OP 7

No glare found

PV19 and OP 10

No glare found

PV19 and OP 11

No glare found

PV19 and OP 12

No glare found

PV19 and OP 13

No glare found

PV19 and OP 14

No glare found

PV19 and OP 15

No glare found

PV19 and OP 16

No glare found

PV19 and OP 17

No glare found

PV19 and OP 18

No glare found

PV19 and OP 19

No glare found

PV19 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV20 potential temporary after-image

Receptor results ordered by category of glare

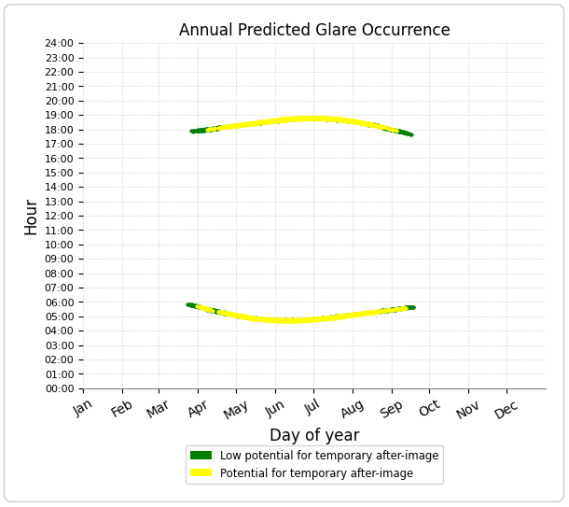
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	360	6.0	1,515	25.2
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 9	142	2.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

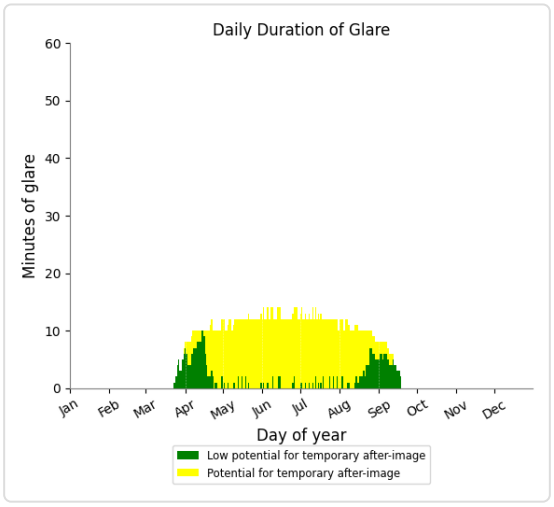
PC ORIGINAL PKG

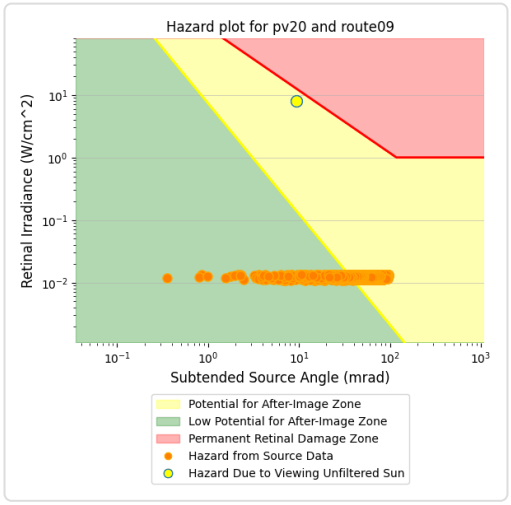
PV20 and Route: Route09

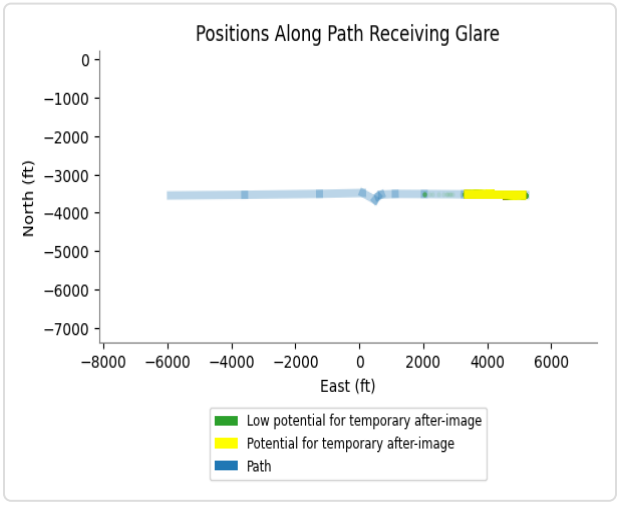
Yellow glare: 1,515 min.

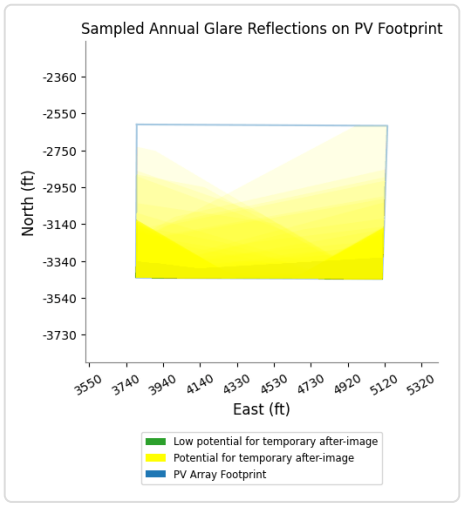
Green glare: 360 min.











PV20 and Route: Route01

No glare found

PV20 and Route: Route02

No glare found

PV20 and Route: Route04

No glare found

PV20 and Route: Route05

No glare found

PV20 and Route: Route06

No glare found

PV20 and Route: Route07

No glare found

PV20 and Route: Route08

No glare found

PV20 and Route: Route10

No glare found

PV20 and Route: Route11

No glare found

PV20 and Route: Route12

No glare found

PV20 and FP: NJK08

No glare found

PV20 and FP: NJK12

No glare found

PV20 and FP: NJK26

No glare found

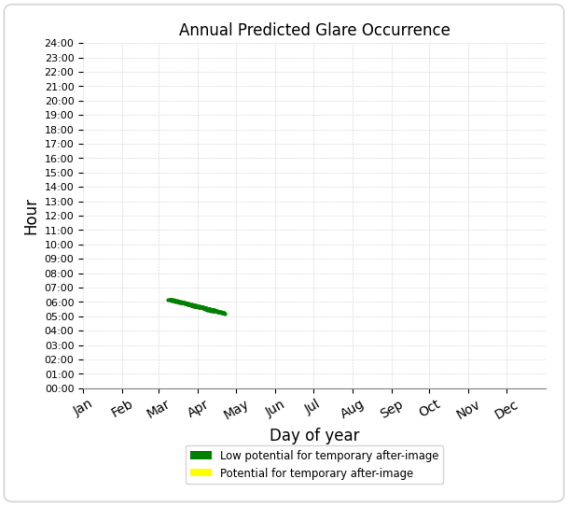
PV20 and FP: NJK30

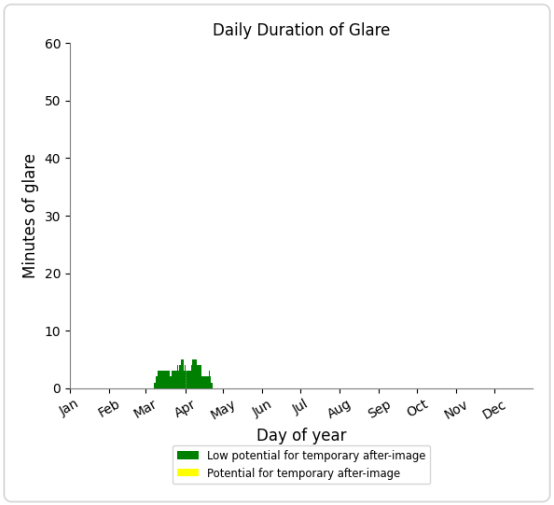
No glare found

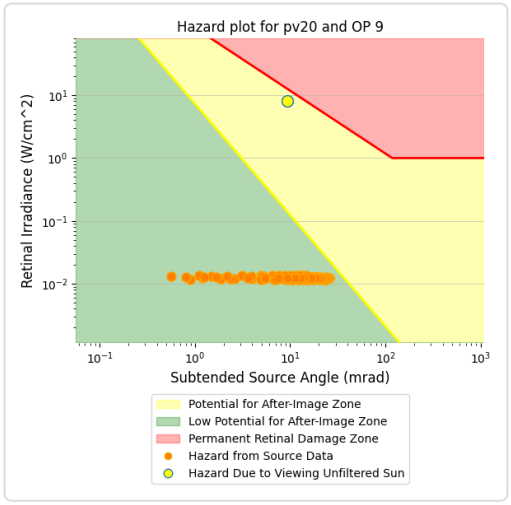
PC ORIGINAL PKG

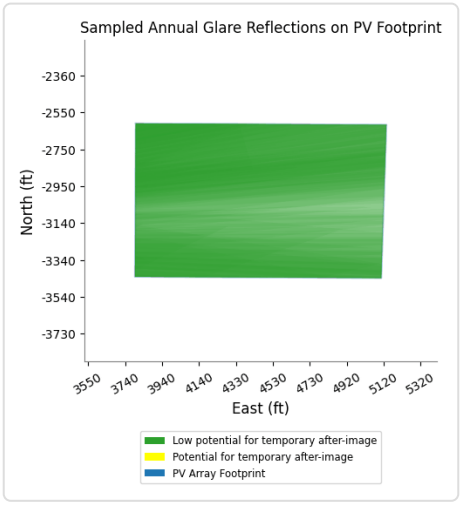
PV20 and OP 9

Yellow glare: none
Green glare: 142 min.









PV20 and OP 1

No glare found

PV20 and OP 2

No glare found

PV20 and OP 3

No glare found

PV20 and OP 4

No glare found

PV20 and OP 5

No glare found

PV20 and OP 6

No glare found

PV20 and OP 7

No glare found

PV20 and OP 8

No glare found

PV20 and OP 10

No glare found

PV20 and OP 11

No glare found

PV20 and OP 12

No glare found

PV20 and OP 13

No glare found

PV20 and OP 14

No glare found

PV20 and OP 15

No glare found

PV20 and OP 16

No glare found

PV20 and OP 17

No glare found

PV20 and OP 18

No glare found

PV20 and OP 19

No glare found

PV20 and 20-ATCT

No glare found

PC ORIGINAL PKG

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

© Sims Industries d/b/a ForgeSolar, All Rights Reserved.

PC ORIGINAL PKG

FORGESOLAR GLARE ANALYSIS

Project: **Big Rock Solar Nov 2023**
Site configuration: **Big Rock Solar May 2024 Group B**

Created 02 May, 2024
Updated 02 May, 2024
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 100 MW to 1 GW
Site ID 118223.18188

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

PC ORIGINAL PKG

Summary of Results

Glare with potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV21	SA tracking	SA tracking	485	8.1	26	0.4	-
PV22	SA tracking	SA tracking	0	0.0	0	0.0	-
PV23	SA tracking	SA tracking	1,760	29.3	1,592	26.5	-
PV24	SA tracking	SA tracking	1,355	22.6	1,920	32.0	-
PV25	SA tracking	SA tracking	2,117	35.3	292	4.9	-
PV26	SA tracking	SA tracking	869	14.5	0	0.0	-
PV27	SA tracking	SA tracking	1,774	29.6	328	5.5	-
PV28	SA tracking	SA tracking	2,255	37.6	12	0.2	-
PV29	SA tracking	SA tracking	1,258	21.0	0	0.0	-
PV30	SA tracking	SA tracking	1,530	25.5	0	0.0	-
PV31	SA tracking	SA tracking	885	14.8	0	0.0	-
PV32	SA tracking	SA tracking	612	10.2	0	0.0	-
PV33	SA tracking	SA tracking	991	16.5	0	0.0	-
PV34	SA tracking	SA tracking	163	2.7	0	0.0	-
PV35	SA tracking	SA tracking	1,021	17.0	8	0.1	-
PV36	SA tracking	SA tracking	257	4.3	204	3.4	-
PV37	SA tracking	SA tracking	295	4.9	1,266	21.1	-
PV38	SA tracking	SA tracking	566	9.4	383	6.4	-
PV39	SA tracking	SA tracking	175	2.9	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

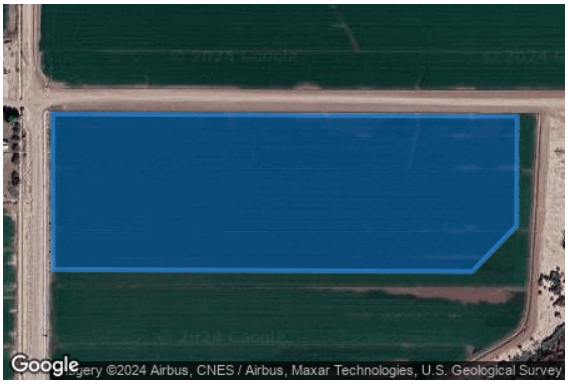
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	627	10.4	0	0.0
Route06	56	0.9	0	0.0
Route07	0	0.0	0	0.0
Route08	1,815	30.2	88	1.5
Route09	5,376	89.6	4,005	66.8
Route10	0	0.0	0	0.0
Route11	976	16.3	0	0.0
Route12	3,967	66.1	1,861	31.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	428	7.1	0	0.0
OP 4	418	7.0	51	0.8
OP 5	640	10.7	0	0.0
OP 6	0	0.0	0	0.0
OP 7	406	6.8	0	0.0
OP 8	780	13.0	0	0.0
OP 9	803	13.4	0	0.0
OP 10	0	0.0	0	0.0
OP 11	985	16.4	26	0.4
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	293	4.9	0	0.0
OP 16	0	0.0	0	0.0
OP 17	375	6.2	0	0.0
OP 18	423	7.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV21
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.765902	-115.715901	-37.23	5.00	-32.23
2	32.767023	-115.715903	-36.05	5.00	-31.05
3	32.767005	-115.711910	-40.60	5.00	-35.60
4	32.766215	-115.711914	-40.02	5.00	-35.02
5	32.765886	-115.712298	-40.06	5.00	-35.06

Name: PV22
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



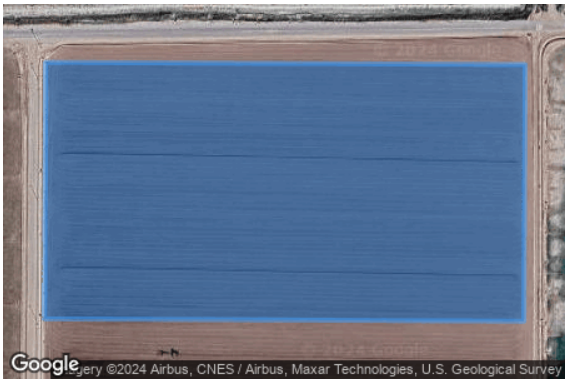
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.763664	-115.715897	-37.83	5.00	-32.83
2	32.765802	-115.715901	-37.59	5.00	-32.59
3	32.765790	-115.713209	-38.70	5.00	-33.70
4	32.765095	-115.713214	-39.04	5.00	-34.04
5	32.763660	-115.714966	-38.78	5.00	-33.78

Name: PV23
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



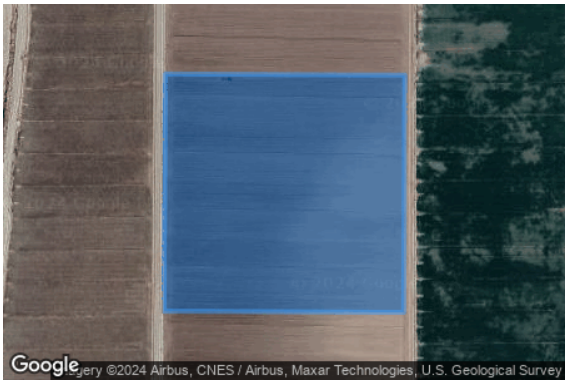
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.758099	-115.748696	-37.29	5.00	-32.29
2	32.751824	-115.748695	-33.76	5.00	-28.76
3	32.751834	-115.751163	-32.72	5.00	-27.72
4	32.752955	-115.751156	-32.33	5.00	-27.33
5	32.758107	-115.750528	-36.26	5.00	-31.26

Name: PV24
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.758092	-115.744383	-38.13	5.00	-33.13
2	32.756239	-115.744393	-35.84	5.00	-30.84
3	32.756256	-115.748512	-34.45	5.00	-29.45
4	32.758108	-115.748501	-35.68	5.00	-30.68

Name: PV25
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



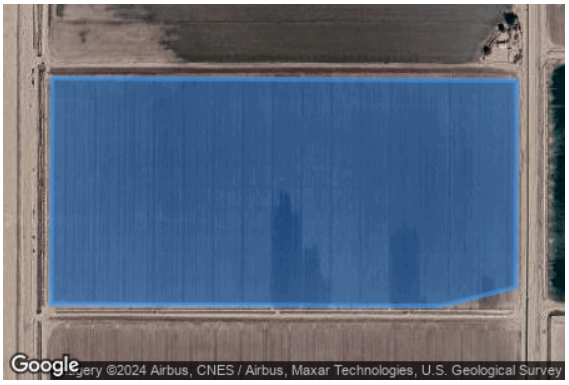
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.756092	-115.748513	-34.58	5.00	-29.58
2	32.756075	-115.744394	-35.89	5.00	-30.89
3	32.752660	-115.744414	-35.33	5.00	-30.33
4	32.752676	-115.748532	-33.46	5.00	-28.46

Name: PV26
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



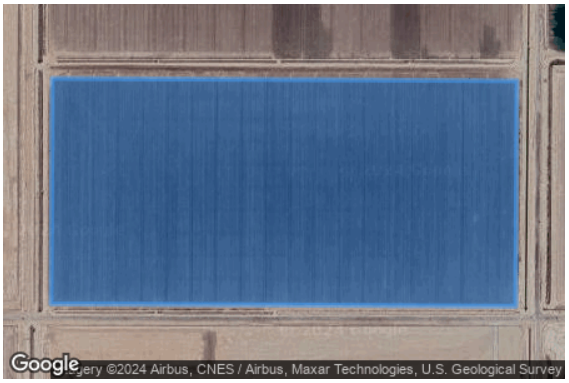
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.752512	-115.748533	-33.49	5.00	-28.49
2	32.752495	-115.744415	-34.59	5.00	-29.59
3	32.751375	-115.744421	-34.71	5.00	-29.71
4	32.751391	-115.748464	-33.19	5.00	-28.19

Name: PV27
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.755997	-115.715669	-39.02	5.00	-34.02
2	32.755962	-115.707684	-36.57	5.00	-31.57
3	32.752985	-115.707703	-35.02	5.00	-30.02
4	32.752712	-115.708993	-35.21	5.00	-30.21
5	32.752741	-115.715689	-36.40	5.00	-31.40

Name: PV28
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.752380	-115.715691	-40.06	5.00	-35.06
2	32.752345	-115.707706	-37.22	5.00	-32.22
3	32.749090	-115.707726	-34.39	5.00	-29.39
4	32.749125	-115.715711	-36.30	5.00	-31.30

Name: PV29
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.748796	-115.751685	-29.21	5.00	-24.21
2	32.749916	-115.751679	-31.39	5.00	-26.39
3	32.750484	-115.750918	-30.11	5.00	-25.11
4	32.750758	-115.749779	-32.02	5.00	-27.02
5	32.750755	-115.748921	-33.17	5.00	-28.17
6	32.748784	-115.748932	-31.55	5.00	-26.55

Name: PV30
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



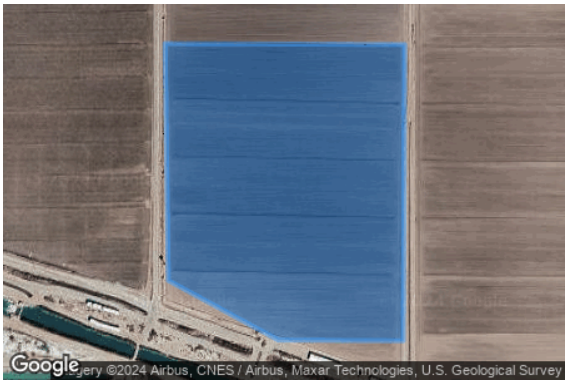
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.745484	-115.748875	-30.78	5.00	-25.78
2	32.745491	-115.750567	-30.69	5.00	-25.69
3	32.746067	-115.751928	-29.50	5.00	-24.50
4	32.747188	-115.751922	-28.74	5.00	-23.74
5	32.748632	-115.751762	-29.28	5.00	-24.28
6	32.748620	-115.748857	-31.47	5.00	-26.47

Name: PV31
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.748845	-115.744438	-32.55	5.00	-27.55
2	32.748862	-115.748556	-30.71	5.00	-25.71
3	32.751111	-115.748543	-30.90	5.00	-25.90
4	32.751094	-115.744425	-33.39	5.00	-28.39

Name: PV32
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



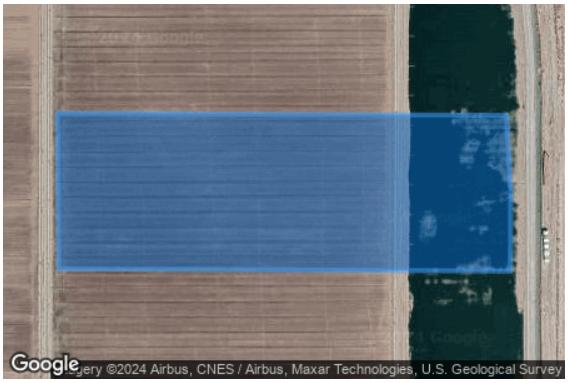
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.748698	-115.748557	-30.37	5.00	-25.37
2	32.748681	-115.744439	-31.53	5.00	-26.53
3	32.744418	-115.744464	-31.46	5.00	-26.46
4	32.744427	-115.746610	-29.30	5.00	-24.30
5	32.745284	-115.748501	-29.45	5.00	-24.45

Name: PV33
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



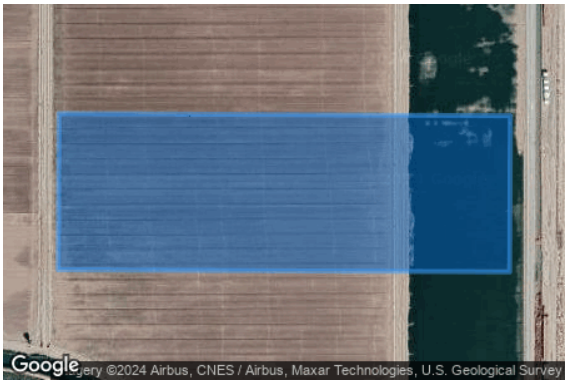
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.748365	-115.732054	-35.98	5.00	-30.98
2	32.748397	-115.739762	-25.80	5.00	-20.80
3	32.750646	-115.739786	-28.53	5.00	-23.53
4	32.750616	-115.732484	-37.85	5.00	-32.85
5	32.749207	-115.732113	-37.11	5.00	-32.11

Name: PV34
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.748233	-115.739761	-25.83	5.00	-20.83
2	32.748201	-115.732043	-36.06	5.00	-31.06
3	32.747072	-115.731974	-36.60	5.00	-31.60
4	32.745951	-115.731980	-37.94	5.00	-32.94
5	32.745984	-115.739737	-24.41	5.00	-19.41

Name: PV35
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



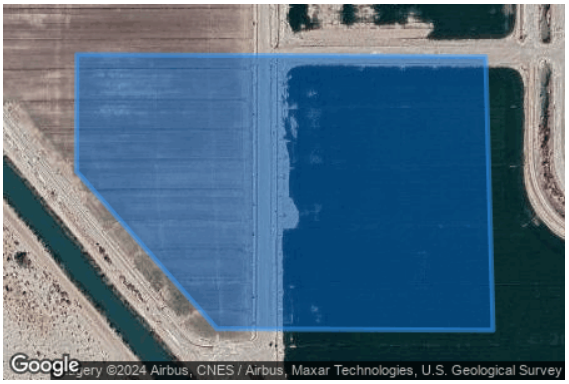
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.743658	-115.731994	-37.39	5.00	-32.39
2	32.743690	-115.739750	-23.85	5.00	-18.85
3	32.745939	-115.739737	-24.42	5.00	-19.42
4	32.745907	-115.731981	-37.32	5.00	-32.32

Name: PV36
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.743526	-115.739751	-23.19	5.00	-18.19
2	32.743494	-115.731995	-37.43	5.00	-32.43
3	32.740358	-115.732013	-34.80	5.00	-29.80
4	32.740376	-115.736358	-22.60	5.00	-17.60
5	32.742110	-115.738092	-22.70	5.00	-17.70
6	32.742684	-115.739756	-23.24	5.00	-18.24

Name: PV37
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



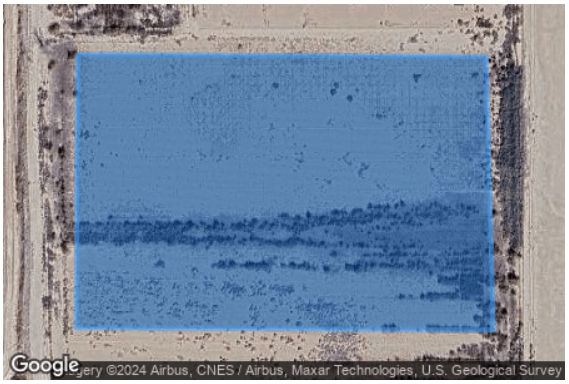
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.739340	-115.735514	-23.58	5.00	-18.58
2	32.740182	-115.735509	-24.11	5.00	-19.11
3	32.740167	-115.731997	-32.99	5.00	-27.99
4	32.738196	-115.731933	-32.37	5.00	-27.37
5	32.738206	-115.734307	-25.21	5.00	-20.21

Name: PV38
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.735685	-115.731074	-29.99	5.00	-24.99
2	32.736906	-115.732789	-29.48	5.00	-24.48
3	32.737376	-115.733334	-28.44	5.00	-23.44
4	32.738148	-115.733330	-30.29	5.00	-25.29
5	32.738124	-115.727620	-36.59	5.00	-31.59
6	32.737552	-115.727321	-35.12	5.00	-30.12
7	32.734766	-115.727261	-33.80	5.00	-28.80
8	32.734771	-115.728323	-32.43	5.00	-27.43

Name: PV39
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.734549	-115.726666	-30.61	5.00	-25.61
2	32.736519	-115.726654	-31.05	5.00	-26.05
3	32.736504	-115.723143	-29.73	5.00	-24.73
4	32.734534	-115.723079	-29.10	5.00	-24.10

Route Receptors

Name: Route01
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.781612	-115.707405	-38.47	7.60	-30.87
2	32.779286	-115.707392	-38.01	7.60	-30.41
3	32.777115	-115.707405	-37.41	7.60	-29.81
4	32.775659	-115.707400	-29.17	7.60	-21.57
5	32.773996	-115.707407	-31.94	7.60	-24.34

Name: Route02
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773996	-115.707407	-31.94	7.60	-24.34
2	32.773325	-115.707405	-31.14	7.60	-23.54
3	32.772457	-115.707405	-33.93	7.60	-26.33
4	32.771565	-115.707399	-33.56	7.60	-25.96
5	32.770066	-115.707397	-33.74	7.60	-26.14
6	32.769041	-115.707420	-33.24	7.60	-25.64
7	32.768296	-115.707425	-34.29	7.60	-26.69
8	32.767714	-115.707440	-33.75	7.60	-26.15
9	32.767032	-115.707455	-34.51	7.60	-26.91
10	32.766545	-115.707498	-36.12	7.60	-28.52
11	32.765400	-115.707499	-39.73	7.60	-32.13
12	32.764266	-115.707468	-37.65	7.60	-30.05
13	32.761319	-115.707359	-36.54	7.60	-28.94
14	32.758160	-115.707340	-36.79	7.60	-29.19

Name: Route04
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.783056	-115.690449	-41.67	7.60	-34.07
2	32.782746	-115.690423	-42.03	7.60	-34.43
3	32.781994	-115.690357	-39.42	7.60	-31.82
4	32.781386	-115.690332	-38.20	7.60	-30.60
5	32.778869	-115.690348	-38.34	7.60	-30.74
6	32.776376	-115.690364	-36.39	7.60	-28.79
7	32.774419	-115.690363	-31.14	7.60	-23.54

Name: Route05
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773078	-115.774795	-27.24	7.60	-19.64
2	32.773104	-115.770524	-32.45	7.60	-24.85
3	32.773070	-115.765509	-34.95	7.60	-27.35
4	32.773064	-115.760189	-37.51	7.60	-29.91
5	32.773086	-115.747972	-38.34	7.60	-30.74
6	32.773138	-115.746684	-36.78	7.60	-29.18

Name: Route06
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773138	-115.746684	-36.78	7.60	-29.18
2	32.773403	-115.745039	-36.46	7.60	-28.86
3	32.773741	-115.743478	-37.37	7.60	-29.77
4	32.773907	-115.742155	-37.18	7.60	-29.58
5	32.773956	-115.740207	-37.16	7.60	-29.56
6	32.773954	-115.736309	-34.96	7.60	-27.36
7	32.773954	-115.732802	-33.40	7.60	-25.80
8	32.773940	-115.729532	-33.54	7.60	-25.94
9	32.773946	-115.724211	-40.50	7.60	-32.90
10	32.773923	-115.718857	-38.49	7.60	-30.89
11	32.773926	-115.716214	-36.70	7.60	-29.10
12	32.773910	-115.709131	-32.79	7.60	-25.19
13	32.773905	-115.704844	-32.87	7.60	-25.27
14	32.773894	-115.699185	-44.61	7.60	-37.01
15	32.773858	-115.697037	-58.11	7.60	-50.51

Name: Route07
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.774083	-115.696832	-59.25	7.60	-51.65
2	32.774088	-115.698627	-45.62	7.60	-38.02
3	32.774107	-115.702779	-34.99	7.60	-27.39
4	32.774117	-115.707932	-32.78	7.60	-25.18
5	32.774130	-115.710912	-32.86	7.60	-25.26
6	32.774140	-115.715797	-36.25	7.60	-28.65
7	32.774140	-115.721276	-40.57	7.60	-32.97
8	32.774138	-115.726543	-39.60	7.60	-32.00
9	32.774148	-115.731711	-35.85	7.60	-28.25
10	32.774141	-115.735834	-34.52	7.60	-26.92
11	32.774143	-115.739166	-35.71	7.60	-28.11
12	32.774139	-115.740903	-37.02	7.60	-29.42
13	32.774121	-115.741765	-37.32	7.60	-29.72
14	32.774025	-115.742816	-36.43	7.60	-28.83
15	32.773843	-115.743935	-36.54	7.60	-28.94
16	32.773576	-115.745174	-36.50	7.60	-28.90
17	32.773409	-115.746208	-36.90	7.60	-29.30
18	32.773340	-115.746937	-37.58	7.60	-29.98
19	32.773289	-115.748463	-36.70	7.60	-29.10

Name: Route08
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.773178	-115.761580	-36.92	7.60	-29.32
2	32.770429	-115.761544	-37.91	7.60	-30.31
3	32.767709	-115.761543	-36.11	7.60	-28.51
4	32.765576	-115.761554	-34.20	7.60	-26.60
5	32.765603	-115.757420	-35.66	7.60	-28.06
6	32.765643	-115.753049	-37.07	7.60	-29.47
7	32.764727	-115.753071	-36.33	7.60	-28.73
8	32.762035	-115.753069	-33.79	7.60	-26.19
9	32.760003	-115.753047	-35.47	7.60	-27.87
10	32.758657	-115.753037	-32.40	7.60	-24.80
11	32.758470	-115.752767	-33.34	7.60	-25.74
12	32.758299	-115.752313	-35.56	7.60	-27.96

Name: Route09
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.758299	-115.752313	-35.56	7.60	-27.96
2	32.758343	-115.744757	-37.43	7.60	-29.83
3	32.758411	-115.737144	-37.62	7.60	-30.02
4	32.758477	-115.732757	-33.98	7.60	-26.38
5	32.757971	-115.731483	-36.52	7.60	-28.92
6	32.758230	-115.731186	-35.61	7.60	-28.01
7	32.758360	-115.730838	-38.69	7.60	-31.09
8	32.758407	-115.729442	-37.83	7.60	-30.23
9	32.758400	-115.726483	-37.57	7.60	-29.97
10	32.758379	-115.722417	-37.95	7.60	-30.35
11	32.758347	-115.718509	-36.69	7.60	-29.09
12	32.758321	-115.716148	-37.86	7.60	-30.26

Name: Route10
Path type: One-way (toward increasing index)
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.791073	-115.733319	-41.31	7.60	-33.71
2	32.789227	-115.733304	-40.88	7.60	-33.28
3	32.788997	-115.733263	-39.46	7.60	-31.86
4	32.788783	-115.733222	-39.13	7.60	-31.53
5	32.788475	-115.733198	-39.14	7.60	-31.54
6	32.786957	-115.733224	-39.67	7.60	-32.07
7	32.783765	-115.733277	-40.79	7.60	-33.19
8	32.781554	-115.733315	-39.89	7.60	-32.29
9	32.778619	-115.733324	-40.33	7.60	-32.73
10	32.776451	-115.733303	-35.94	7.60	-28.34
11	32.775169	-115.733276	-37.93	7.60	-30.33
12	32.774030	-115.733242	-33.91	7.60	-26.31

Name: Route11
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.774030	-115.733242	-33.91	7.60	-26.31
2	32.771081	-115.733188	-35.92	7.60	-28.32
3	32.769728	-115.733204	-38.14	7.60	-30.54
4	32.767681	-115.733225	-40.05	7.60	-32.45
5	32.765727	-115.733228	-41.13	7.60	-33.53
6	32.764582	-115.733226	-40.60	7.60	-33.00
7	32.763165	-115.733226	-38.65	7.60	-31.05
8	32.761111	-115.733247	-36.97	7.60	-29.37
9	32.760624	-115.733224	-36.73	7.60	-29.13
10	32.760316	-115.733150	-33.77	7.60	-26.17
11	32.760022	-115.733007	-34.79	7.60	-27.19
12	32.759750	-115.732907	-35.86	7.60	-28.26
13	32.759284	-115.732868	-36.20	7.60	-28.60
14	32.758783	-115.732837	-36.44	7.60	-28.84
15	32.758633	-115.732778	-36.35	7.60	-28.75
16	32.758477	-115.732757	-33.98	7.60	-26.38

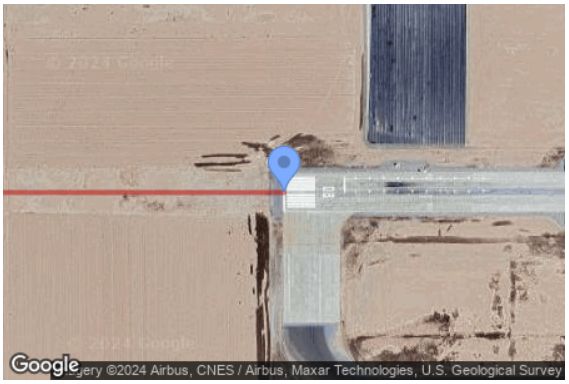
Name: Route12
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	32.757971	-115.731483	-36.52	7.60	-28.92
2	32.752093	-115.731458	-36.36	7.60	-28.76
3	32.751576	-115.731456	-36.20	7.60	-28.60
4	32.751220	-115.731121	-33.46	7.60	-25.86
5	32.749496	-115.731138	-38.51	7.60	-30.91
6	32.747645	-115.731170	-39.30	7.60	-31.70
7	32.744820	-115.731219	-38.75	7.60	-31.15
8	32.741767	-115.731273	-37.42	7.60	-29.82
9	32.739648	-115.731310	-36.41	7.60	-28.81
10	32.739328	-115.731264	-35.81	7.60	-28.21
11	32.739119	-115.731065	-35.56	7.60	-27.96
12	32.739044	-115.730899	-36.58	7.60	-28.98
13	32.739042	-115.727491	-36.74	7.60	-29.14
14	32.739039	-115.727061	-36.13	7.60	-28.53
15	32.739088	-115.725130	-35.32	7.60	-27.72
16	32.739158	-115.723752	-33.49	7.60	-25.89

Flight Path Receptors

Name: NJK08
Description: None
Threshold height: 50 ft
Direction: 90.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



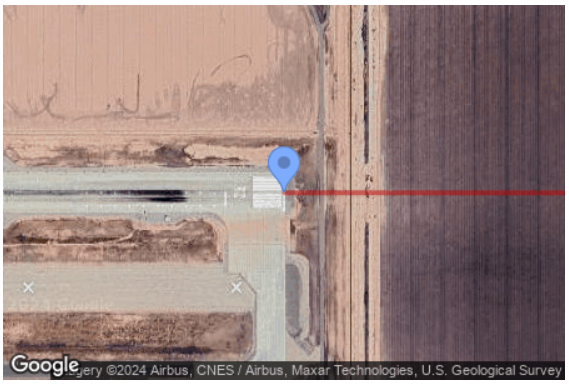
Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.829135	-115.687092	-50.00	50.00	0.00
Two-mile	32.829135	-115.721540	-42.90	596.30	553.40

Name: NJK12
Description: None
Threshold height: 50 ft
Direction: 135.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.829764	-115.672093	-48.80	50.00	1.20
Two-mile	32.850208	-115.696452	-52.30	606.90	554.60

Name: NJK26
Description: None
Threshold height: 55 ft
Direction: 270.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.829156	-115.656186	-49.00	55.00	6.00
Two-mile	32.829156	-115.621738	-48.10	607.50	559.40

Name: NJK30
Description: None
Threshold height: 55 ft
Direction: 315.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	32.816530	-115.656494	-42.50	55.00	12.50
Two-mile	32.796089	-115.632135	-35.60	601.60	566.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	32.784232	-115.761123	-37.55	5.50
OP 2	2	32.765361	-115.759028	-27.47	5.50
OP 3	3	32.740398	-115.753116	-2.82	5.50
OP 4	4	32.758689	-115.743834	-28.81	5.50
OP 5	5	32.741795	-115.741975	-13.53	5.50
OP 6	6	32.770851	-115.733700	-30.33	5.50
OP 7	7	32.759604	-115.732076	-35.55	5.50
OP 8	8	32.758638	-115.731863	-32.10	5.50
OP 9	9	32.759149	-115.730843	-29.05	5.50
OP 10	10	32.789932	-115.727501	-41.53	5.50
OP 11	11	32.766648	-115.716886	-34.91	5.50
OP 12	12	32.775113	-115.715136	-39.10	5.50
OP 13	13	32.789968	-115.707252	-41.08	5.50
OP 14	14	32.779210	-115.702460	-34.14	5.50
OP 15	15	32.765555	-115.697826	-65.36	5.50
OP 16	16	32.790545	-115.696241	-37.01	5.50
OP 17	17	32.765415	-115.693275	-38.29	5.50
OP 18	18	32.769290	-115.692077	-41.60	5.50
OP 19	19	32.780102	-115.689035	-37.60	5.50
20-ATCT	20	32.824282	-115.672259	-46.30	90.00

Map image of 20-ATCT



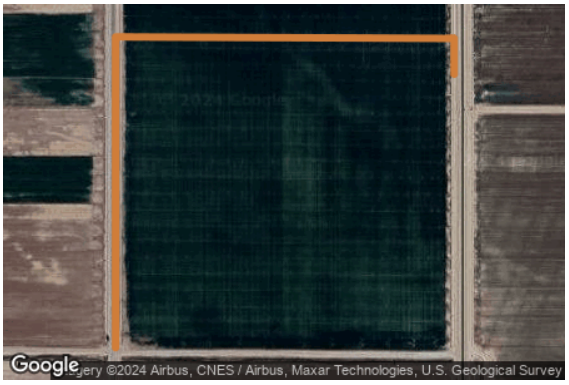
Obstruction Components

Name: Fence01
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.760064	-115.737290	-40.83
2	32.761688	-115.737291	-42.47
3	32.763409	-115.737292	-41.61
4	32.763408	-115.736213	-40.35
5	32.763407	-115.734803	-37.36
6	32.763407	-115.734000	-38.74
7	32.763406	-115.733370	-38.60

Name: Fence02
Top height: 7.0 ft



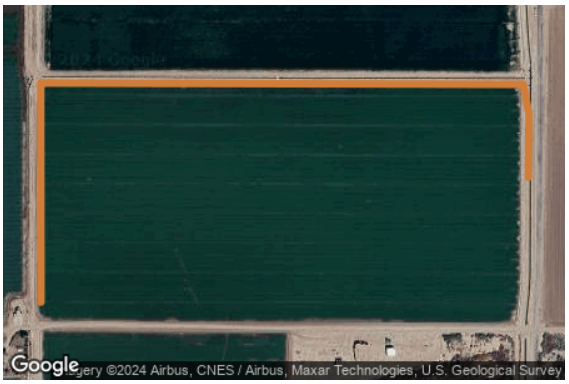
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.763663	-115.733184	-39.07
2	32.765888	-115.733185	-41.04
3	32.768137	-115.733186	-39.42
4	32.768133	-115.732034	-39.66
5	32.768127	-115.730534	-39.33
6	32.768122	-115.729043	-38.72
7	32.768117	-115.727959	-37.82
8	32.768115	-115.727368	-36.36
9	32.767600	-115.727366	-36.96

Name: Fence03
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.767598	-115.727076	-37.24
2	32.768343	-115.727075	-37.01
3	32.769085	-115.727077	-37.55
4	32.769077	-115.724853	-39.24
5	32.769064	-115.721295	-41.52
6	32.769053	-115.718423	-37.82
7	32.769045	-115.716243	-36.68
8	32.768318	-115.716247	-38.26
9	32.767459	-115.716252	-37.38

Name: Fence04
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.767479	-115.715969	-38.20
2	32.768732	-115.715971	-36.84
3	32.769999	-115.715973	-36.91
4	32.770642	-115.715974	-35.24
5	32.770637	-115.714084	-36.20
6	32.770631	-115.711407	-36.03
7	32.770625	-115.709145	-35.63
8	32.770622	-115.707681	-33.53
9	32.770189	-115.707586	-33.81
10	32.769283	-115.707595	-33.38

Name: Fence05
Top height: 7.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	32.769300	-115.707324	-33.43
2	32.769949	-115.707329	-33.72
3	32.770625	-115.707327	-33.62
4	32.770620	-115.705965	-36.59
5	32.770613	-115.704108	-40.17
6	32.770603	-115.701256	-46.01
7	32.770597	-115.699392	-45.83
8	32.770588	-115.696893	-38.57
9	32.769980	-115.696901	-39.07
10	32.769339	-115.697486	-38.67

Glare Analysis Results

Summary of Results

Glare with potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV21	SA tracking	SA tracking	485	8.1	26	0.4	-
PV22	SA tracking	SA tracking	0	0.0	0	0.0	-
PV23	SA tracking	SA tracking	1,760	29.3	1,592	26.5	-
PV24	SA tracking	SA tracking	1,355	22.6	1,920	32.0	-
PV25	SA tracking	SA tracking	2,117	35.3	292	4.9	-
PV26	SA tracking	SA tracking	869	14.5	0	0.0	-
PV27	SA tracking	SA tracking	1,774	29.6	328	5.5	-
PV28	SA tracking	SA tracking	2,255	37.6	12	0.2	-
PV29	SA tracking	SA tracking	1,258	21.0	0	0.0	-
PV30	SA tracking	SA tracking	1,530	25.5	0	0.0	-
PV31	SA tracking	SA tracking	885	14.8	0	0.0	-
PV32	SA tracking	SA tracking	612	10.2	0	0.0	-
PV33	SA tracking	SA tracking	991	16.5	0	0.0	-
PV34	SA tracking	SA tracking	163	2.7	0	0.0	-
PV35	SA tracking	SA tracking	1,021	17.0	8	0.1	-
PV36	SA tracking	SA tracking	257	4.3	204	3.4	-
PV37	SA tracking	SA tracking	295	4.9	1,266	21.1	-
PV38	SA tracking	SA tracking	566	9.4	383	6.4	-
PV39	SA tracking	SA tracking	175	2.9	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0

PC ORIGINAL PKG

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route04	0	0.0	0	0.0
Route05	627	10.4	0	0.0
Route06	56	0.9	0	0.0
Route07	0	0.0	0	0.0
Route08	1,815	30.2	88	1.5
Route09	5,376	89.6	4,005	66.8
Route10	0	0.0	0	0.0
Route11	976	16.3	0	0.0
Route12	3,967	66.1	1,861	31.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	428	7.1	0	0.0
OP 4	418	7.0	51	0.8
OP 5	640	10.7	0	0.0
OP 6	0	0.0	0	0.0
OP 7	406	6.8	0	0.0
OP 8	780	13.0	0	0.0
OP 9	803	13.4	0	0.0
OP 10	0	0.0	0	0.0
OP 11	985	16.4	26	0.4
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	293	4.9	0	0.0
OP 16	0	0.0	0	0.0
OP 17	375	6.2	0	0.0
OP 18	423	7.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV: PV21 potential temporary after-image

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 11	485	8.1	26	0.4
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV21 and Route: Route01

No glare found

PV21 and Route: Route02

No glare found

PV21 and Route: Route04

No glare found

PV21 and Route: Route05

No glare found

PV21 and Route: Route06

No glare found

PV21 and Route: Route07

No glare found

PV21 and Route: Route08

No glare found

PV21 and Route: Route09

No glare found

PV21 and Route: Route10

No glare found

PV21 and Route: Route11

No glare found

PV21 and Route: Route12

No glare found

PV21 and FP: NJK08

No glare found

PV21 and FP: NJK12

No glare found

PV21 and FP: NJK26

No glare found

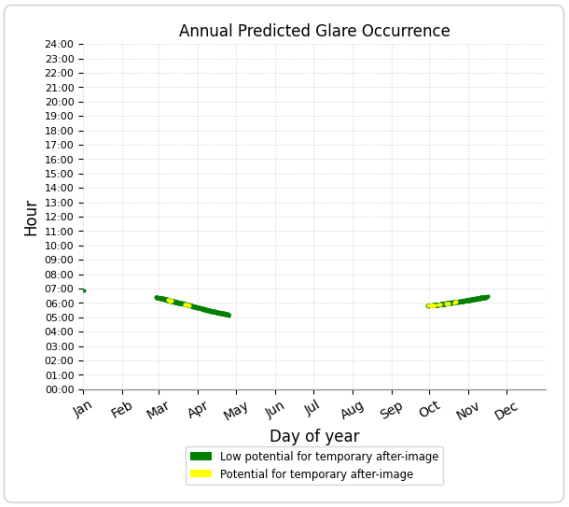
PC ORIGINAL PKG

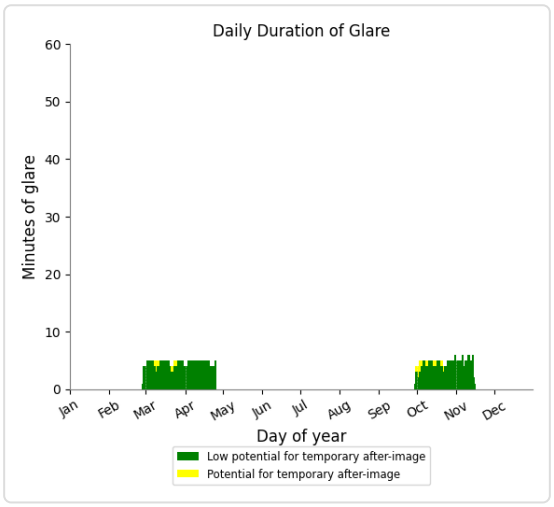
PV21 and FP: NJK30

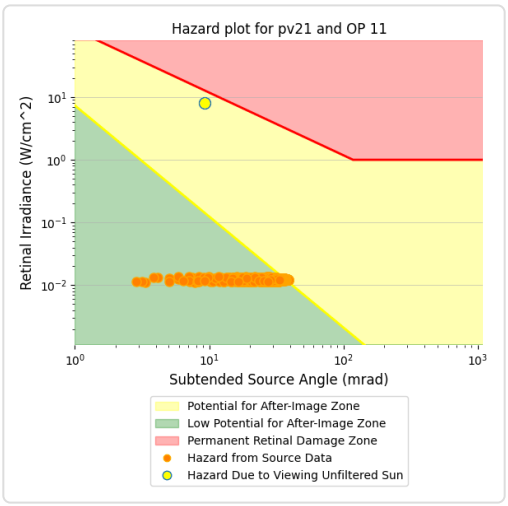
No glare found

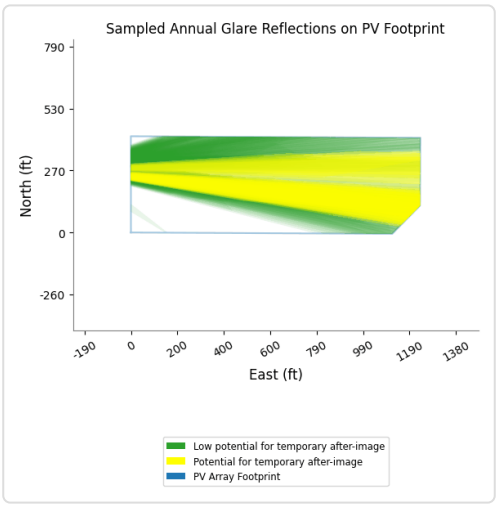
PV21 and OP 11

Yellow glare: 26 min.
Green glare: 485 min.









PV21 and OP 1

No glare found

PV21 and OP 2

No glare found

PV21 and OP 3

No glare found

PV21 and OP 4

No glare found

PV21 and OP 5

No glare found

PV21 and OP 6

No glare found

PV21 and OP 7

No glare found

PV21 and OP 8

No glare found

PV21 and OP 9

No glare found

PV21 and OP 10

No glare found

PV21 and OP 12

No glare found

PV21 and OP 13

No glare found

PV21 and OP 14

No glare found

PV21 and OP 15

No glare found

PV21 and OP 16

No glare found

PV21 and OP 17

No glare found

PV21 and OP 18

No glare found

PV21 and OP 19

No glare found

PC ORIGINAL PKG

PV21 and 20-ATCT

No glare found

PV: PV22 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PC ORIGINAL PKG

PV22 and Route: Route01

No glare found

PV22 and Route: Route02

No glare found

PV22 and Route: Route04

No glare found

PV22 and Route: Route05

No glare found

PV22 and Route: Route06

No glare found

PV22 and Route: Route07

No glare found

PV22 and Route: Route08

No glare found

PV22 and Route: Route09

No glare found

PV22 and Route: Route10

No glare found

PV22 and Route: Route11

No glare found

PV22 and Route: Route12

No glare found

PV22 and FP: NJK08

No glare found

PV22 and FP: NJK12

No glare found

PV22 and FP: NJK26

No glare found

PC ORIGINAL PKG

PV22 and FP: NJK30

No glare found

PV22 and OP 1

No glare found

PV22 and OP 2

No glare found

PV22 and OP 3

No glare found

PV22 and OP 4

No glare found

PV22 and OP 5

No glare found

PV22 and OP 6

No glare found

PV22 and OP 7

No glare found

PV22 and OP 8

No glare found

PV22 and OP 9

No glare found

PV22 and OP 10

No glare found

PV22 and OP 11

No glare found

PV22 and OP 12

No glare found

PV22 and OP 13

No glare found

PC ORIGINAL PKG

PV22 and OP 14

No glare found

PV22 and OP 15

No glare found

PV22 and OP 16

No glare found

PV22 and OP 17

No glare found

PV22 and OP 18

No glare found

PV22 and OP 19

No glare found

PV22 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV23 potential temporary after-image

Receptor results ordered by category of glare

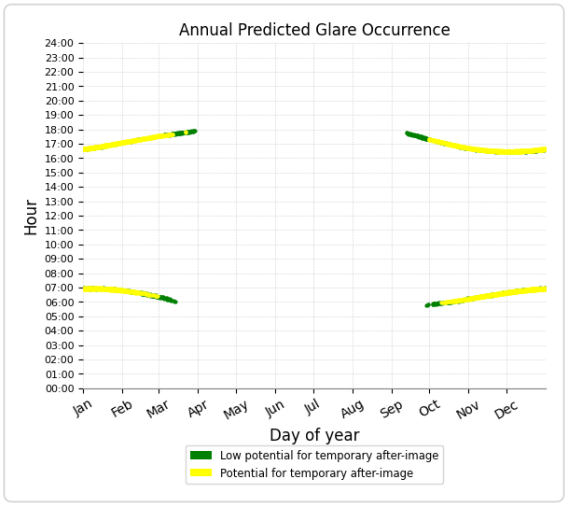
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	435	7.2	1,592	26.5
Route12	695	11.6	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	171	2.9	0	0.0
OP 7	146	2.4	0	0.0
OP 8	82	1.4	0	0.0
OP 9	104	1.7	0	0.0
OP 11	127	2.1	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

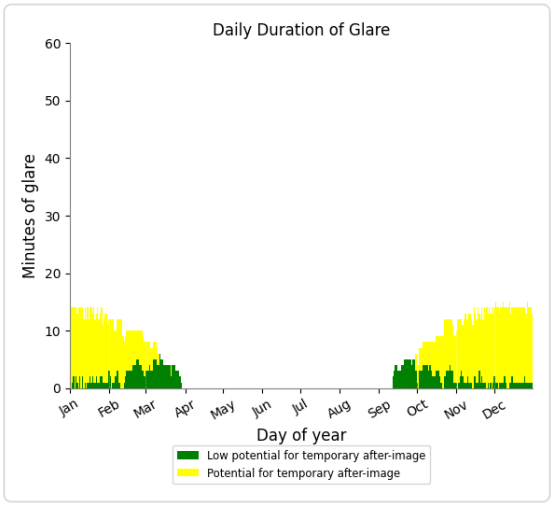
PC ORIGINAL PKG

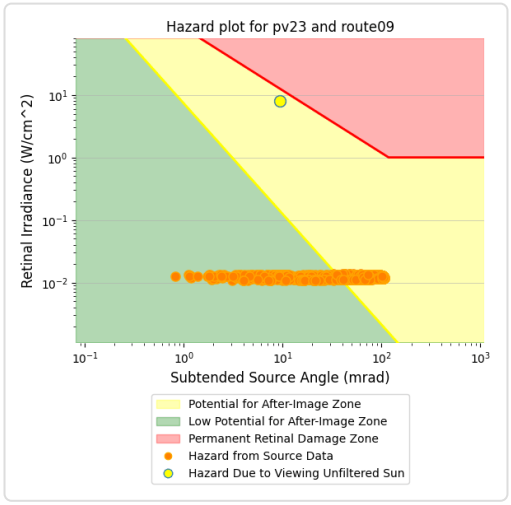
PV23 and Route: Route09

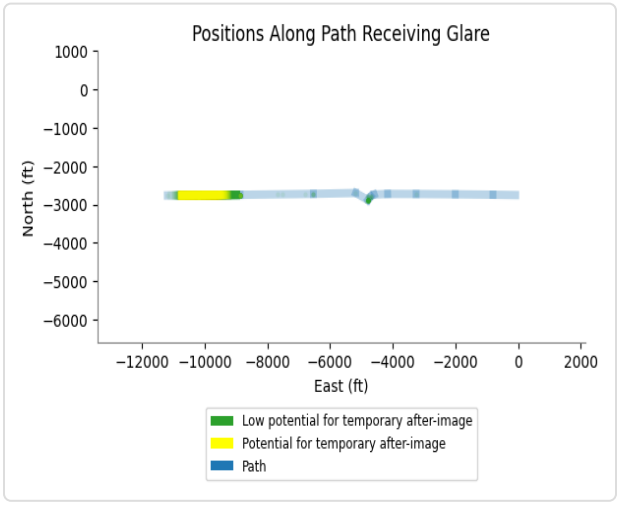
Yellow glare: 1,592 min.

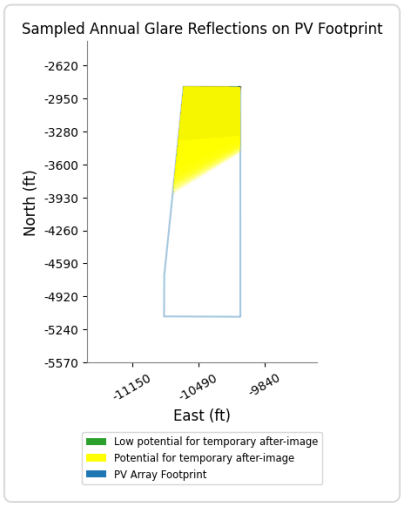
Green glare: 435 min.







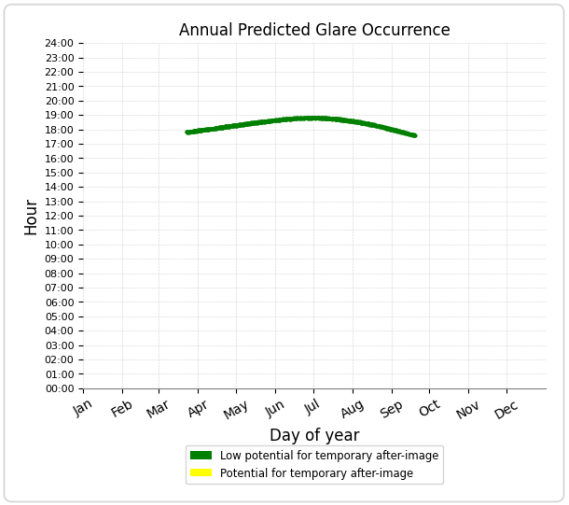


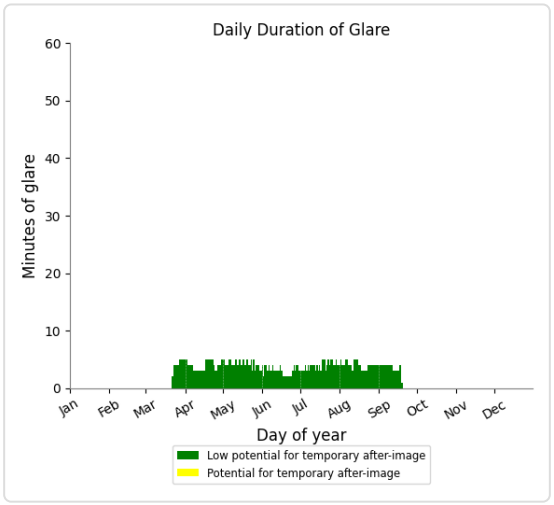


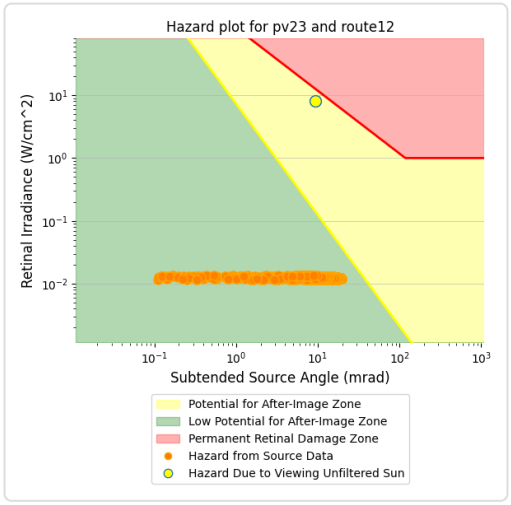
PV23 and Route: Route12

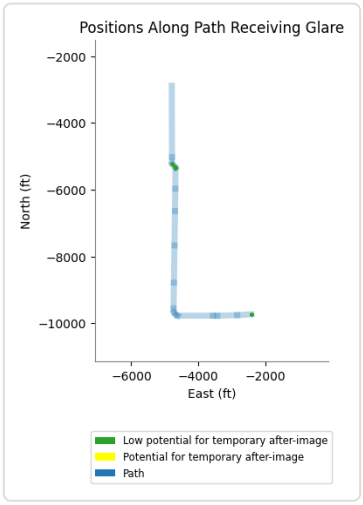
Yellow glare: none

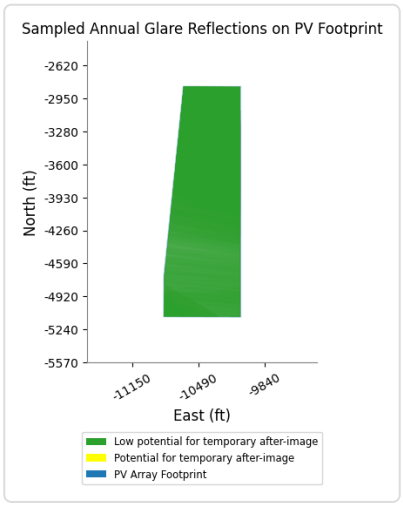
Green glare: 695 min.











PV23 and Route: Route01

No glare found

PC ORIGINAL PKG

PV23 and Route: Route02

No glare found

PV23 and Route: Route04

No glare found

PV23 and Route: Route05

No glare found

PV23 and Route: Route06

No glare found

PV23 and Route: Route07

No glare found

PV23 and Route: Route08

No glare found

PV23 and Route: Route10

No glare found

PV23 and Route: Route11

No glare found

PV23 and FP: NJK08

No glare found

PV23 and FP: NJK12

No glare found

PV23 and FP: NJK26

No glare found

PV23 and FP: NJK30

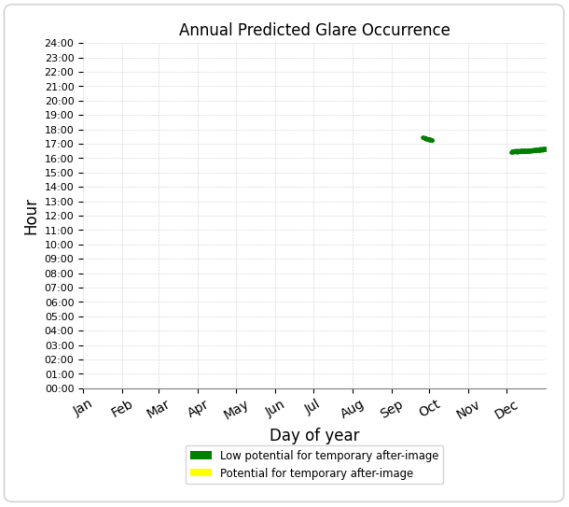
No glare found

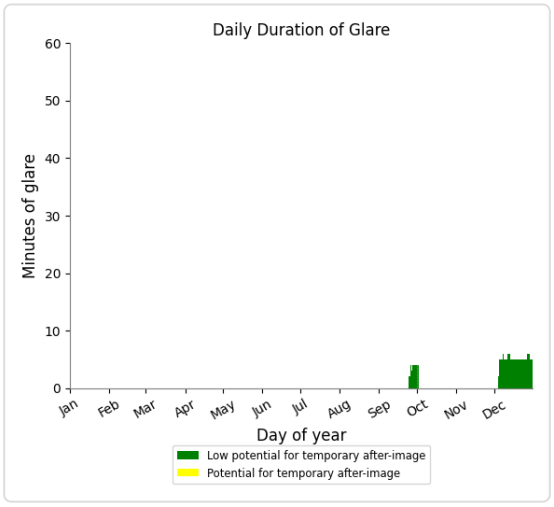
PC ORIGINAL PKG

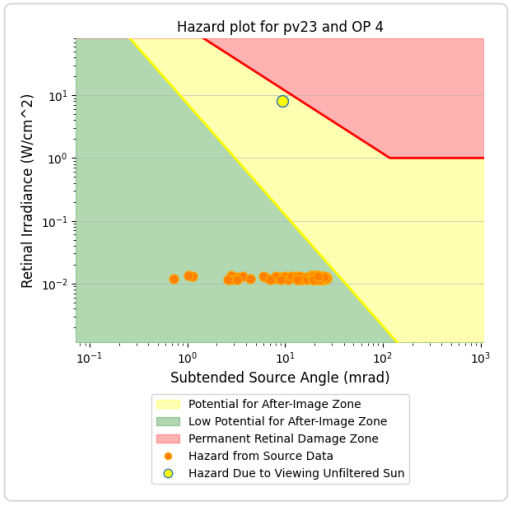
PV23 and OP 4

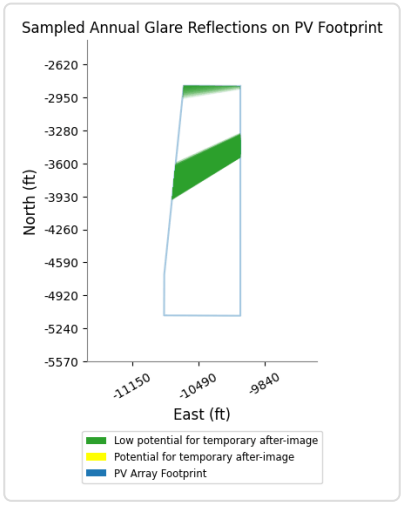
Yellow glare: none

Green glare: 171 min.





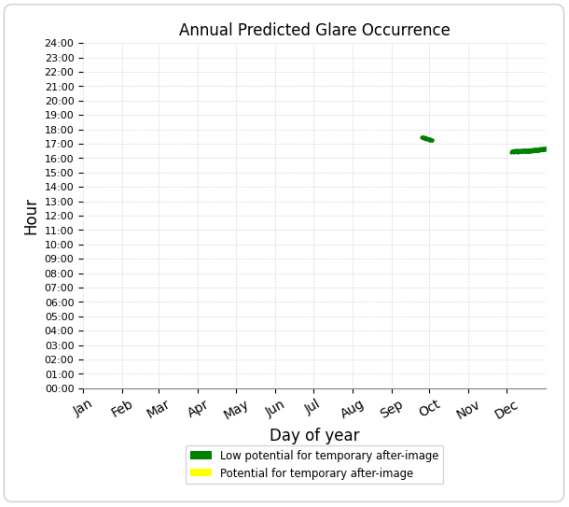


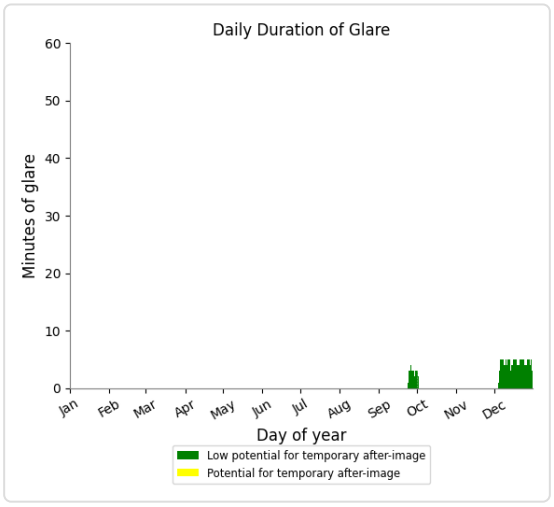


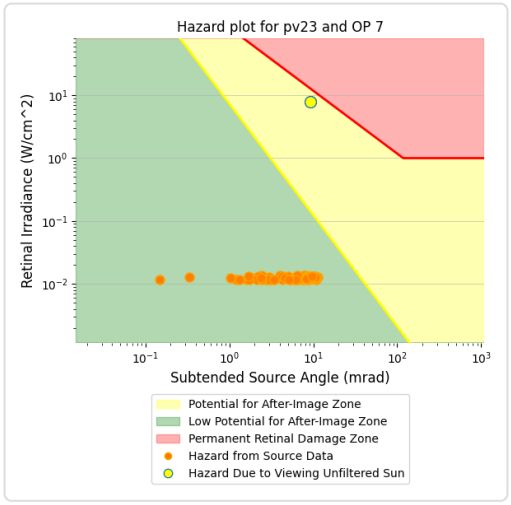
PV23 and OP 7

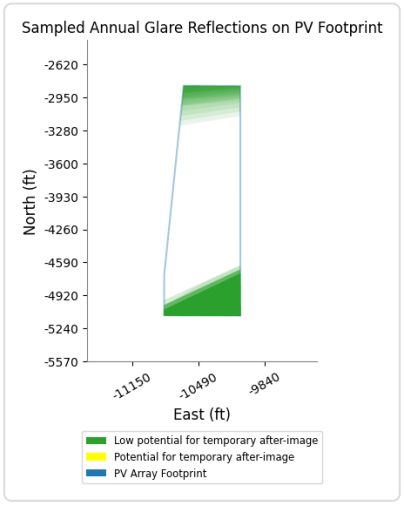
Yellow glare: none

Green glare: 146 min.







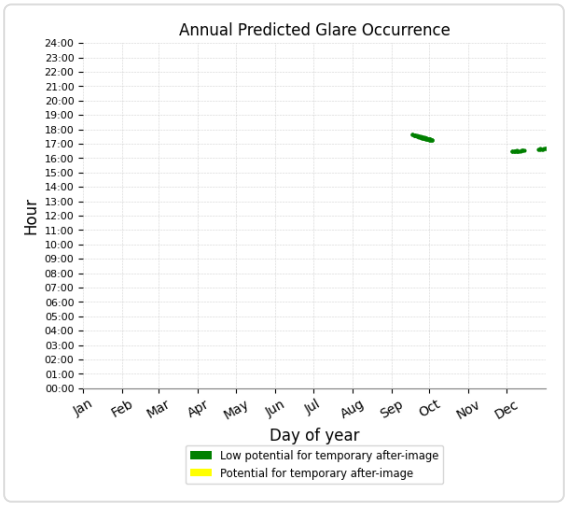


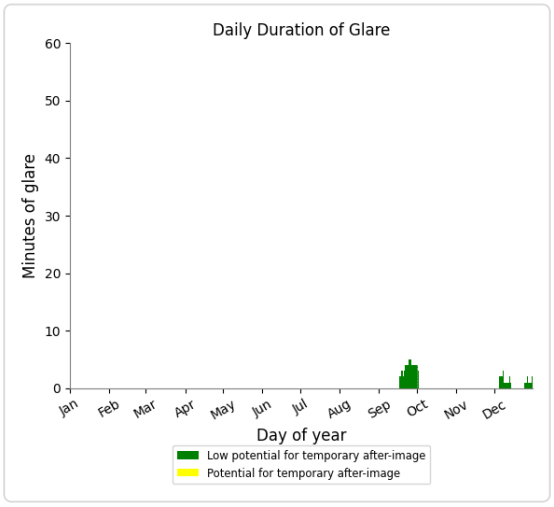
PC ORIGINAL PKG

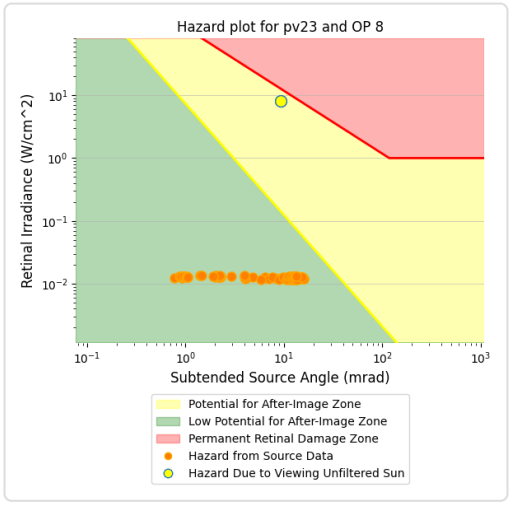
PV23 and OP 8

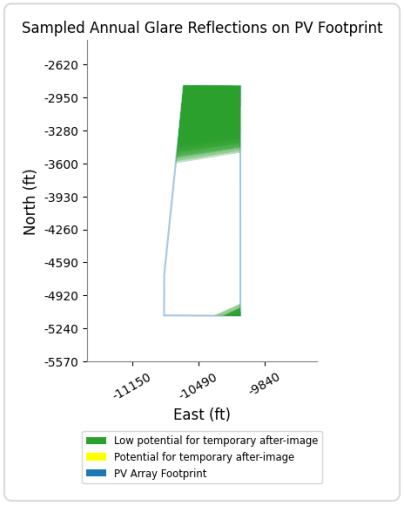
Yellow glare: none

Green glare: 82 min.





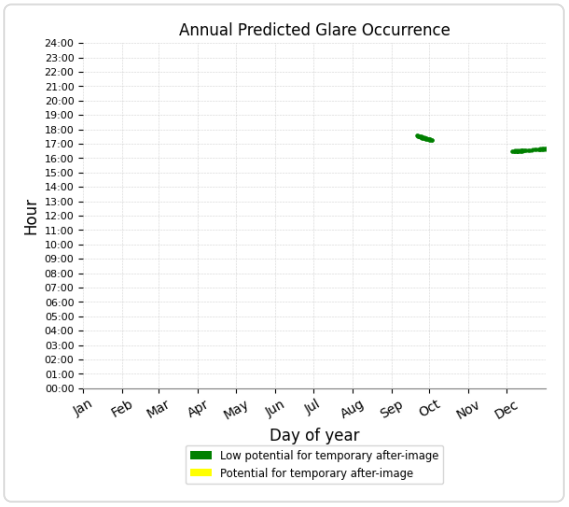


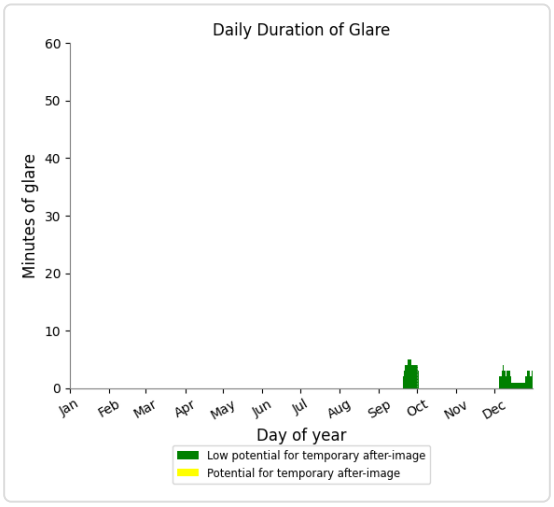


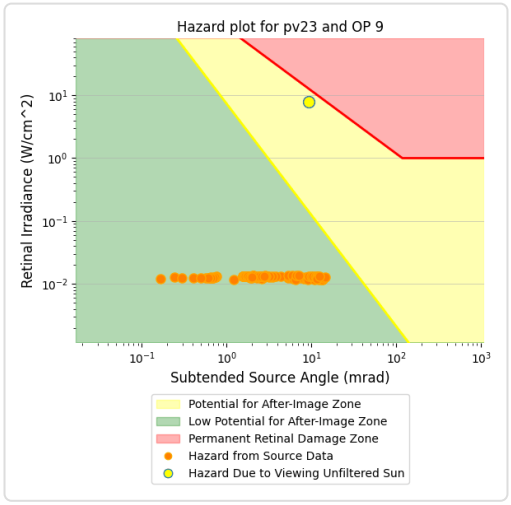
PV23 and OP 9

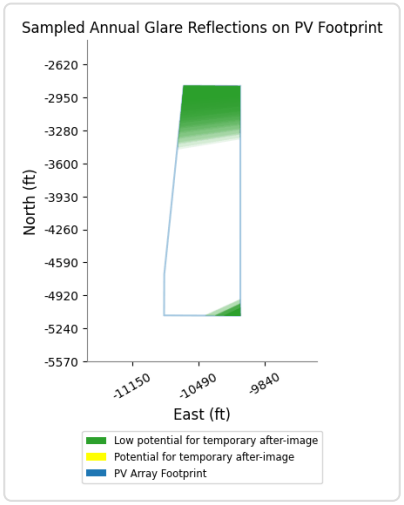
Yellow glare: none

Green glare: 104 min.



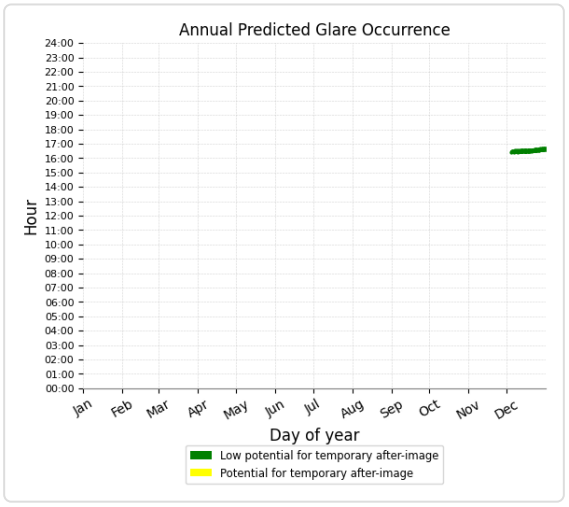


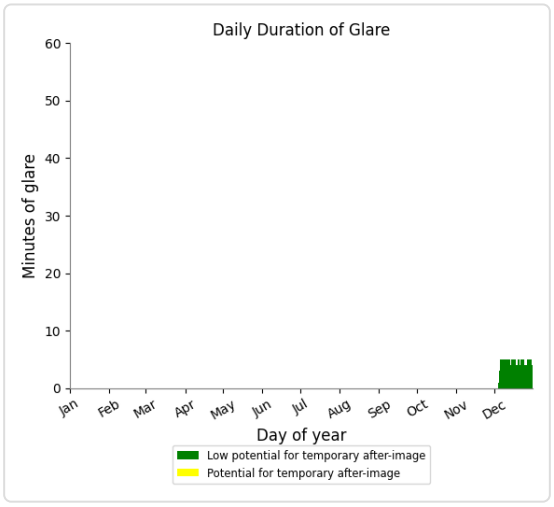


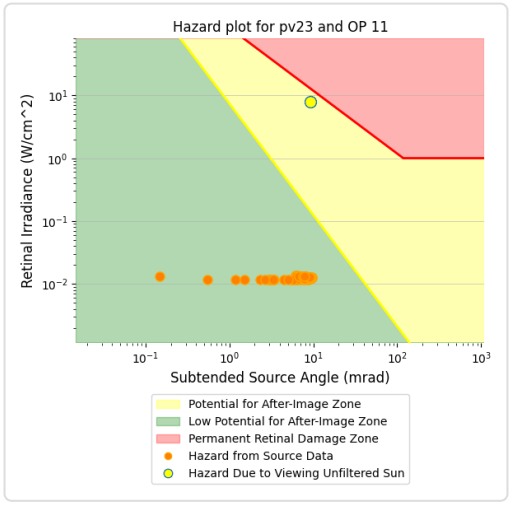


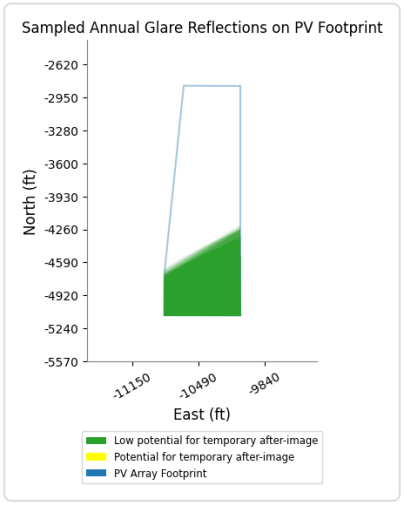
PV23 and OP 11

Yellow glare: none
Green glare: 127 min.









PV23 and OP 1

No glare found

PV23 and OP 2

No glare found

PV23 and OP 3

No glare found

PV23 and OP 5

No glare found

PV23 and OP 6

No glare found

PV23 and OP 10

No glare found

PV23 and OP 12

No glare found

PV23 and OP 13

No glare found

PV23 and OP 14

No glare found

PV23 and OP 15

No glare found

PV23 and OP 16

No glare found

PV23 and OP 17

No glare found

PV23 and OP 18

No glare found

PV23 and OP 19

No glare found

PV23 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV24 potential temporary after-image

Receptor results ordered by category of glare

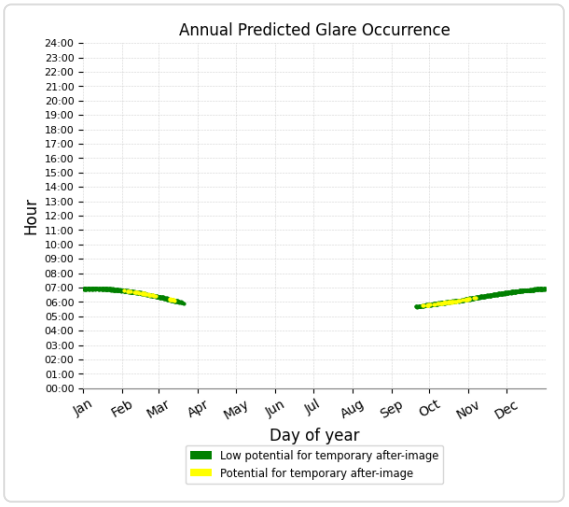
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route08	686	11.4	83	1.4
Route09	295	4.9	1,786	29.8
Route05	36	0.6	0	0.0
Route12	230	3.8	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	92	1.5	51	0.8
OP 11	16	0.3	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

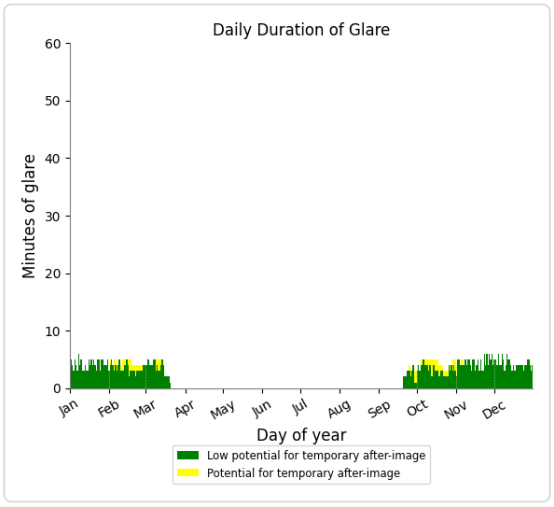
PC ORIGINAL PKG

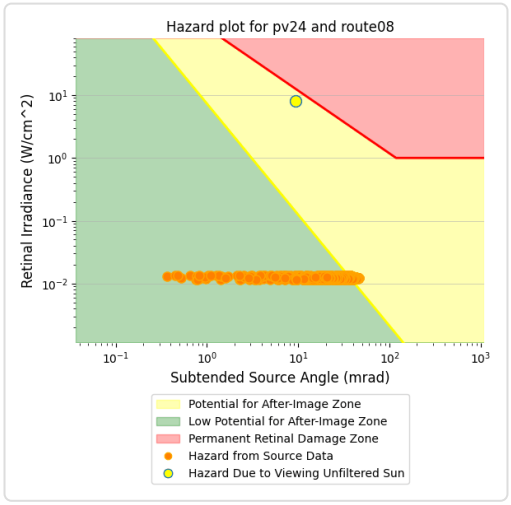
PV24 and Route: Route08

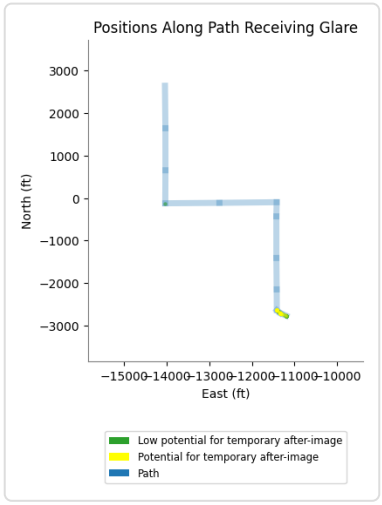
Yellow glare: 83 min.

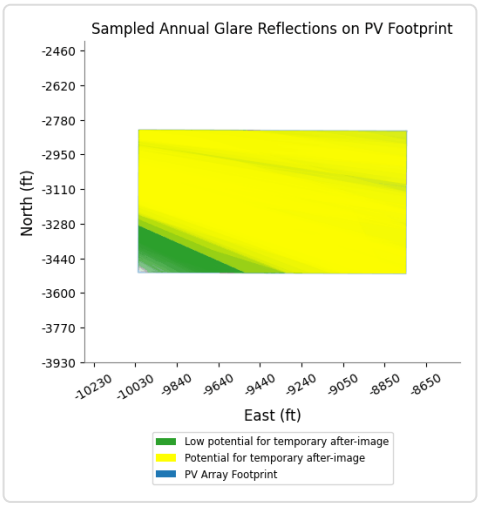
Green glare: 686 min.









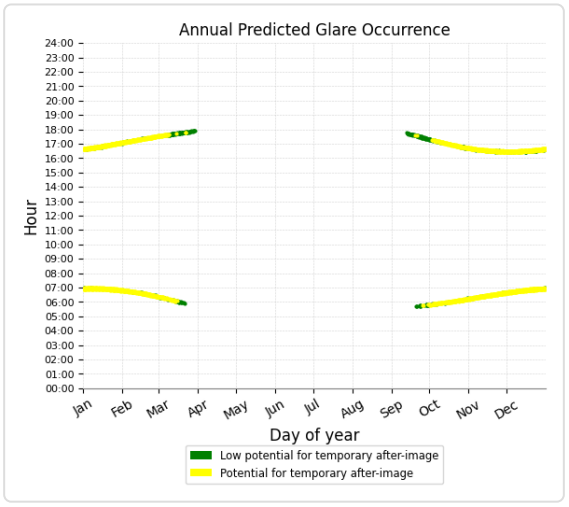


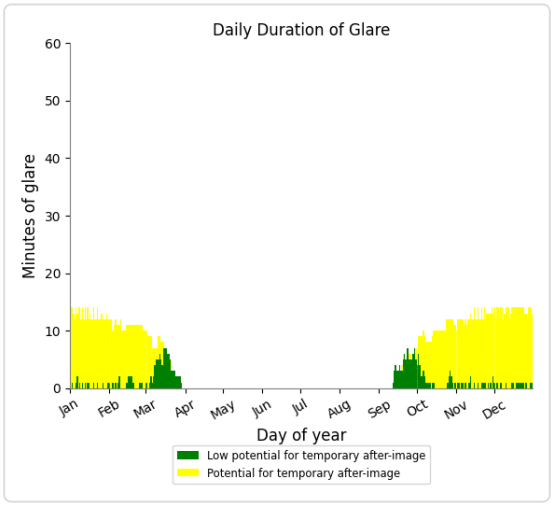
PC ORIGINAL PKG

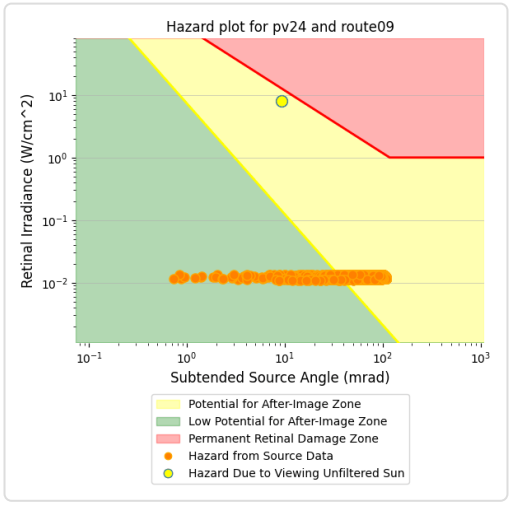
PV24 and Route: Route09

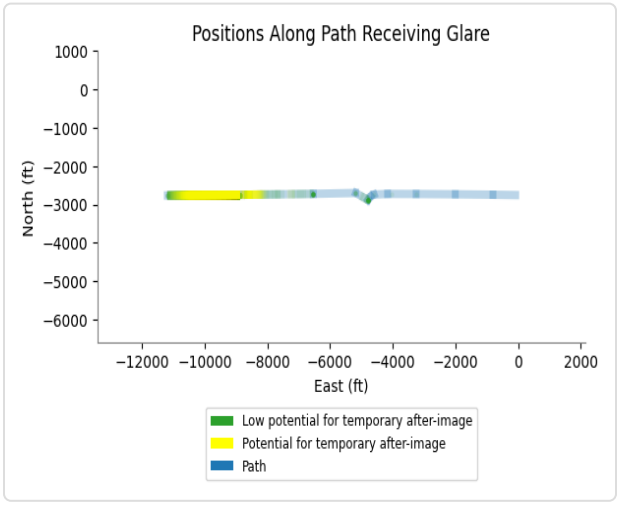
Yellow glare: 1,786 min.

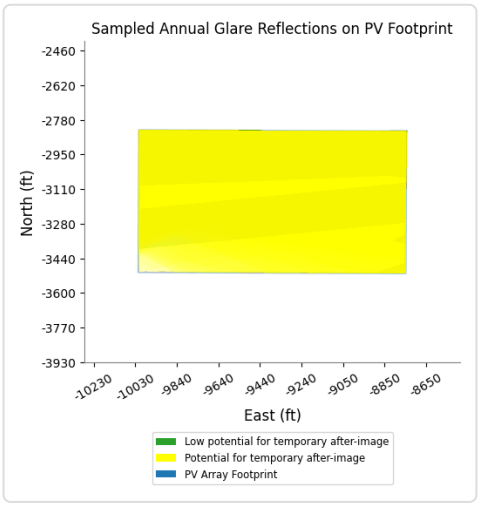
Green glare: 295 min.







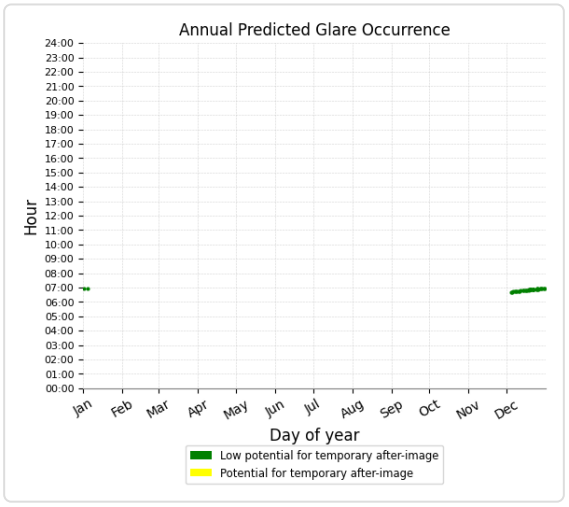


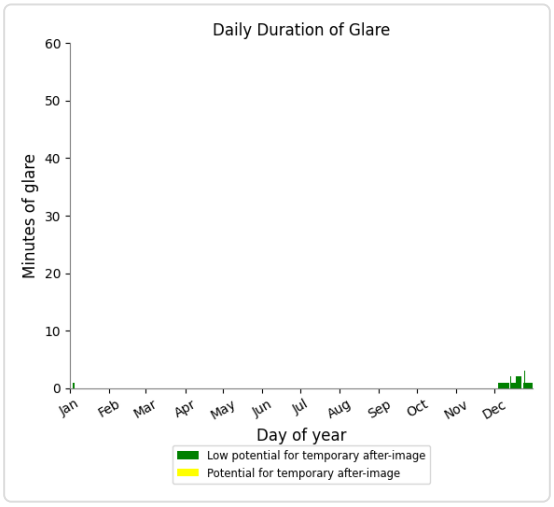


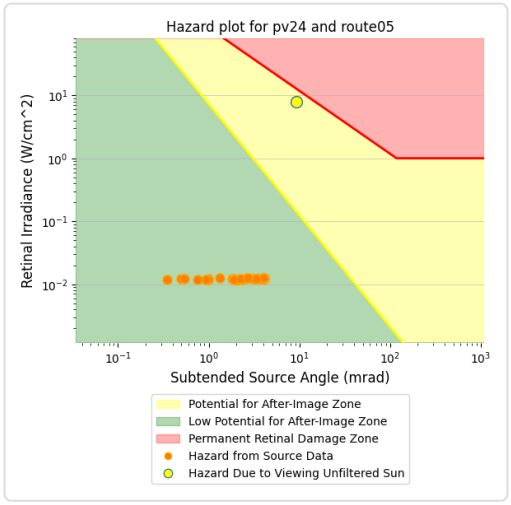
PV24 and Route: Route05

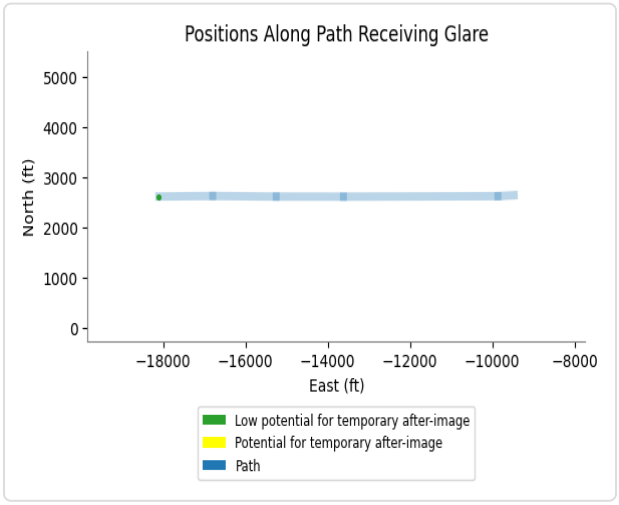
Yellow glare: none

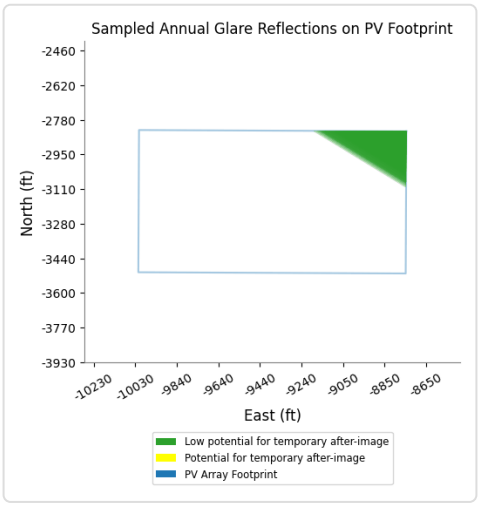
Green glare: 36 min.







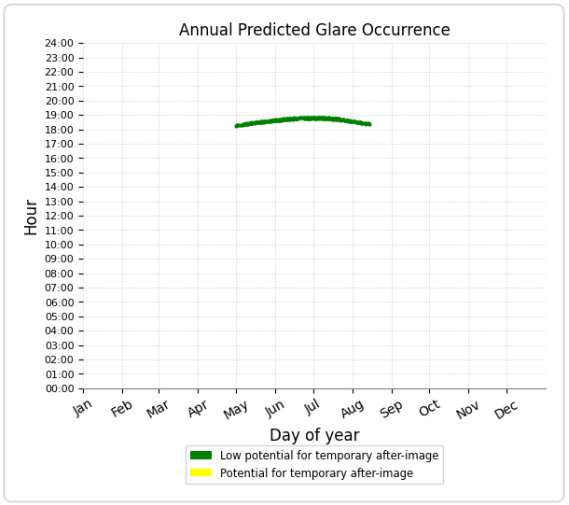


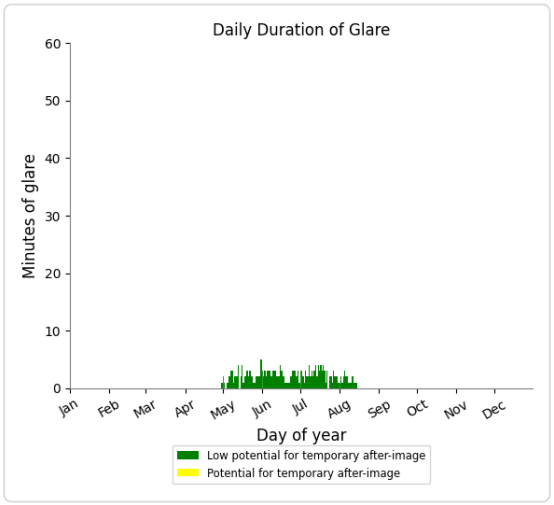


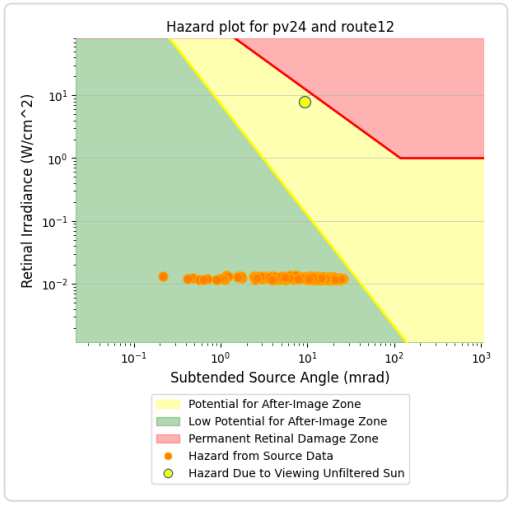
PV24 and Route: Route12

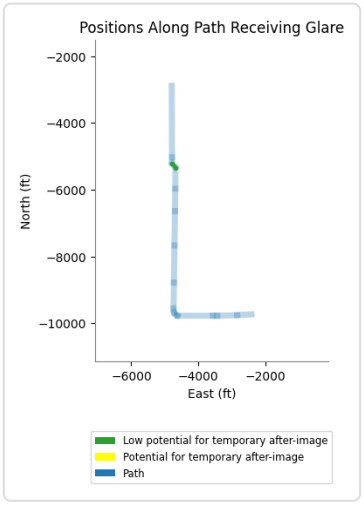
Yellow glare: none

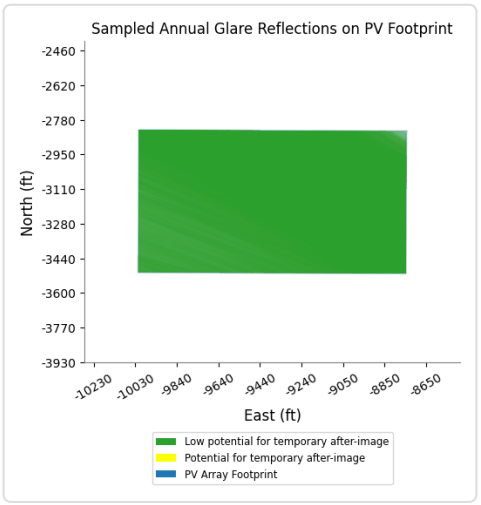
Green glare: 230 min.











PV24 and Route: Route01

No glare found

PV24 and Route: Route02

No glare found

PV24 and Route: Route04

No glare found

PV24 and Route: Route06

No glare found

PV24 and Route: Route07

No glare found

PV24 and Route: Route10

No glare found

PV24 and Route: Route11

No glare found

PV24 and FP: NJK08

No glare found

PV24 and FP: NJK12

No glare found

PV24 and FP: NJK26

No glare found

PV24 and FP: NJK30

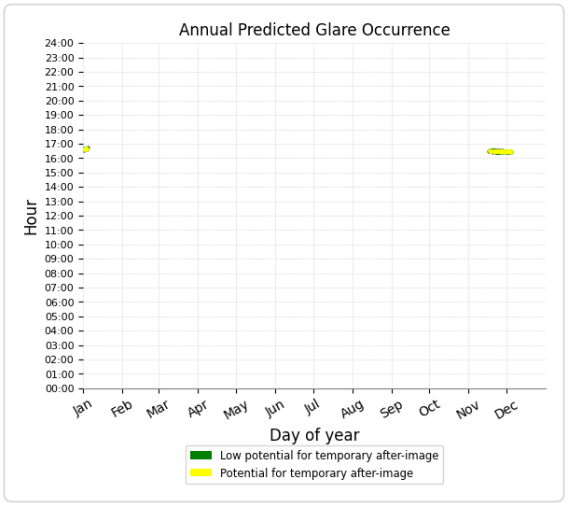
No glare found

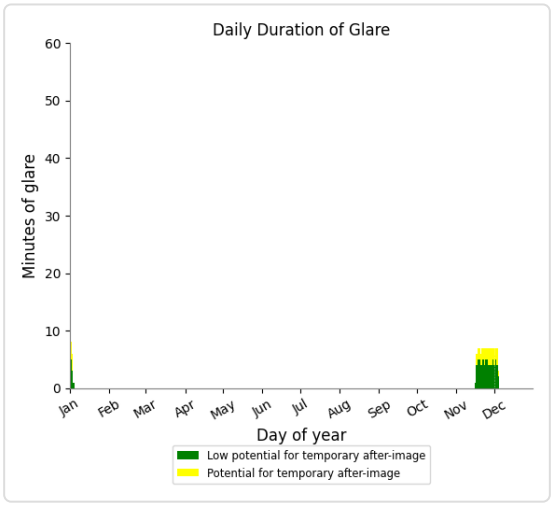
PC ORIGINAL PKG

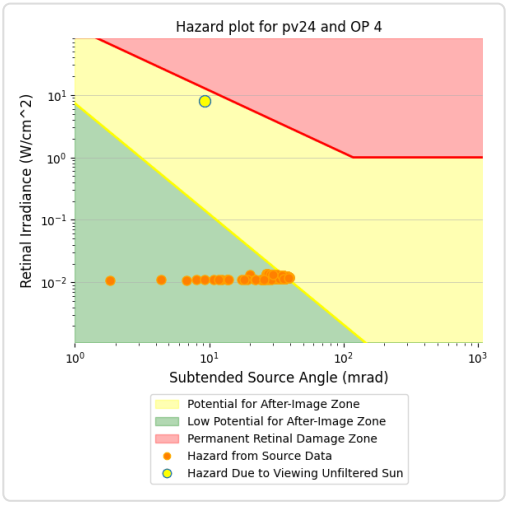
PV24 and OP 4

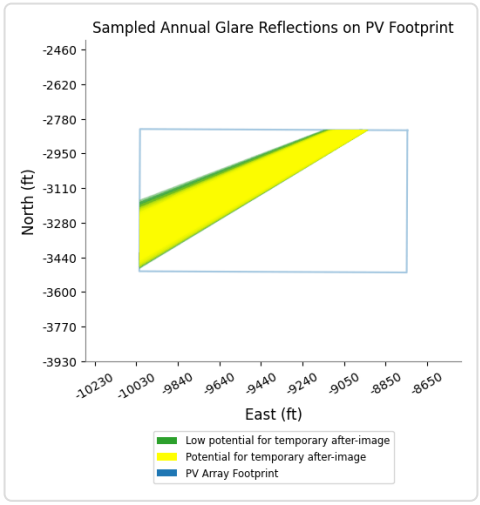
Yellow glare: 51 min.

Green glare: 92 min.





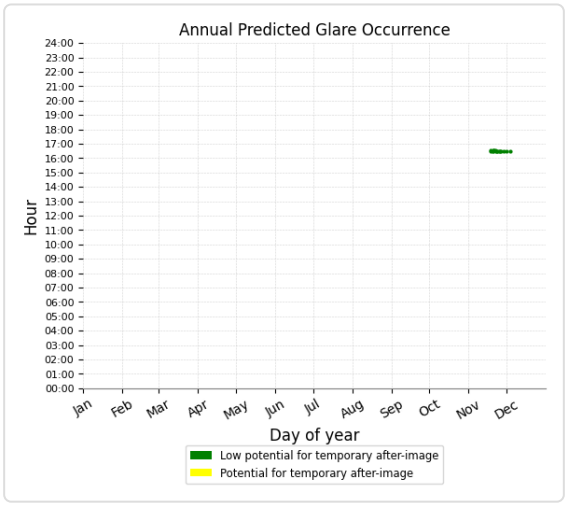


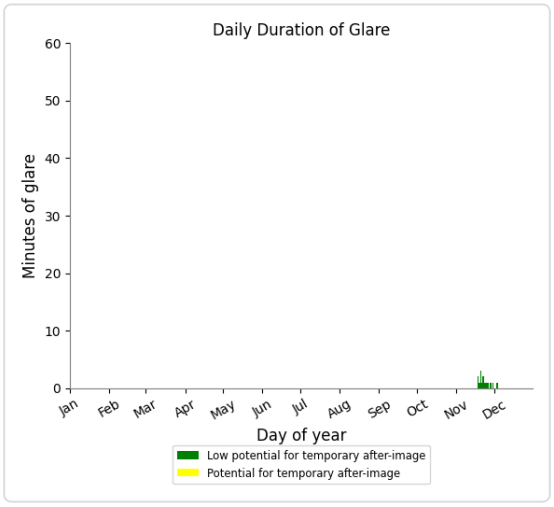


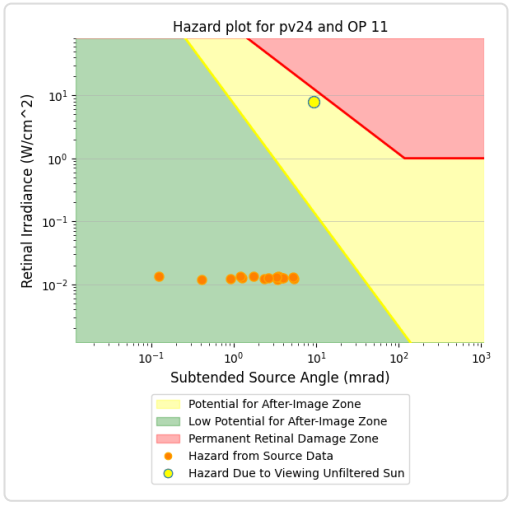
PC ORIGINAL PKG

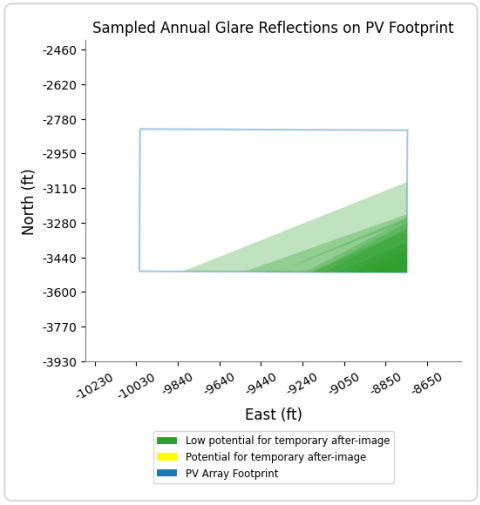
PV24 and OP 11

Yellow glare: none
Green glare: 16 min.









PV24 and OP 1

No glare found

PV24 and OP 2

No glare found

PV24 and OP 3

No glare found

PV24 and OP 5

No glare found

PV24 and OP 6

No glare found

PV24 and OP 7

No glare found

PV24 and OP 8

No glare found

PV24 and OP 9

No glare found

PV24 and OP 10

No glare found

PV24 and OP 12

No glare found

PV24 and OP 13

No glare found

PV24 and OP 14

No glare found

PV24 and OP 15

No glare found

PV24 and OP 16

No glare found

PV24 and OP 17

No glare found

PV24 and OP 18

No glare found

PV24 and OP 19

No glare found

PV24 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV25 potential temporary after-image

Receptor results ordered by category of glare

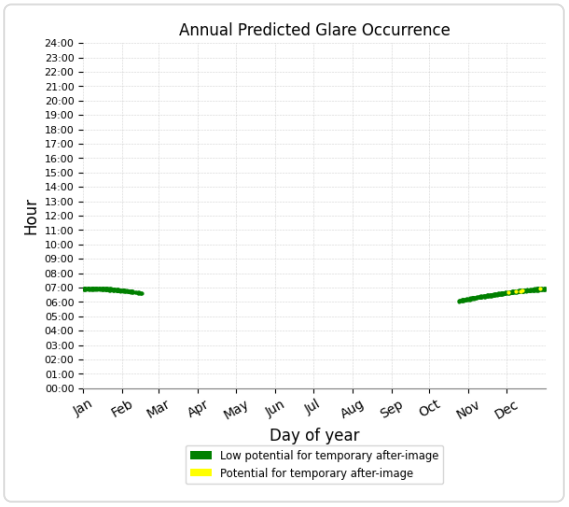
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route08	382	6.4	5	0.1
Route09	571	9.5	287	4.8
Route12	334	5.6	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 7	178	3.0	0	0.0
OP 8	193	3.2	0	0.0
OP 9	253	4.2	0	0.0
OP 11	206	3.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

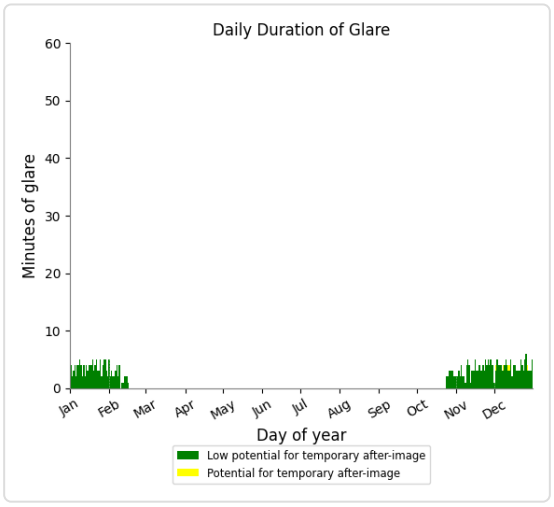
PC ORIGINAL PKG

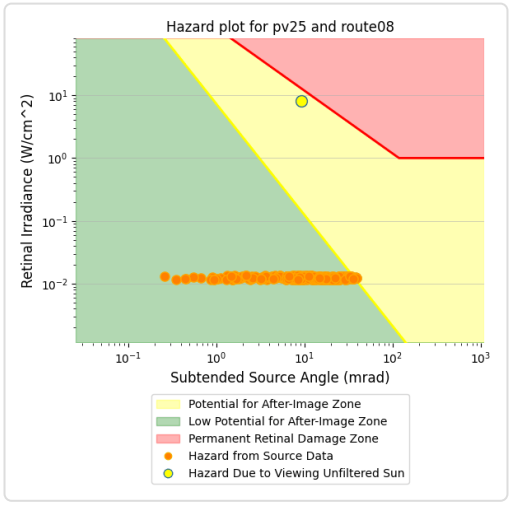
PV25 and Route: Route08

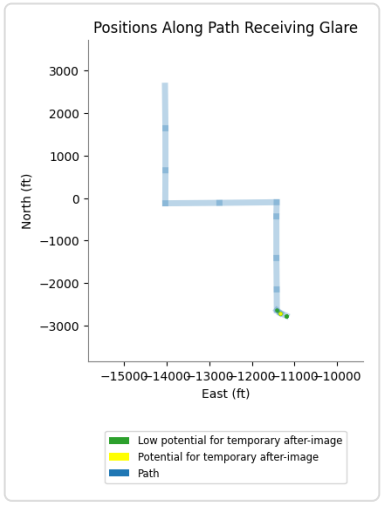
Yellow glare: 5 min.

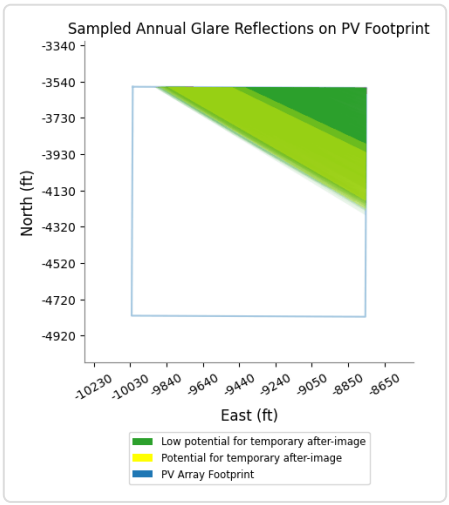
Green glare: 382 min.







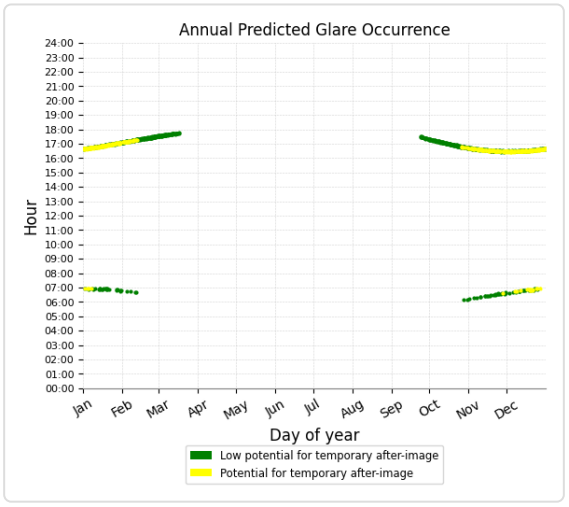


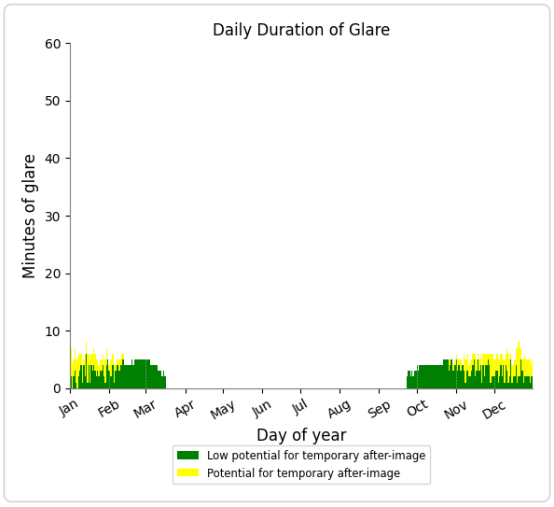


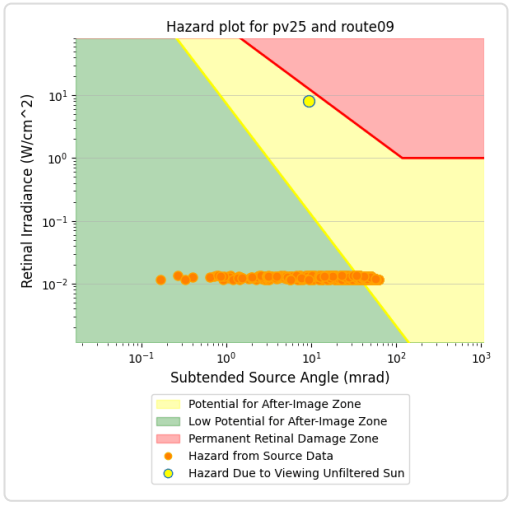
PV25 and Route: Route09

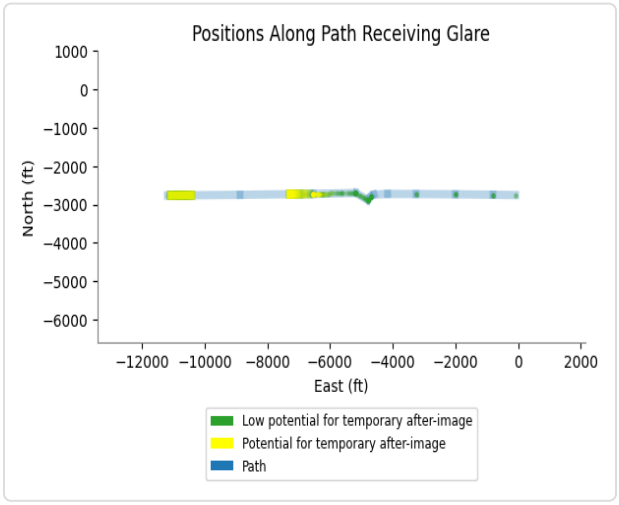
Yellow glare: 287 min.

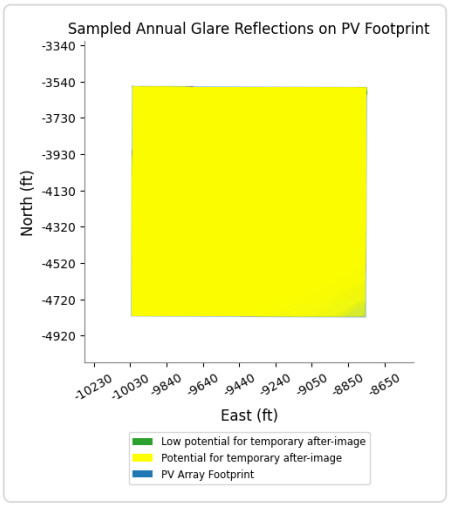
Green glare: 571 min.







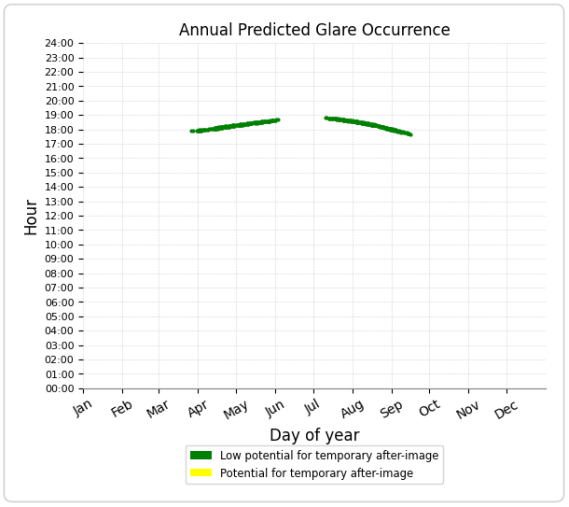


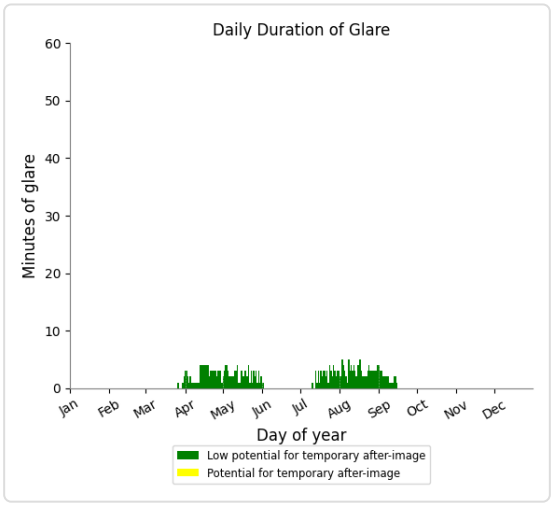


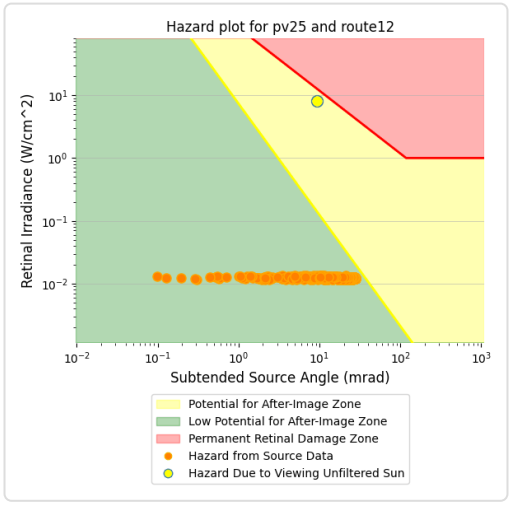
PV25 and Route: Route12

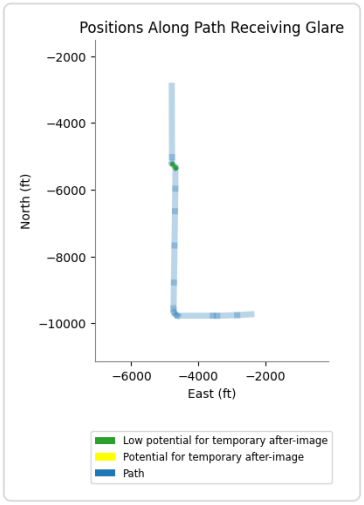
Yellow glare: none

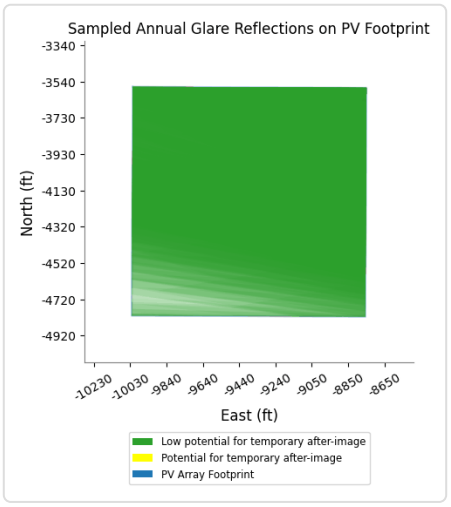
Green glare: 334 min.











PV25 and Route: Route01

No glare found

PC ORIGINAL PKG

PV25 and Route: Route02

No glare found

PV25 and Route: Route04

No glare found

PV25 and Route: Route05

No glare found

PV25 and Route: Route06

No glare found

PV25 and Route: Route07

No glare found

PV25 and Route: Route10

No glare found

PV25 and Route: Route11

No glare found

PV25 and FP: NJK08

No glare found

PV25 and FP: NJK12

No glare found

PV25 and FP: NJK26

No glare found

PV25 and FP: NJK30

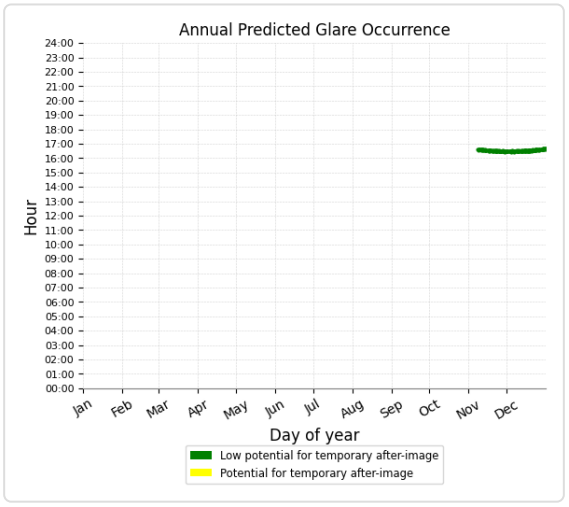
No glare found

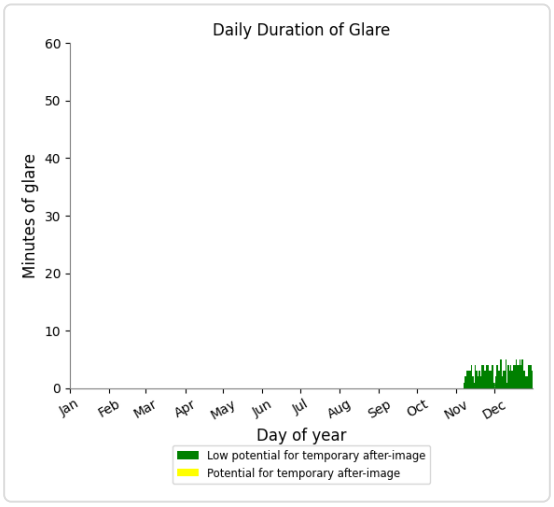
PC ORIGINAL PKG

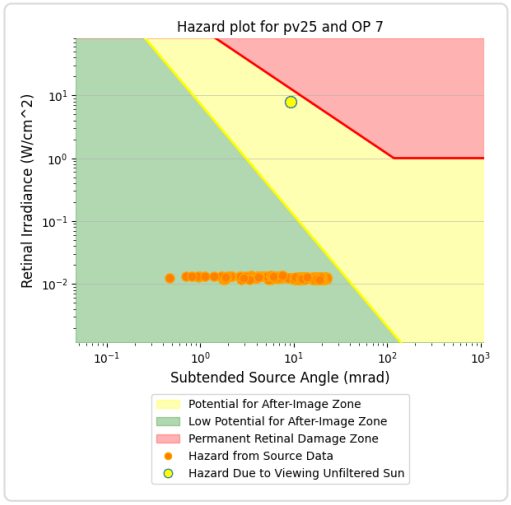
PV25 and OP 7

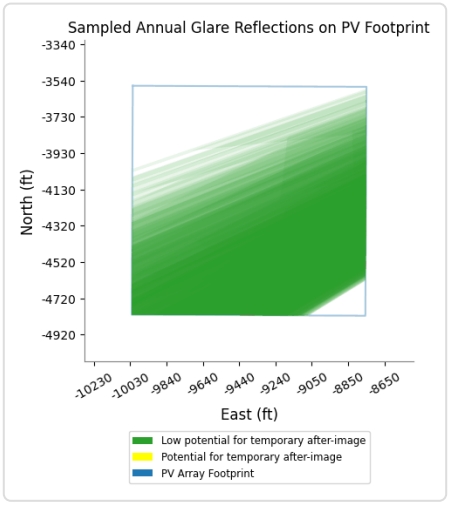
Yellow glare: none

Green glare: 178 min.





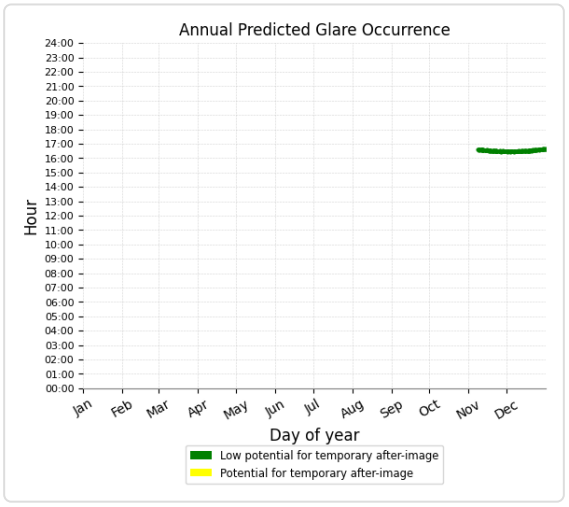


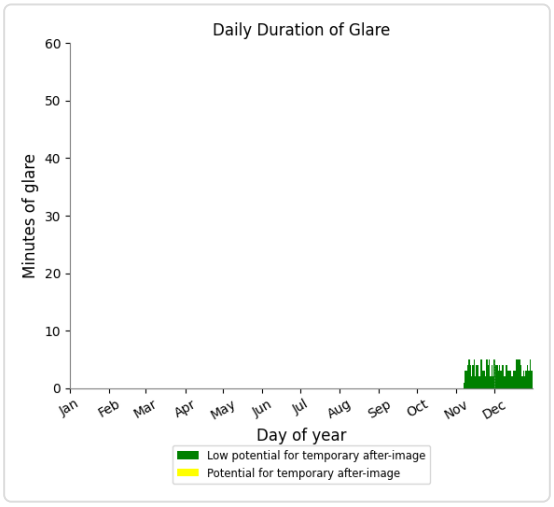


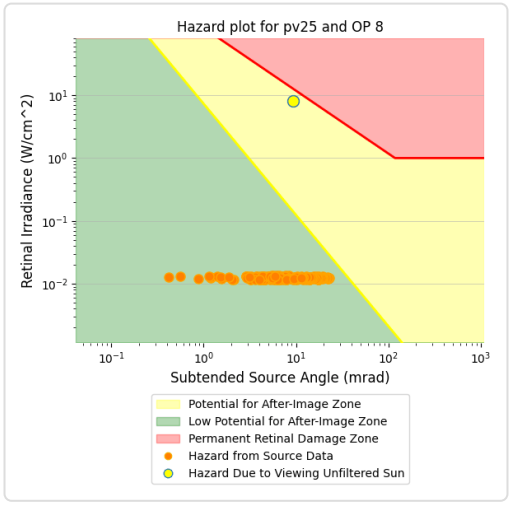
PV25 and OP 8

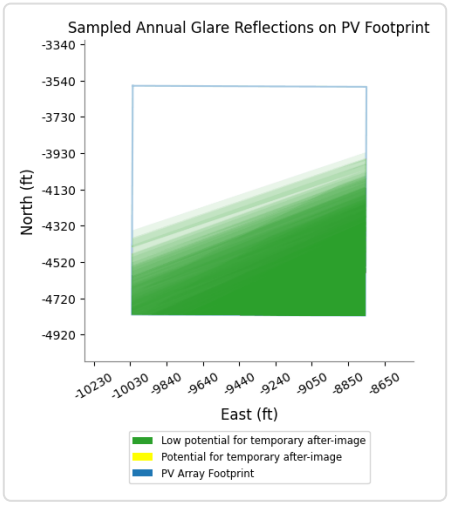
Yellow glare: none

Green glare: 193 min.





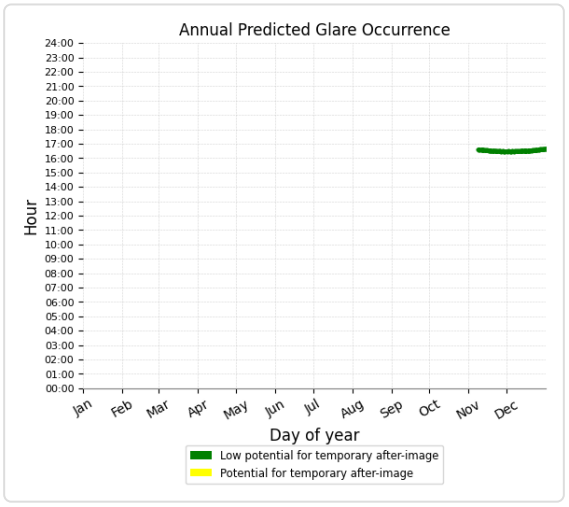


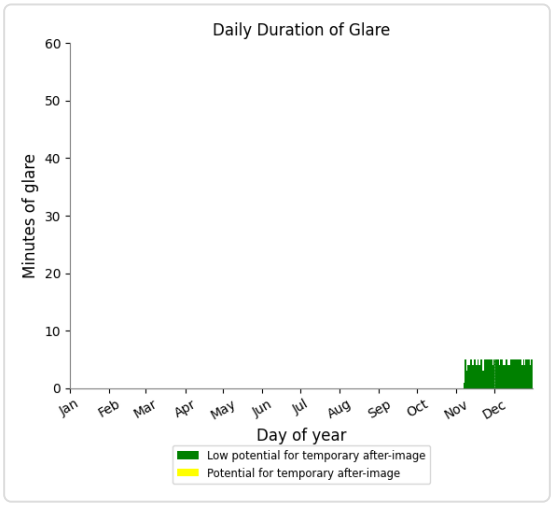


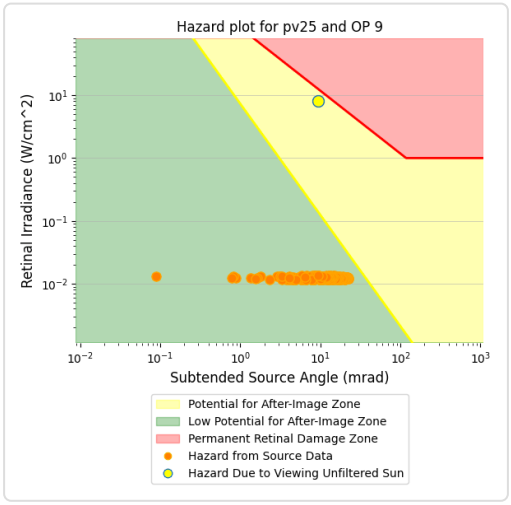
PV25 and OP 9

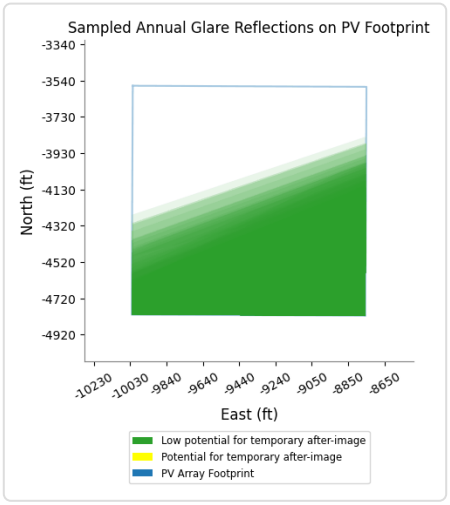
Yellow glare: none

Green glare: 253 min.



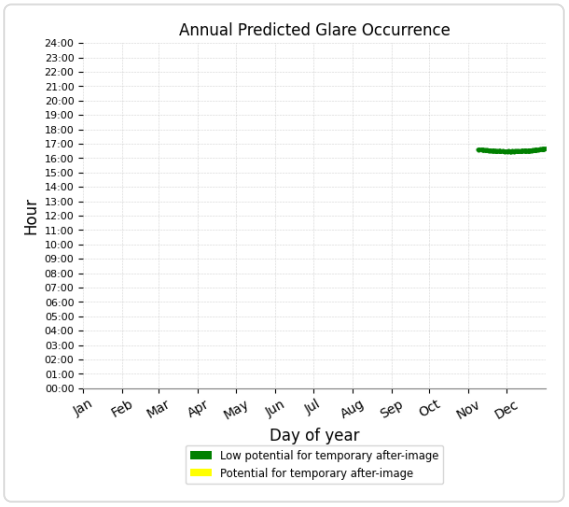


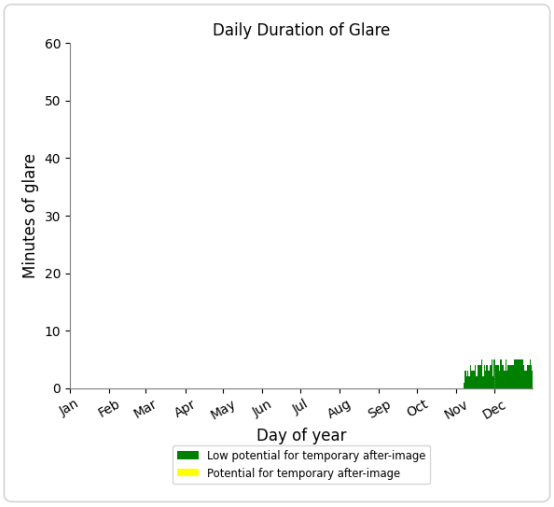


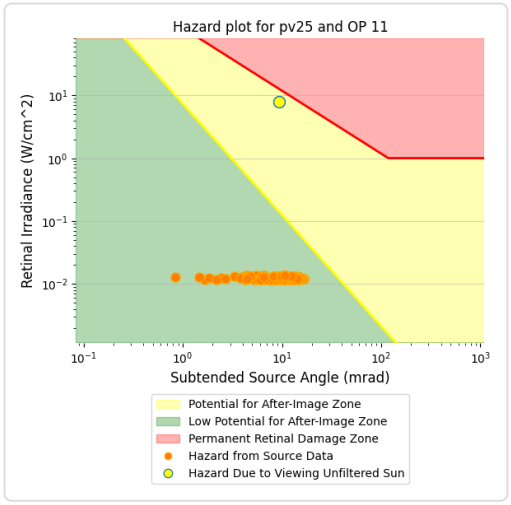


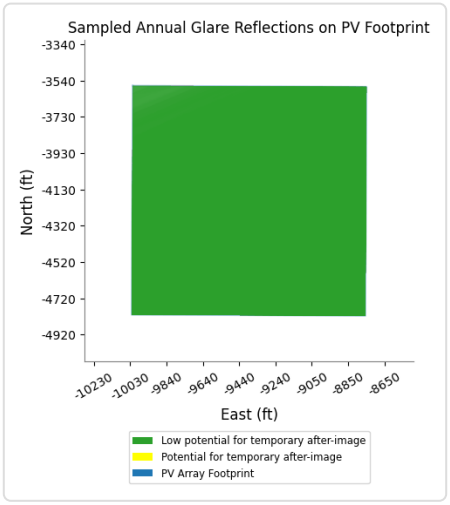
PV25 and OP 11

Yellow glare: none
Green glare: 206 min.









PV25 and OP 1

No glare found

PV25 and OP 2

No glare found

PV25 and OP 3

No glare found

PV25 and OP 4

No glare found

PV25 and OP 5

No glare found

PV25 and OP 6

No glare found

PV25 and OP 10

No glare found

PV25 and OP 12

No glare found

PV25 and OP 13

No glare found

PV25 and OP 14

No glare found

PV25 and OP 15

No glare found

PV25 and OP 16

No glare found

PV25 and OP 17

No glare found

PV25 and OP 18

No glare found

PV25 and OP 19

No glare found

PV25 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV26 low potential for temporary after-image

Receptor results ordered by category of glare

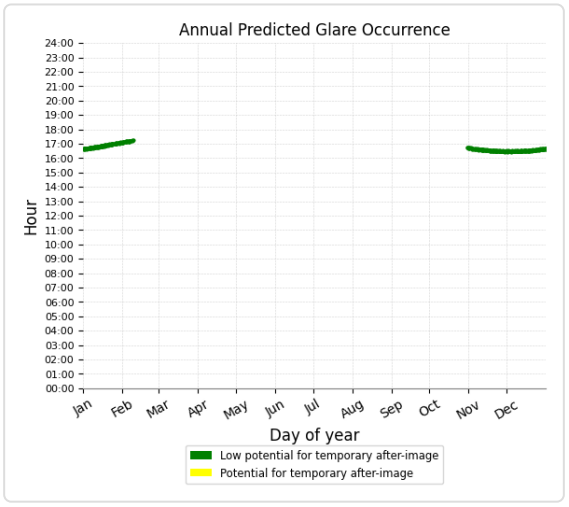
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	410	6.8	0	0.0
Route12	84	1.4	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 8	190	3.2	0	0.0
OP 9	185	3.1	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

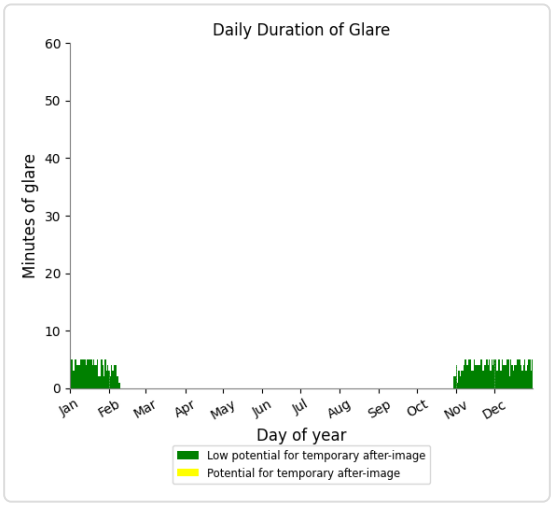
PC ORIGINAL PKG

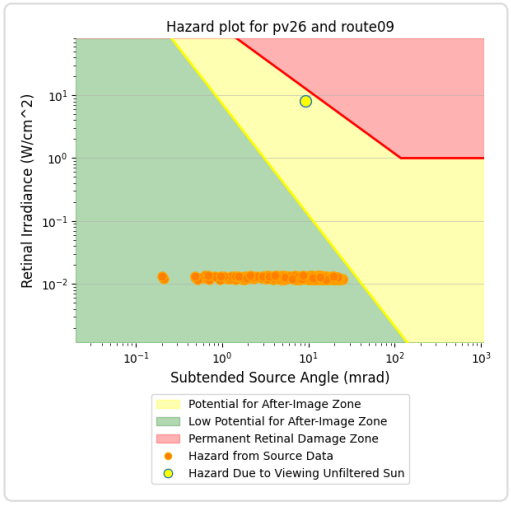
PV26 and Route: Route09

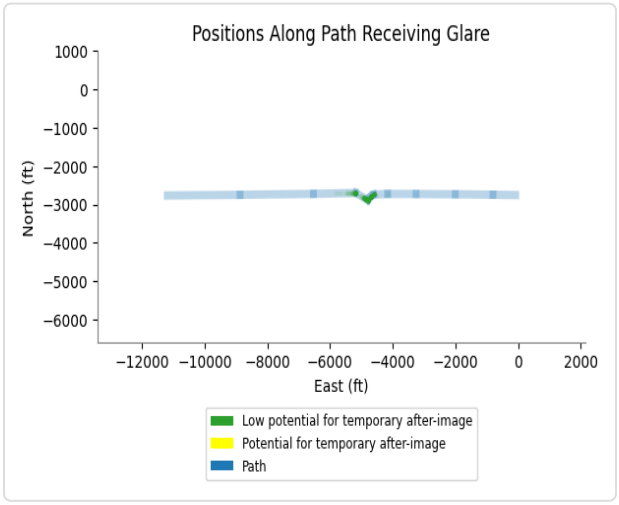
Yellow glare: none

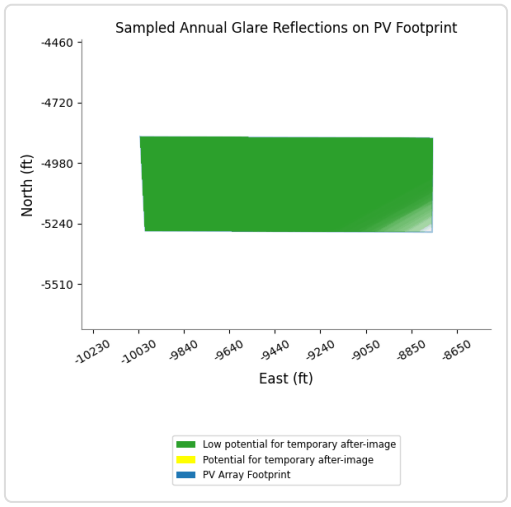
Green glare: 410 min.







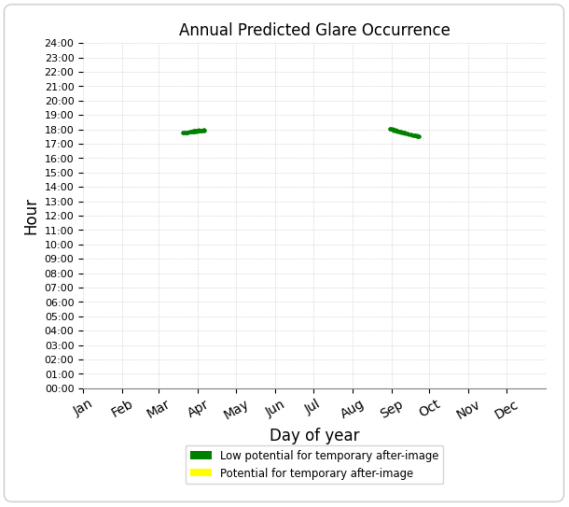


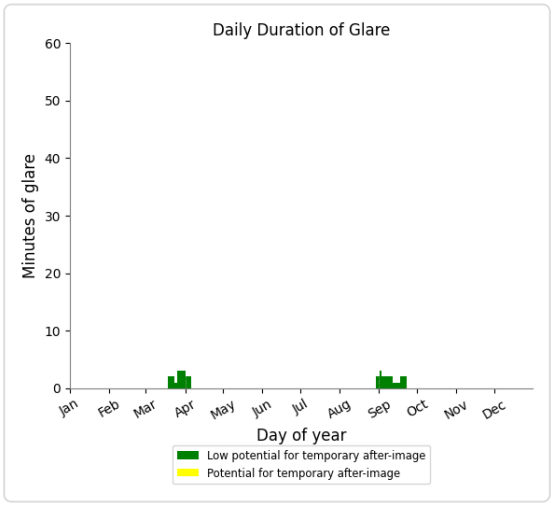


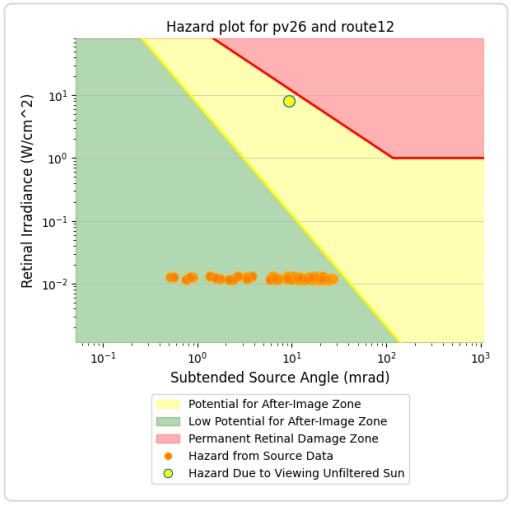
PV26 and Route: Route12

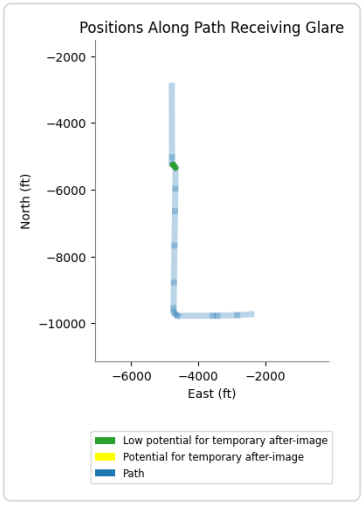
Yellow glare: none

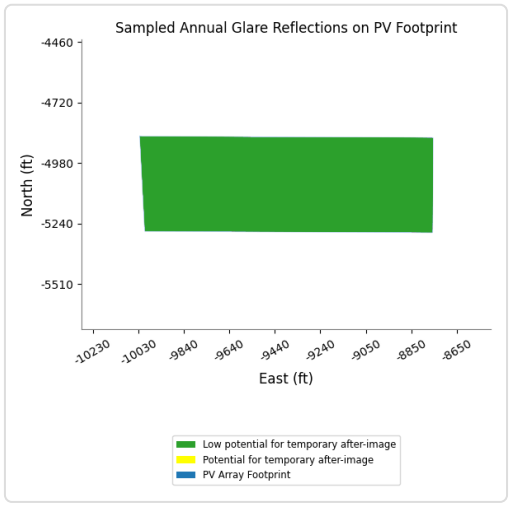
Green glare: 84 min.











PV26 and Route: Route01

No glare found

PC ORIGINAL PKG

PV26 and Route: Route02

No glare found

PV26 and Route: Route04

No glare found

PV26 and Route: Route05

No glare found

PV26 and Route: Route06

No glare found

PV26 and Route: Route07

No glare found

PV26 and Route: Route08

No glare found

PV26 and Route: Route10

No glare found

PV26 and Route: Route11

No glare found

PV26 and FP: NJK08

No glare found

PV26 and FP: NJK12

No glare found

PV26 and FP: NJK26

No glare found

PV26 and FP: NJK30

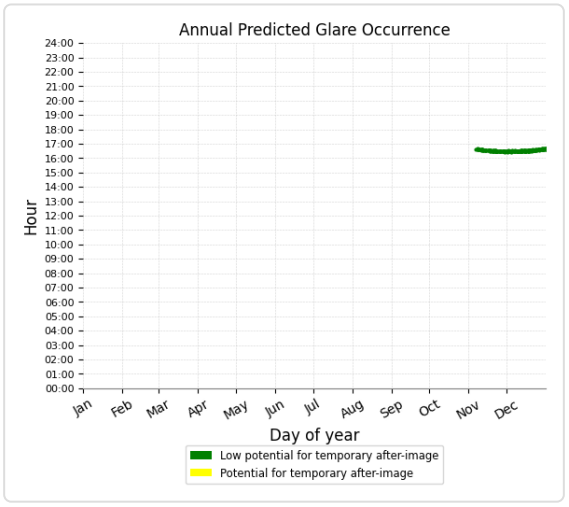
No glare found

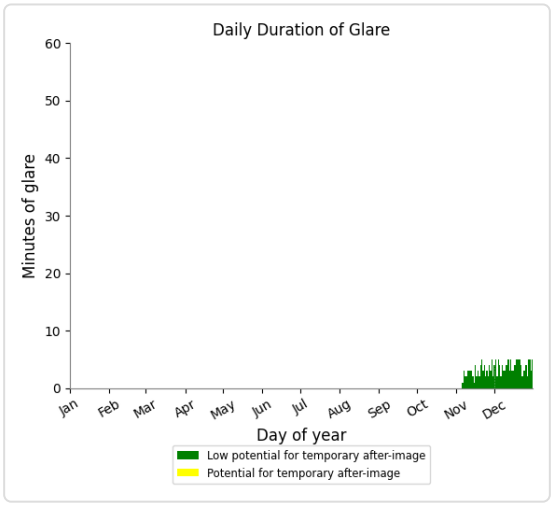
PC ORIGINAL PKG

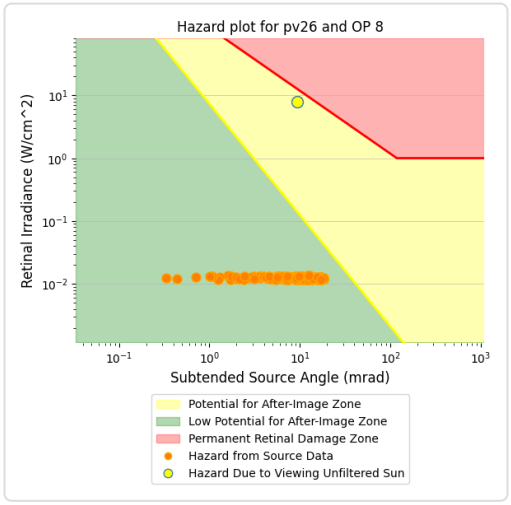
PV26 and OP 8

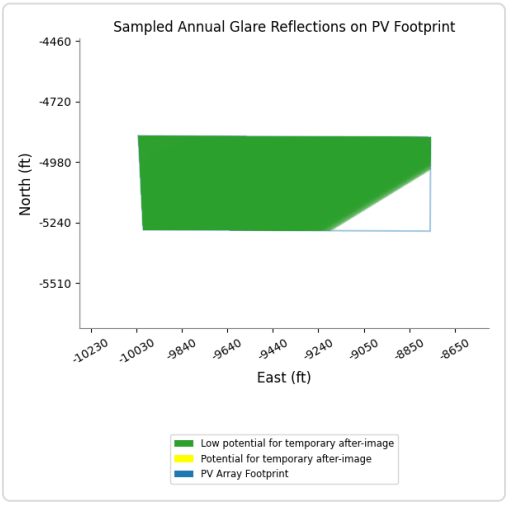
Yellow glare: none

Green glare: 190 min.



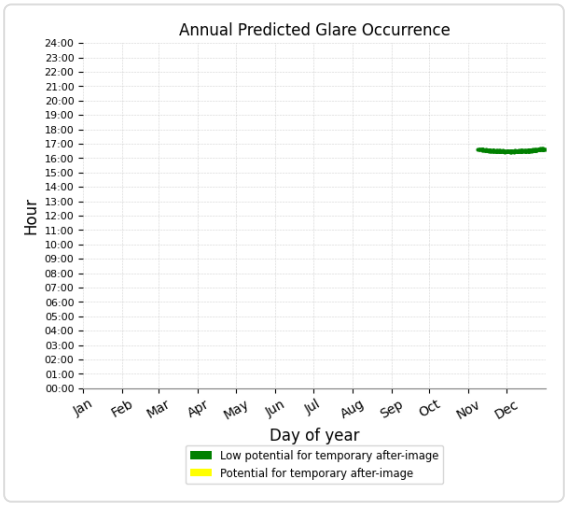


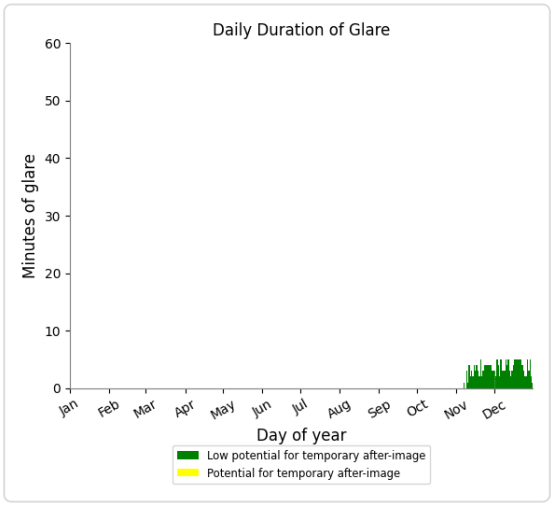


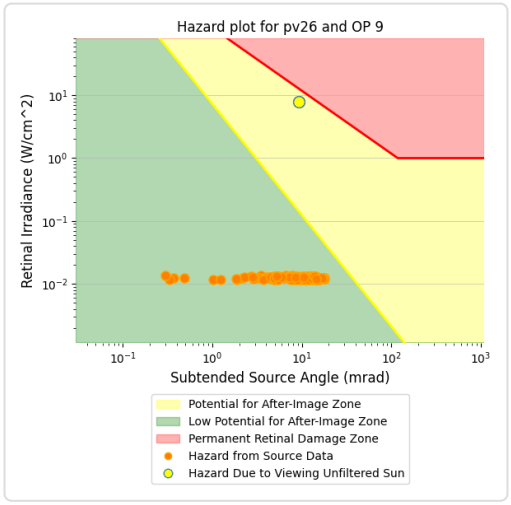


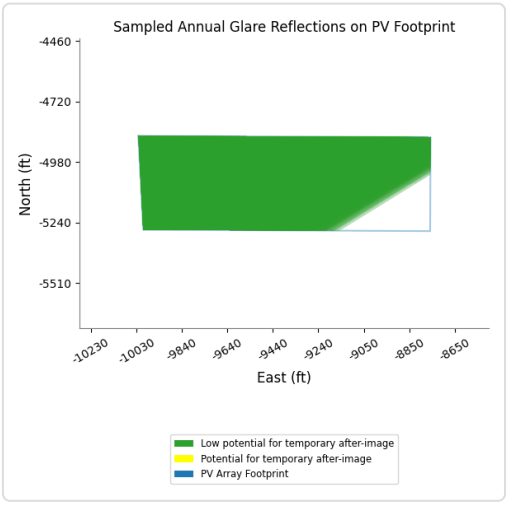
PV26 and OP 9

Yellow glare: none
Green glare: 185 min.









PV26 and OP 1

No glare found

PV26 and OP 2

No glare found

PV26 and OP 3

No glare found

PV26 and OP 4

No glare found

PV26 and OP 5

No glare found

PV26 and OP 6

No glare found

PV26 and OP 7

No glare found

PV26 and OP 10

No glare found

PV26 and OP 11

No glare found

PV26 and OP 12

No glare found

PV26 and OP 13

No glare found

PV26 and OP 14

No glare found

PV26 and OP 15

No glare found

PV26 and OP 16

No glare found

PV26 and OP 17

No glare found

PV26 and OP 18

No glare found

PV26 and OP 19

No glare found

PV26 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV27 potential temporary after-image

Receptor results ordered by category of glare

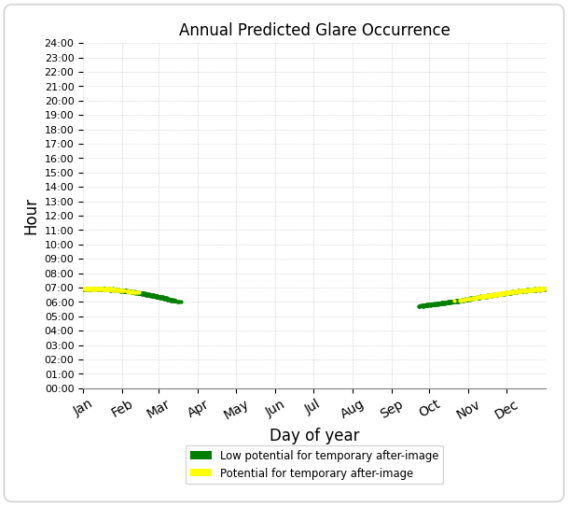
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	489	8.2	328	5.5
Route05	245	4.1	0	0.0
Route06	56	0.9	0	0.0
Route08	288	4.8	0	0.0
Route11	486	8.1	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	107	1.8	0	0.0
OP 7	28	0.5	0	0.0
OP 8	53	0.9	0	0.0
OP 9	22	0.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

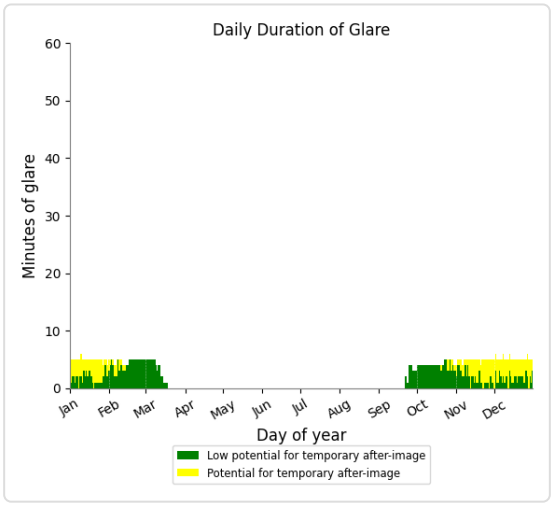
PC ORIGINAL PKG

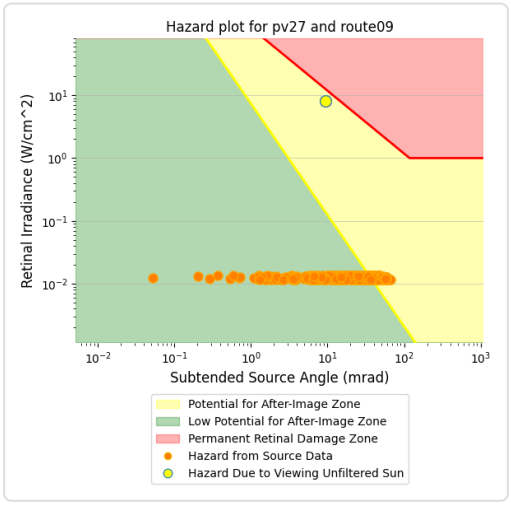
PV27 and Route: Route09

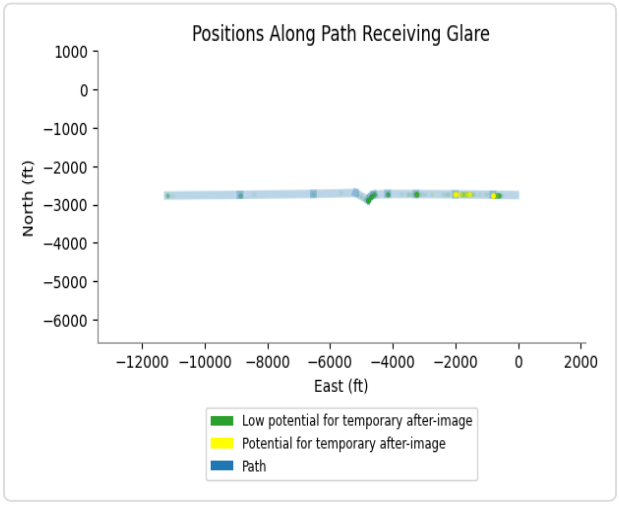
Yellow glare: 328 min.

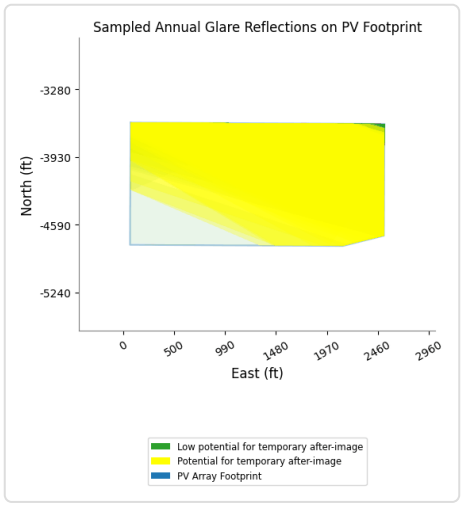
Green glare: 489 min.







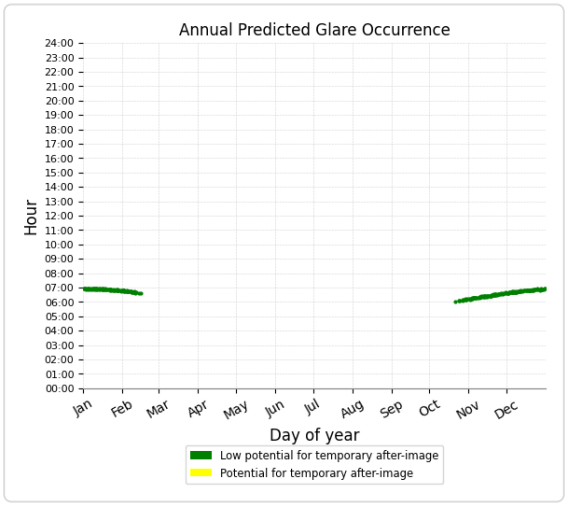


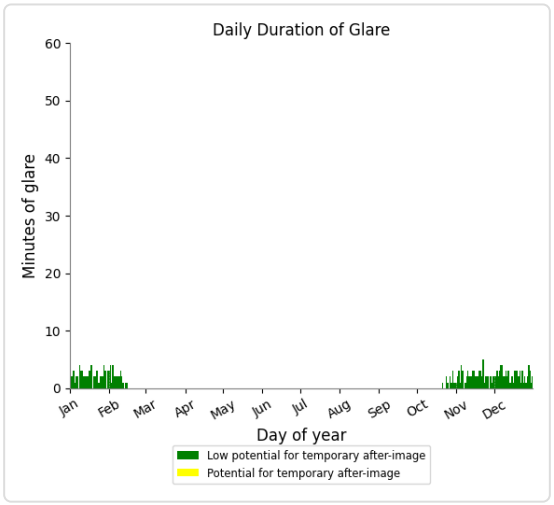


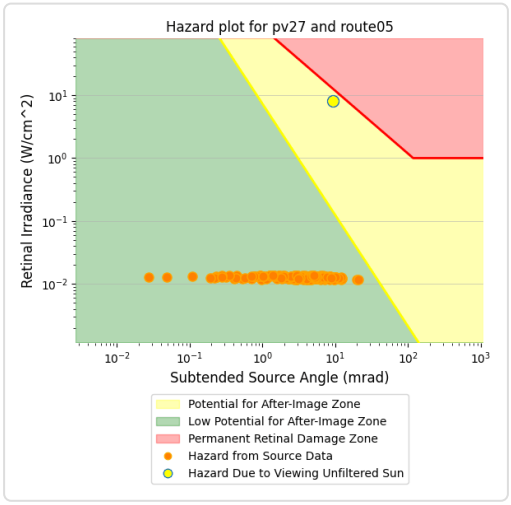
PV27 and Route: Route05

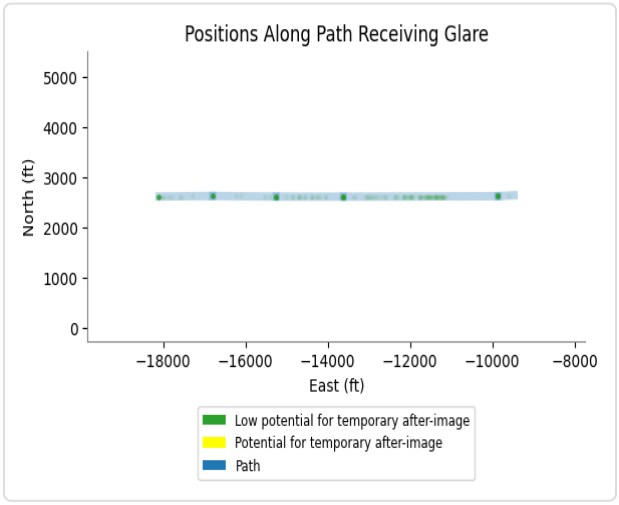
Yellow glare: none

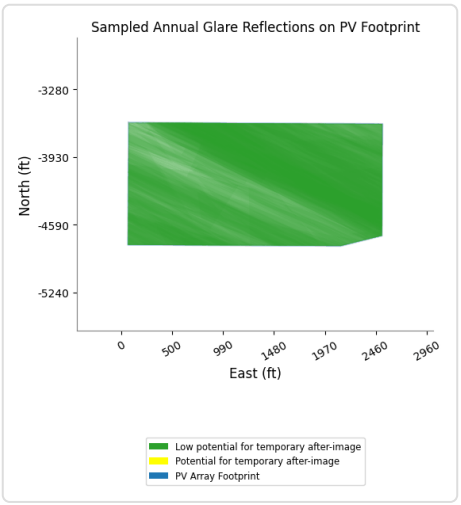
Green glare: 245 min.







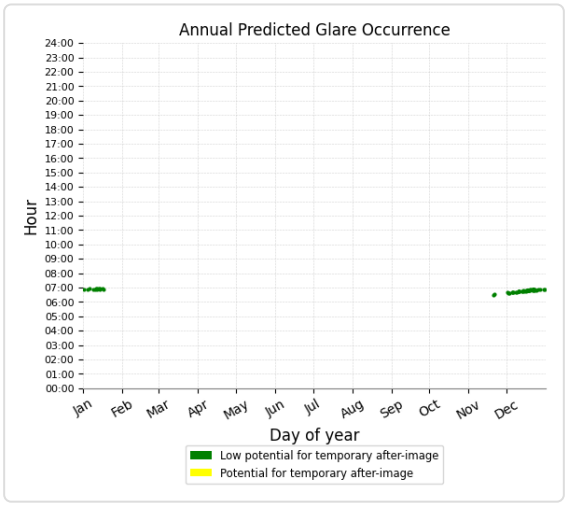


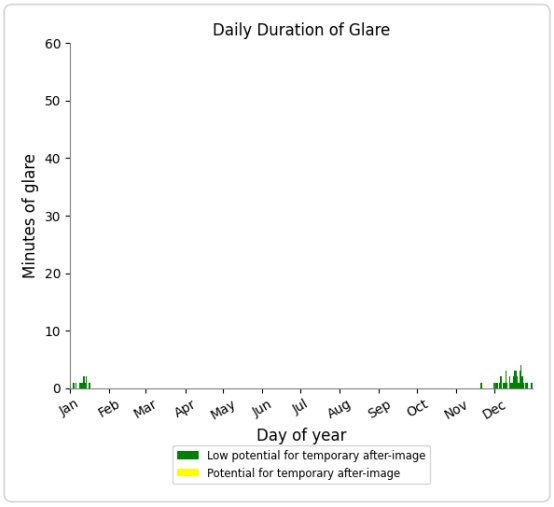


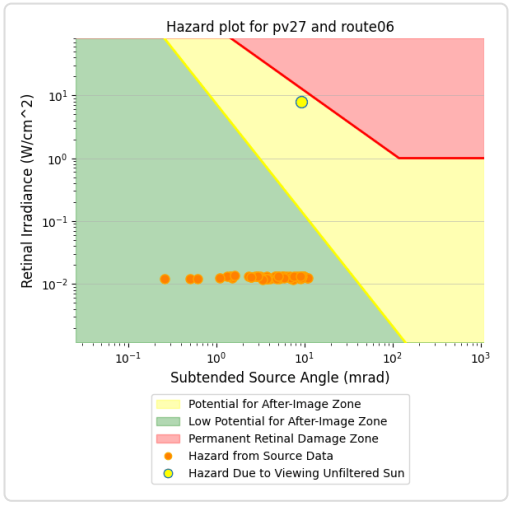
PV27 and Route: Route06

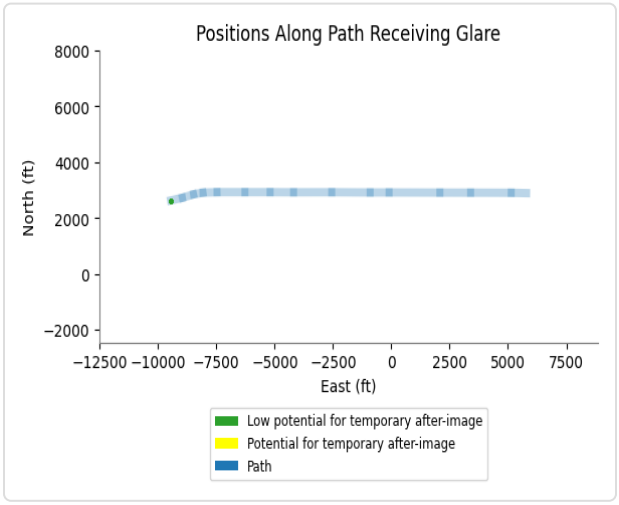
Yellow glare: none

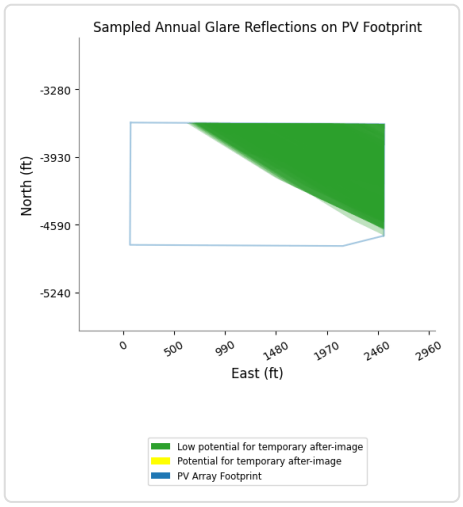
Green glare: 56 min.







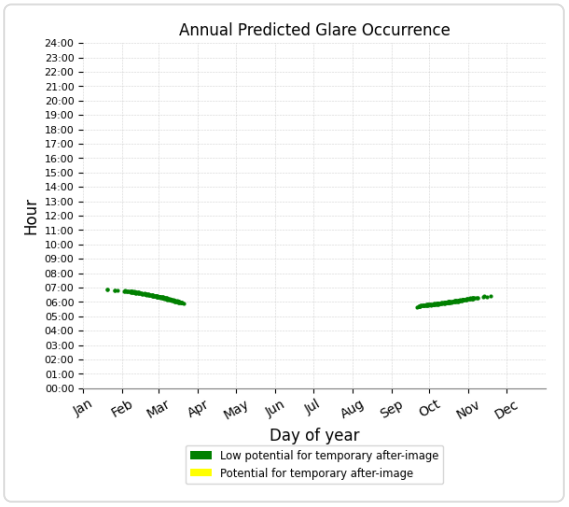


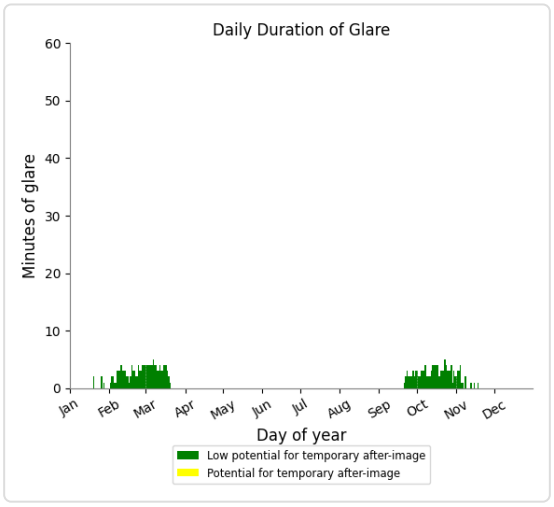


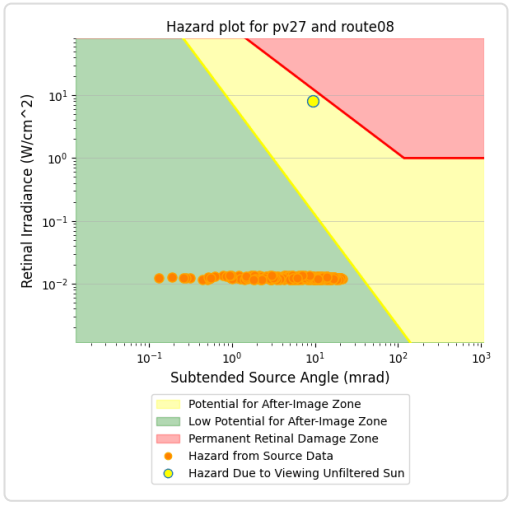
PV27 and Route: Route08

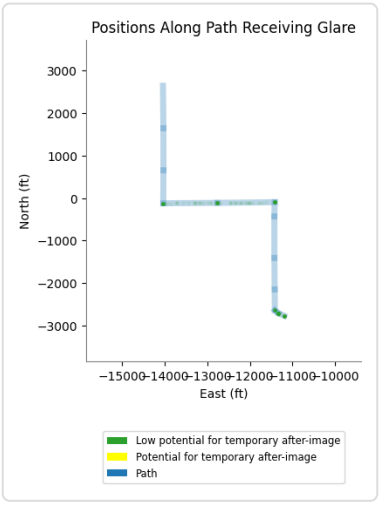
Yellow glare: none

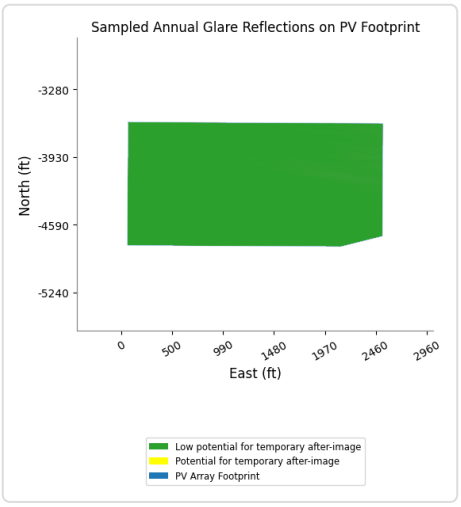
Green glare: 288 min.







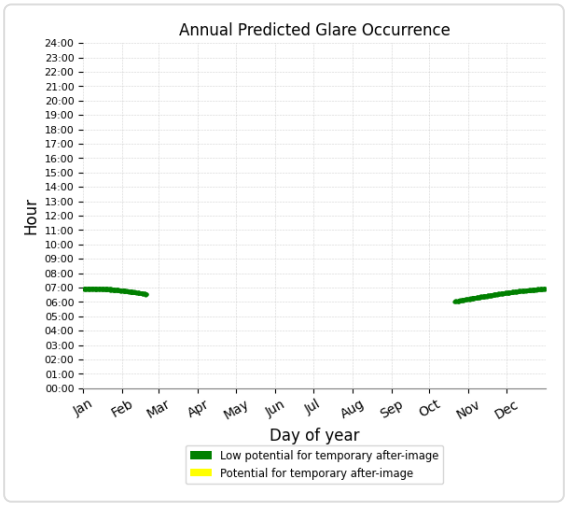


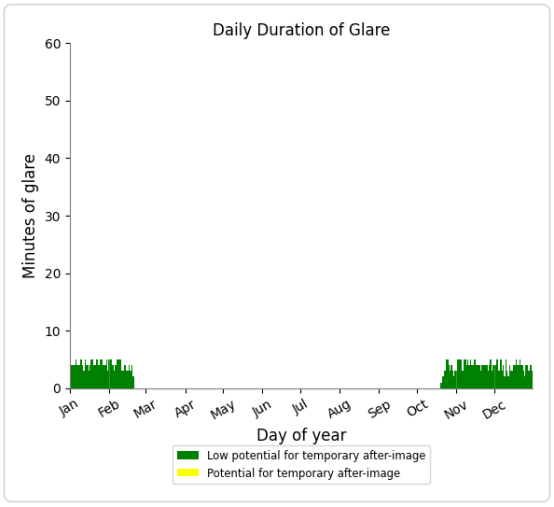


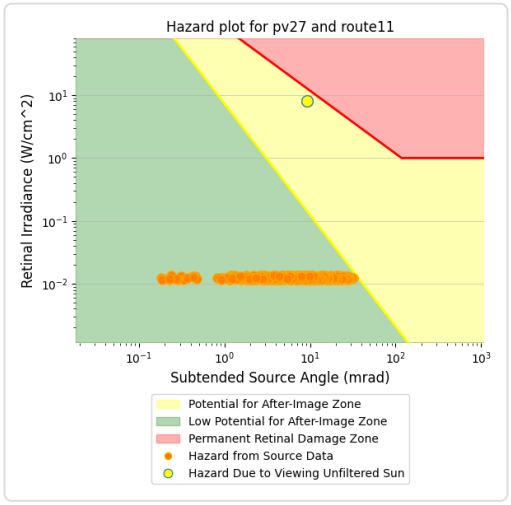
PV27 and Route: Route11

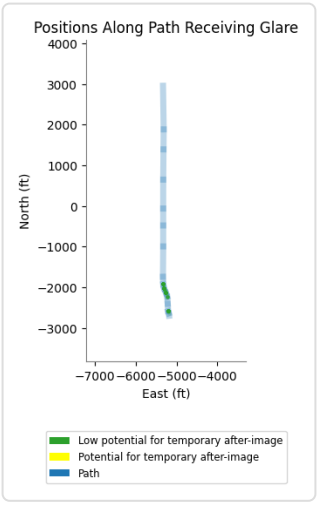
Yellow glare: none

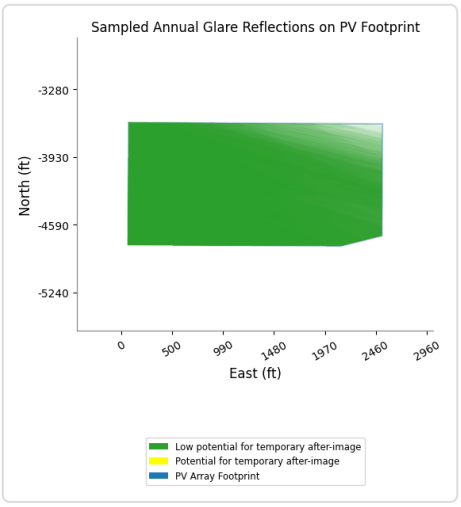
Green glare: 486 min.











PV27 and Route: Route01

No glare found

PC ORIGINAL PKG

PV27 and Route: Route02

No glare found

PV27 and Route: Route04

No glare found

PV27 and Route: Route07

No glare found

PV27 and Route: Route10

No glare found

PV27 and Route: Route12

No glare found

PV27 and FP: NJK08

No glare found

PV27 and FP: NJK12

No glare found

PV27 and FP: NJK26

No glare found

PV27 and FP: NJK30

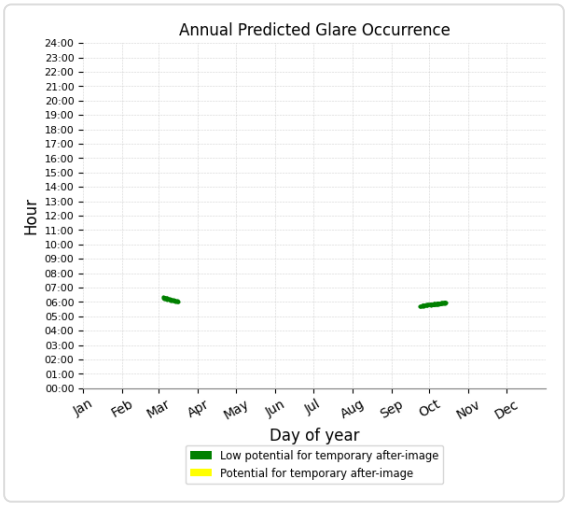
No glare found

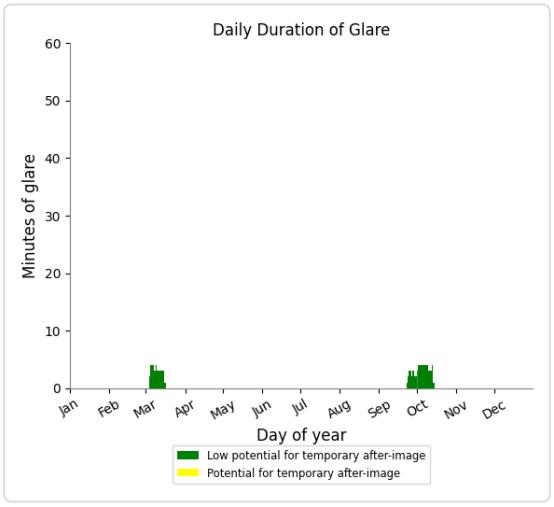
PC ORIGINAL PKG

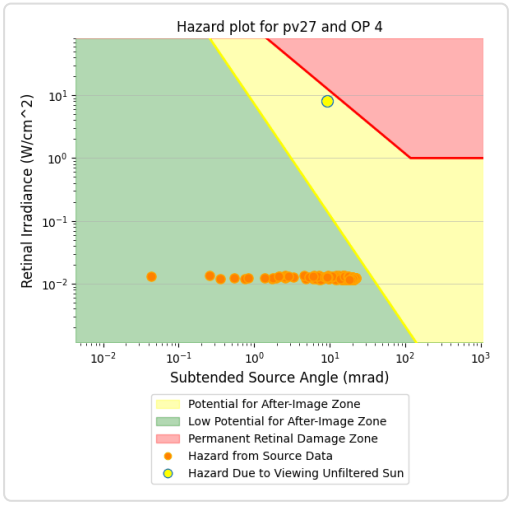
PV27 and OP 4

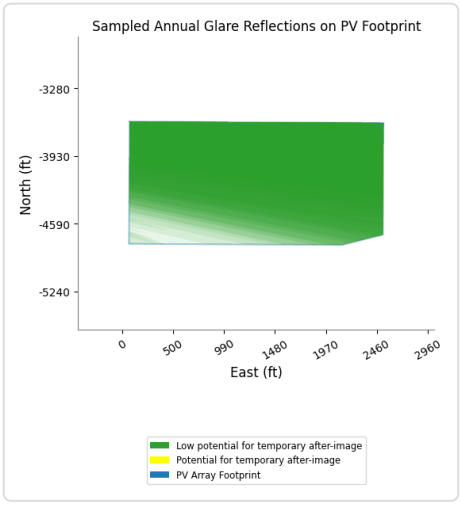
Yellow glare: none

Green glare: 107 min.





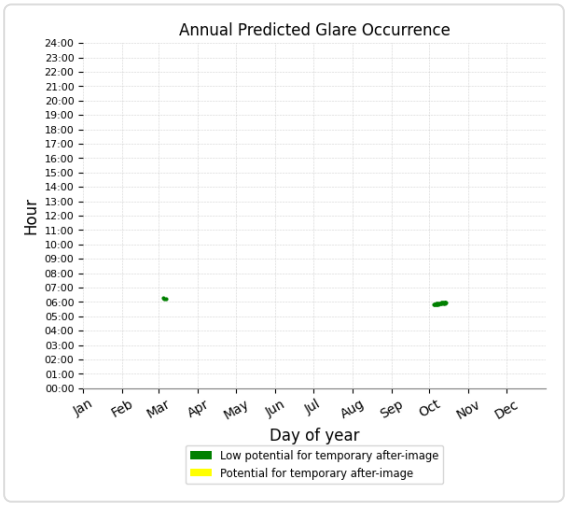


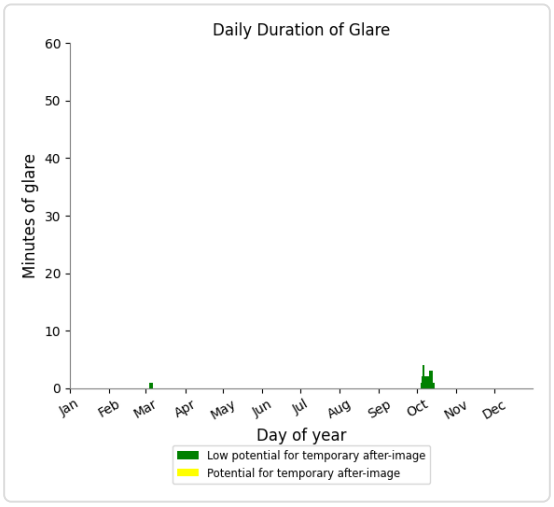


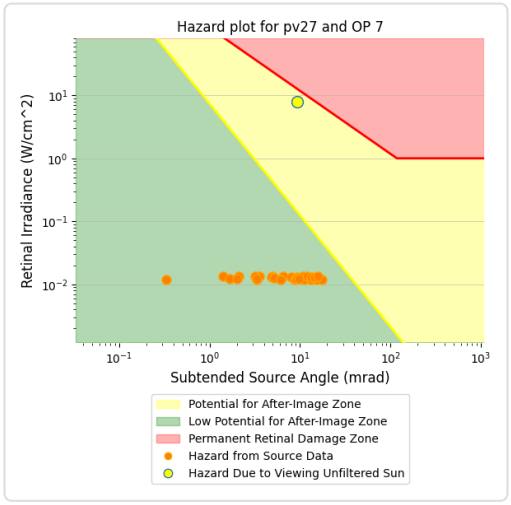
PV27 and OP 7

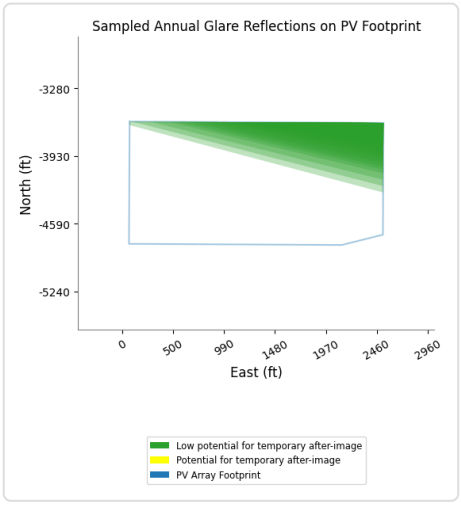
Yellow glare: none

Green glare: 28 min.





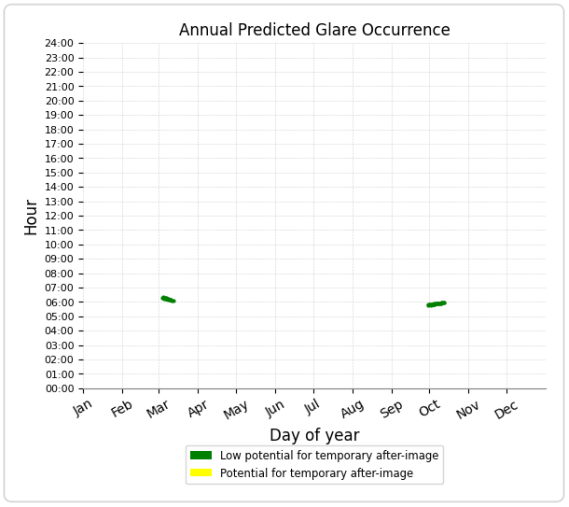


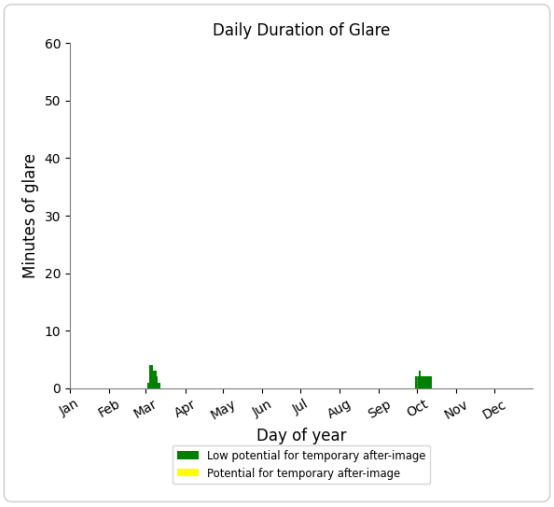


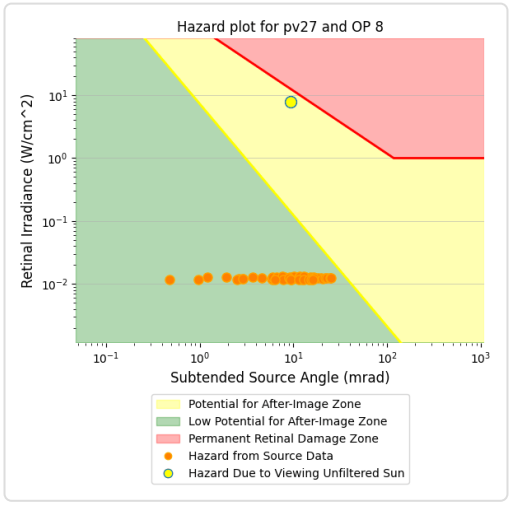
PV27 and OP 8

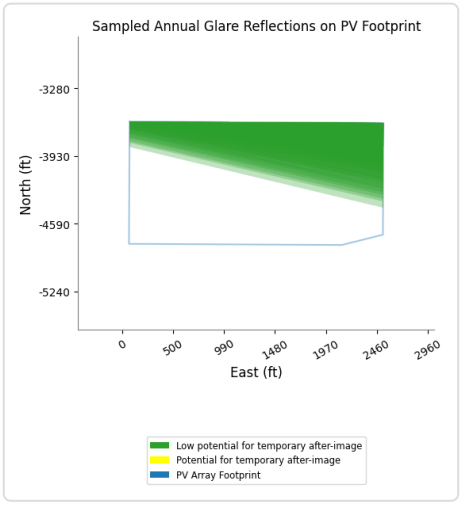
Yellow glare: none

Green glare: 53 min.



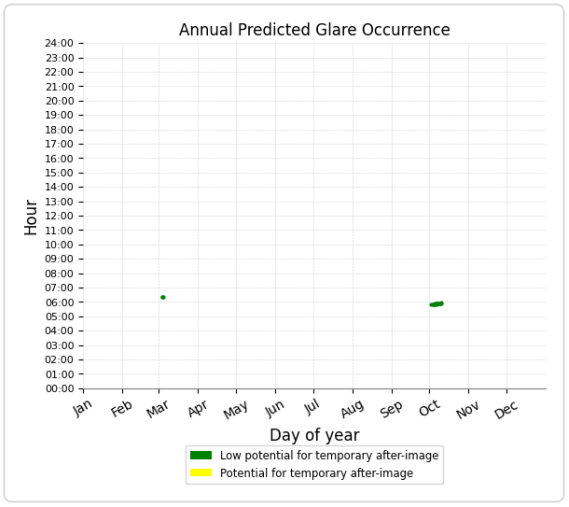


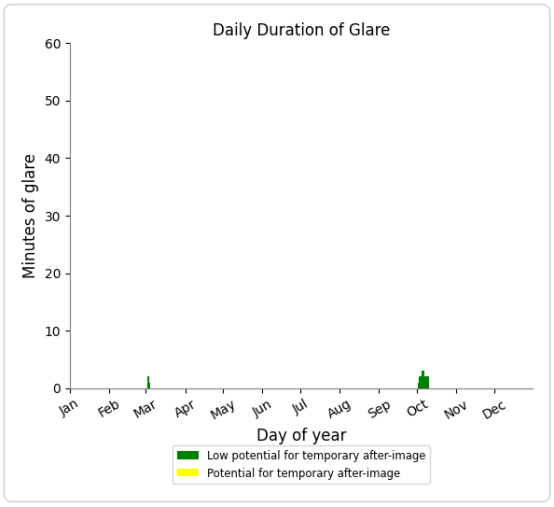


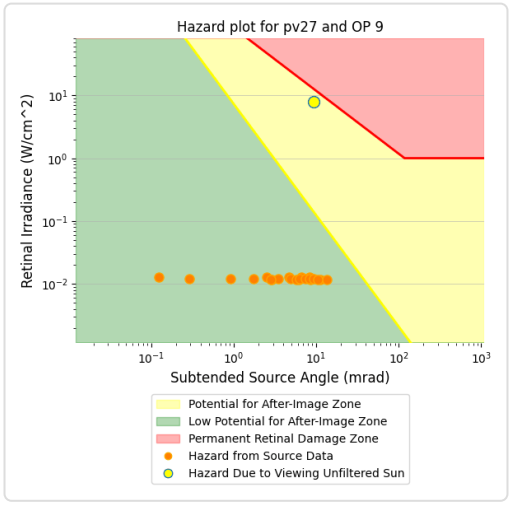


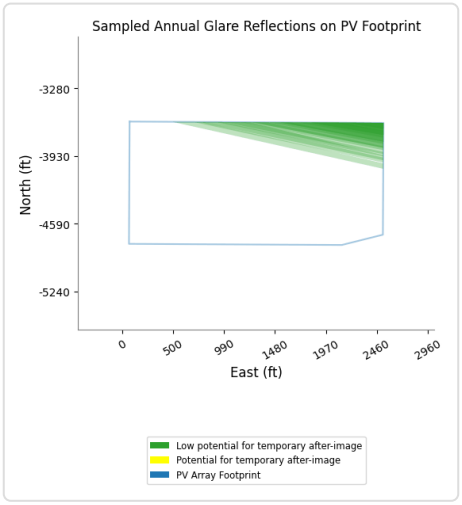
PV27 and OP 9

Yellow glare: none
Green glare: 22 min.









PV27 and OP 1

No glare found

PV27 and OP 2

No glare found

PV27 and OP 3

No glare found

PV27 and OP 5

No glare found

PV27 and OP 6

No glare found

PV27 and OP 10

No glare found

PV27 and OP 11

No glare found

PV27 and OP 12

No glare found

PV27 and OP 13

No glare found

PV27 and OP 14

No glare found

PV27 and OP 15

No glare found

PV27 and OP 16

No glare found

PV27 and OP 17

No glare found

PV27 and OP 18

No glare found

PV27 and OP 19

No glare found

PV27 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV28 potential temporary after-image

Receptor results ordered by category of glare

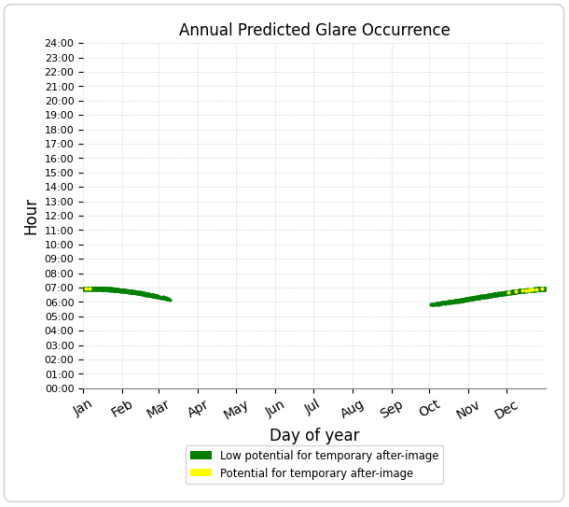
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	685	11.4	12	0.2
Route05	346	5.8	0	0.0
Route08	459	7.7	0	0.0
Route11	490	8.2	0	0.0
Route12	165	2.8	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route10	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 4	48	0.8	0	0.0
OP 5	62	1.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

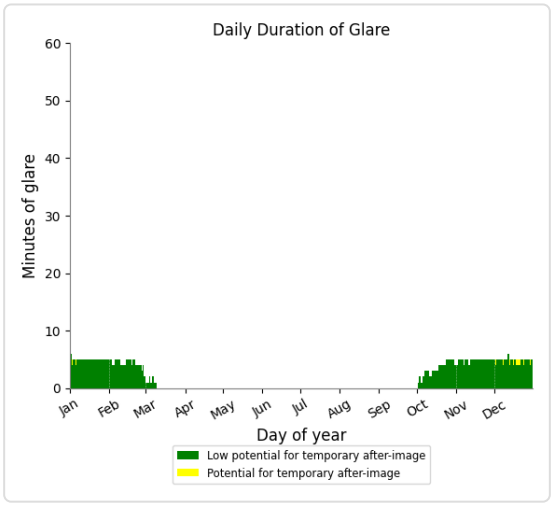
PC ORIGINAL PKG

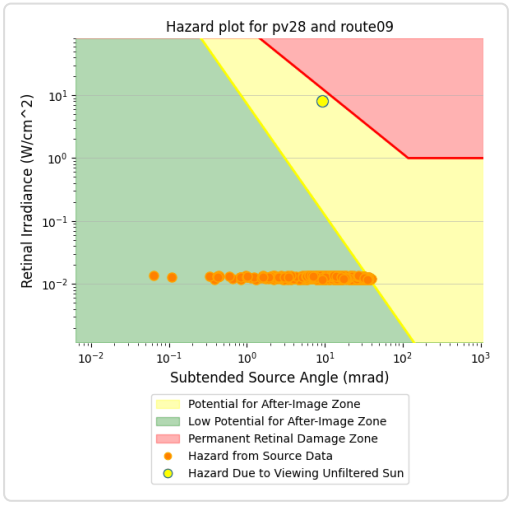
PV28 and Route: Route09

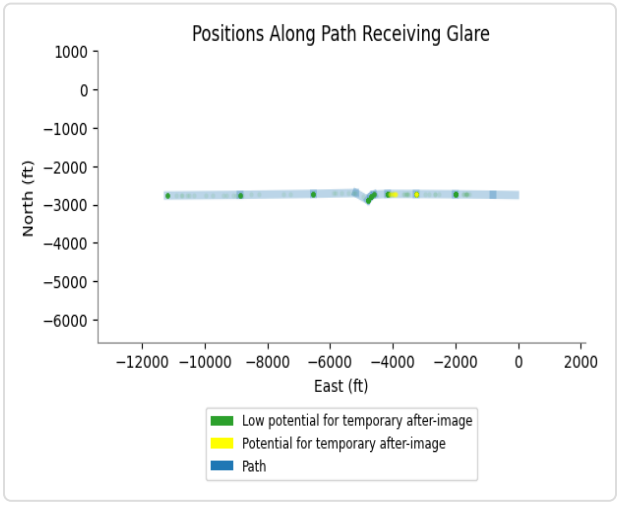
Yellow glare: 12 min.

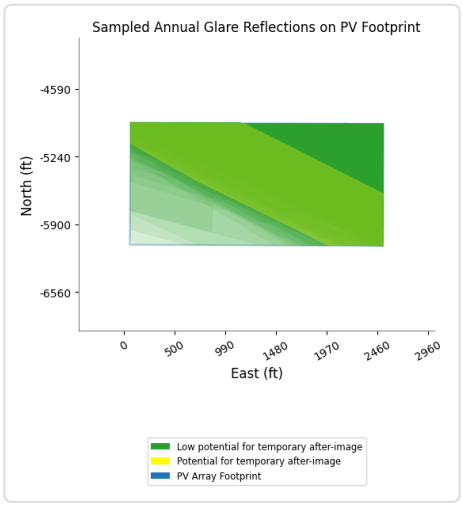
Green glare: 685 min.







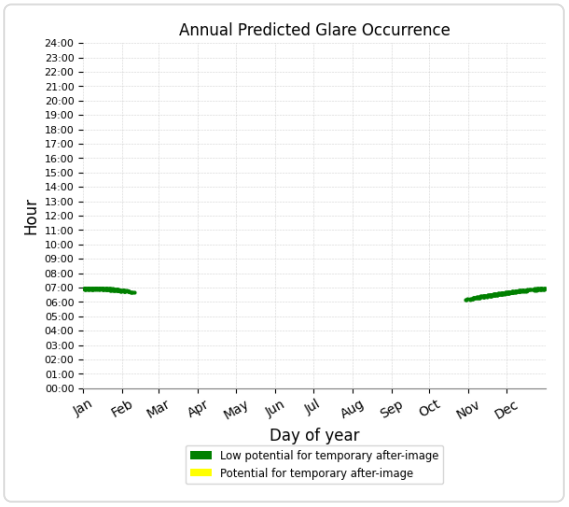


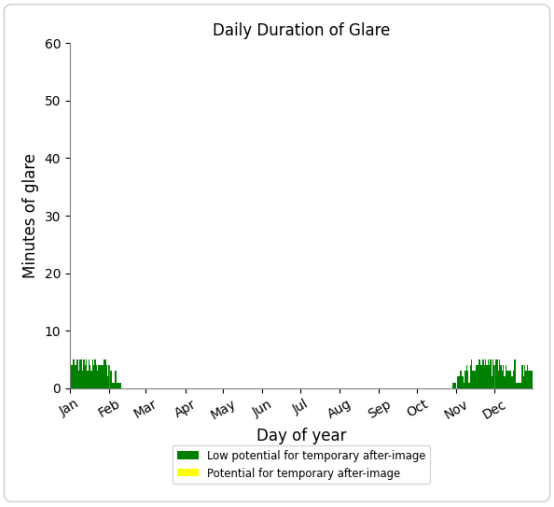


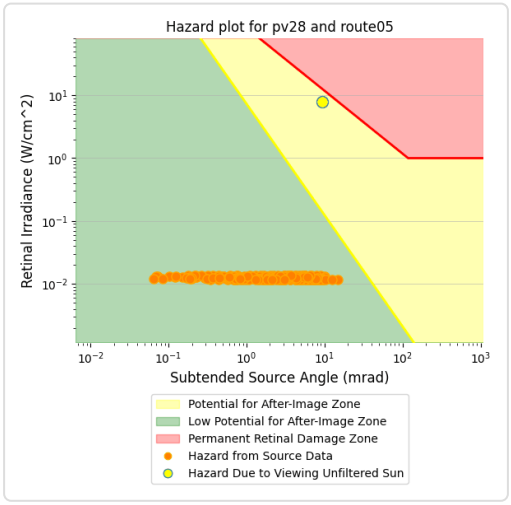
PV28 and Route: Route05

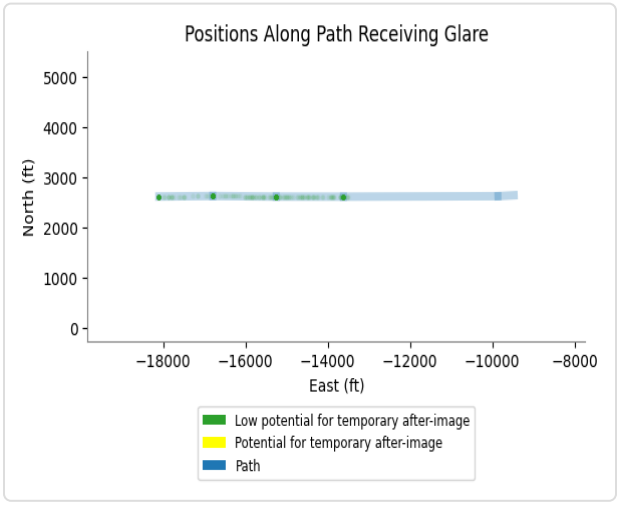
Yellow glare: none

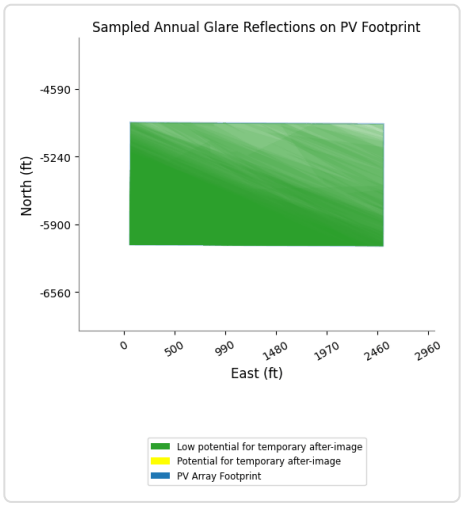
Green glare: 346 min.









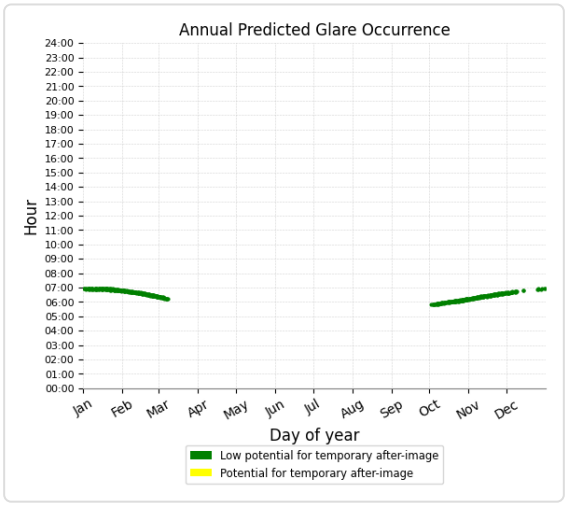


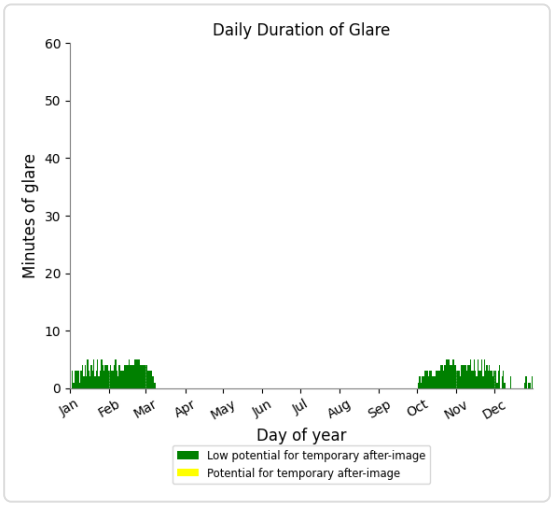
PC ORIGINAL PKG

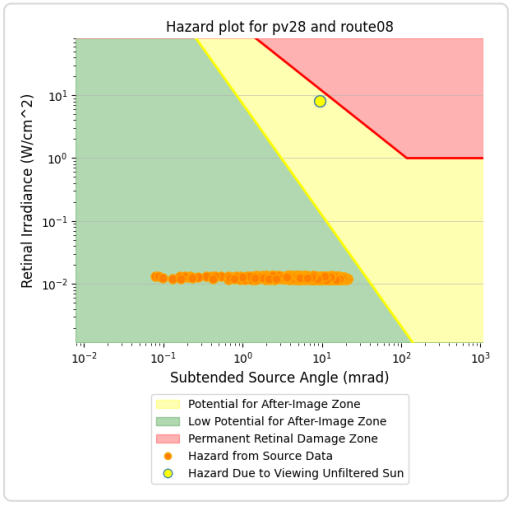
PV28 and Route: Route08

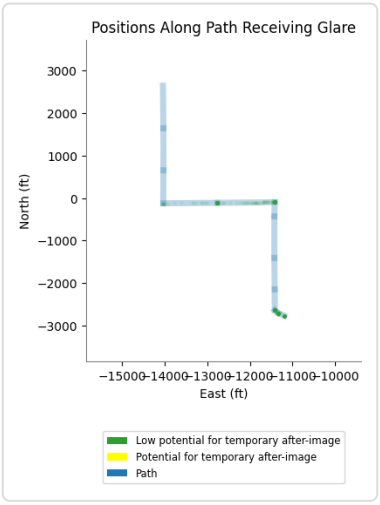
Yellow glare: none

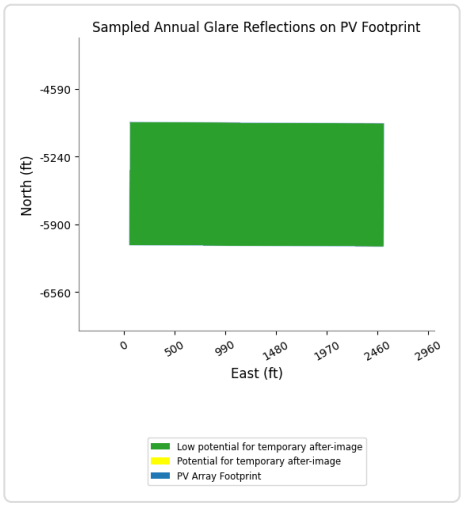
Green glare: 459 min.







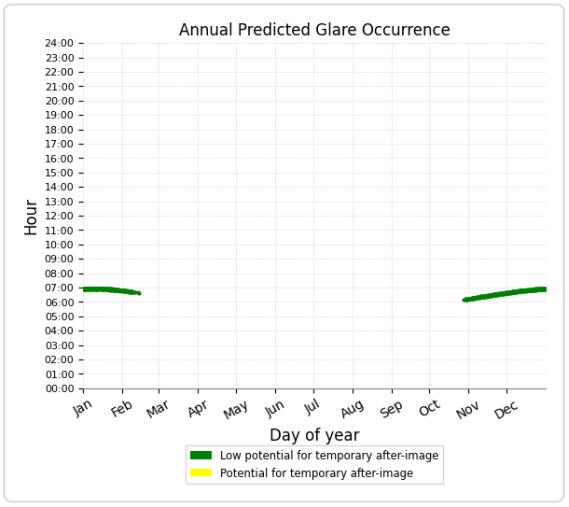


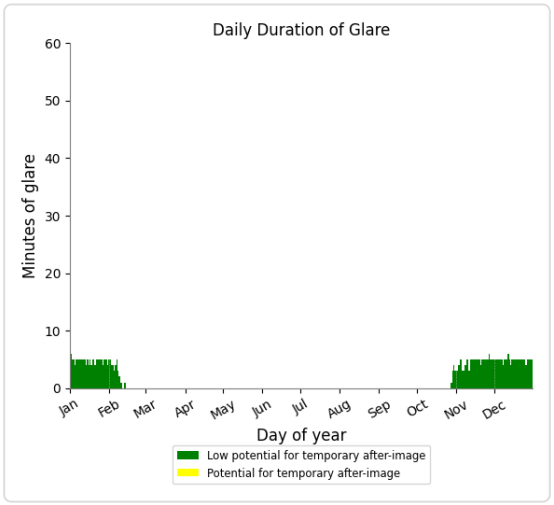


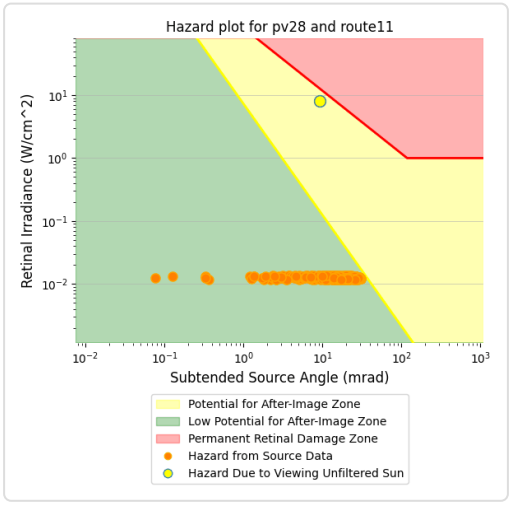
PV28 and Route: Route11

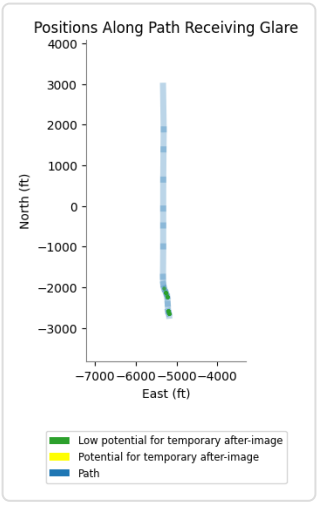
Yellow glare: none

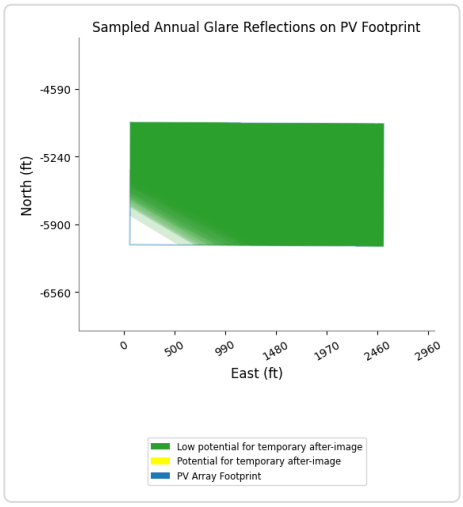
Green glare: 490 min.







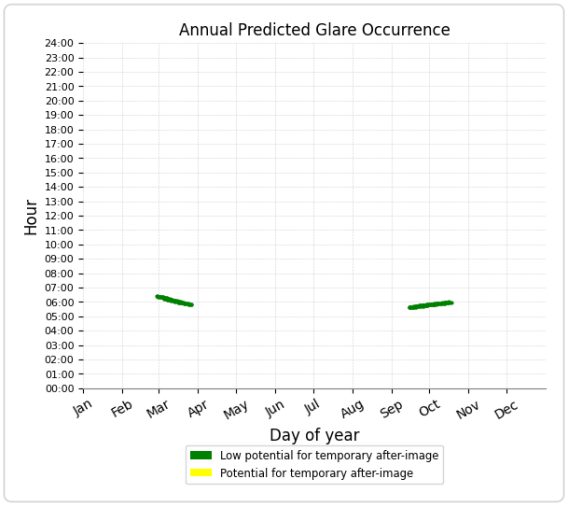


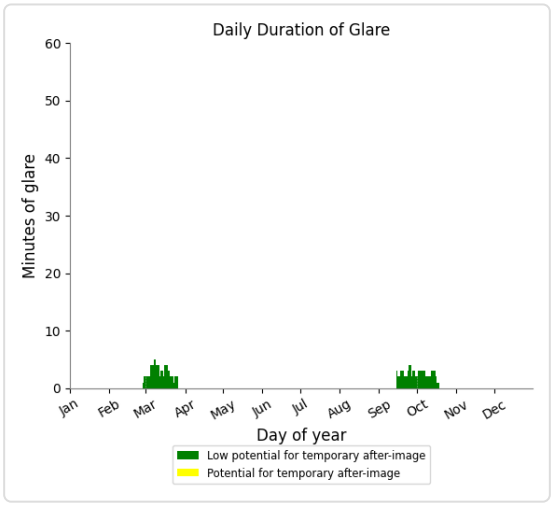


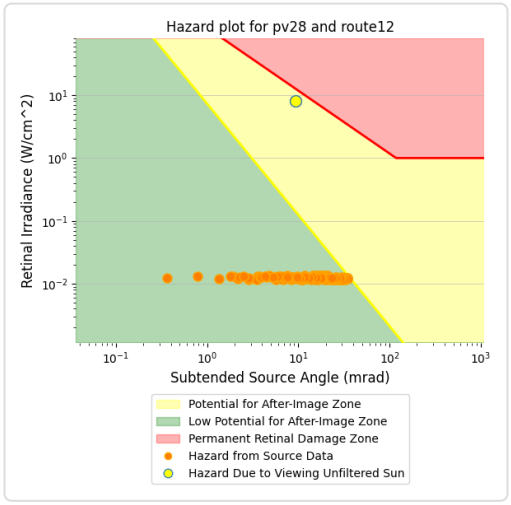
PV28 and Route: Route12

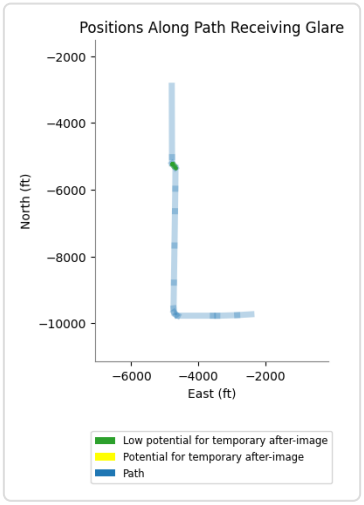
Yellow glare: none

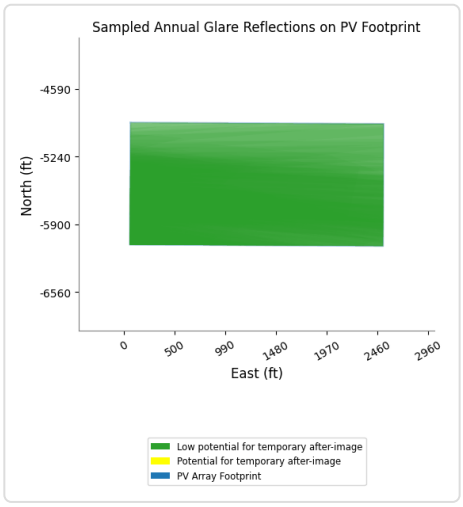
Green glare: 165 min.











PV28 and Route: Route01

No glare found

PV28 and Route: Route02

No glare found

PV28 and Route: Route04

No glare found

PV28 and Route: Route06

No glare found

PV28 and Route: Route07

No glare found

PV28 and Route: Route10

No glare found

PV28 and FP: NJK08

No glare found

PV28 and FP: NJK12

No glare found

PV28 and FP: NJK26

No glare found

PV28 and FP: NJK30

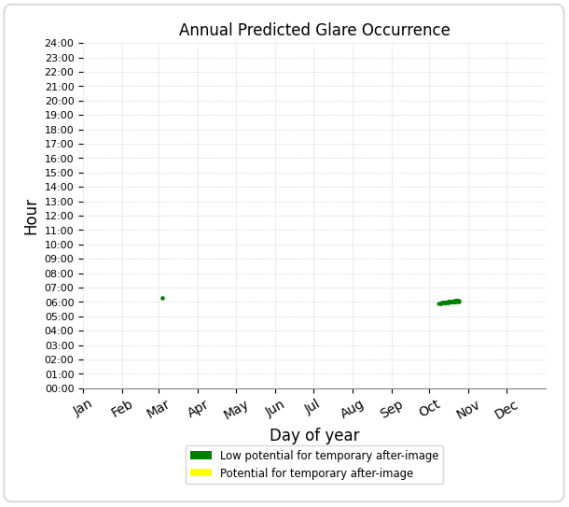
No glare found

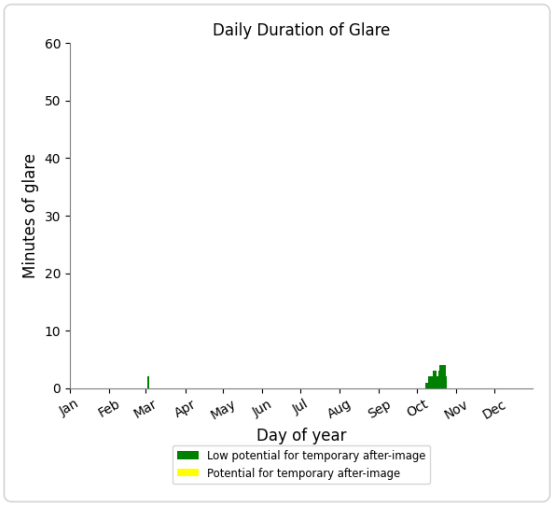
PC ORIGINAL PKG

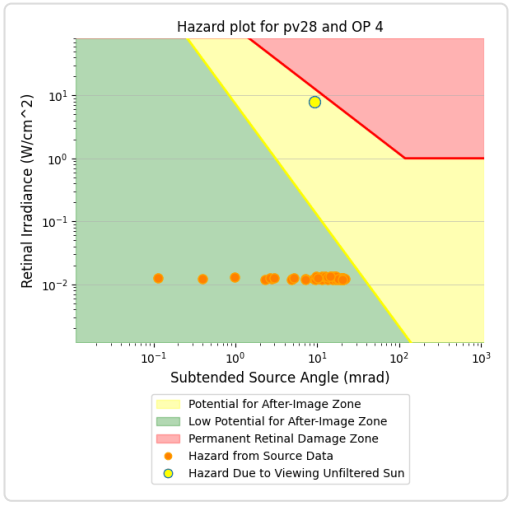
PV28 and OP 4

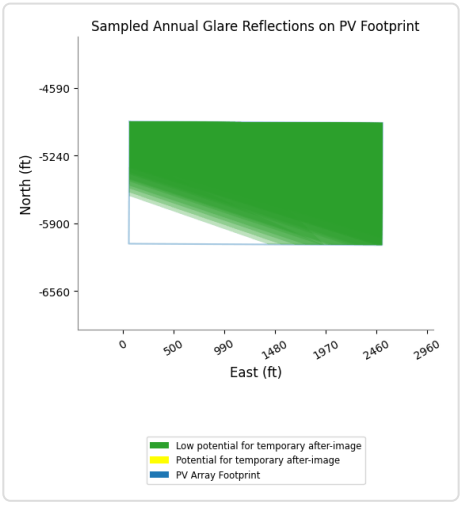
Yellow glare: none

Green glare: 48 min.



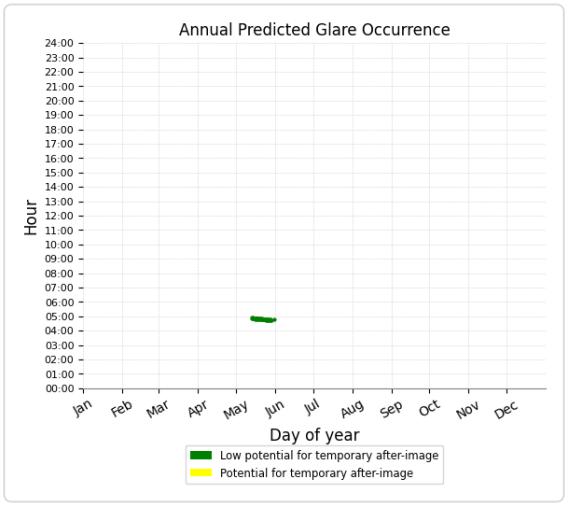


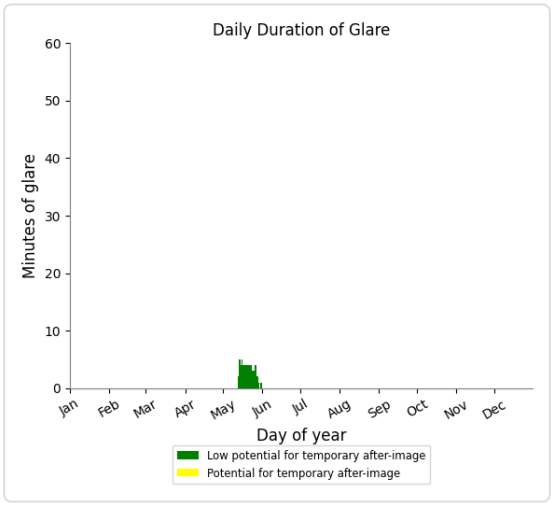


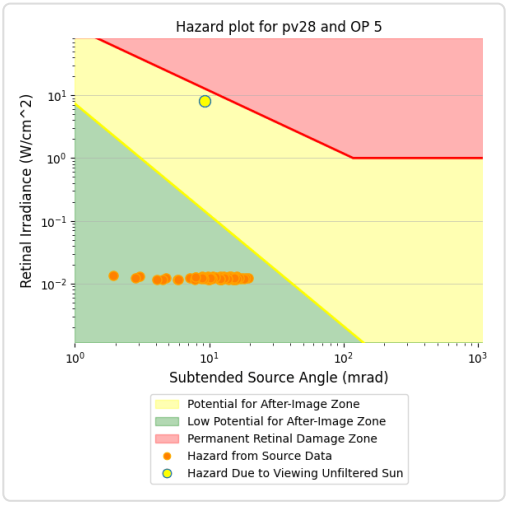


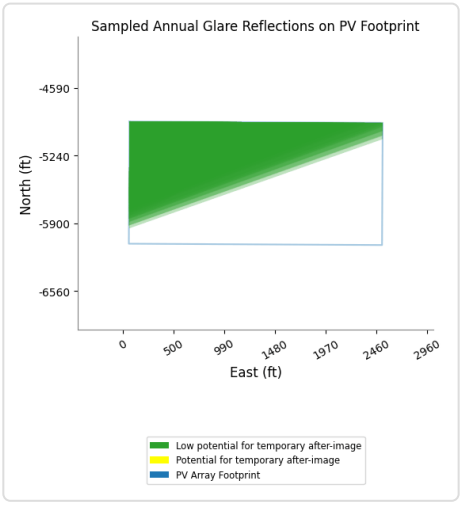
PV28 and OP 5

Yellow glare: none
Green glare: 62 min.









PV28 and OP 1

No glare found

PV28 and OP 2

No glare found

PV28 and OP 3

No glare found

PV28 and OP 6

No glare found

PV28 and OP 7

No glare found

PV28 and OP 8

No glare found

PV28 and OP 9

No glare found

PV28 and OP 10

No glare found

PV28 and OP 11

No glare found

PV28 and OP 12

No glare found

PV28 and OP 13

No glare found

PV28 and OP 14

No glare found

PV28 and OP 15

No glare found

PV28 and OP 16

No glare found

PV28 and OP 17

No glare found

PV28 and OP 18

No glare found

PV28 and OP 19

No glare found

PV28 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV29 low potential for temporary after-image

Receptor results ordered by category of glare

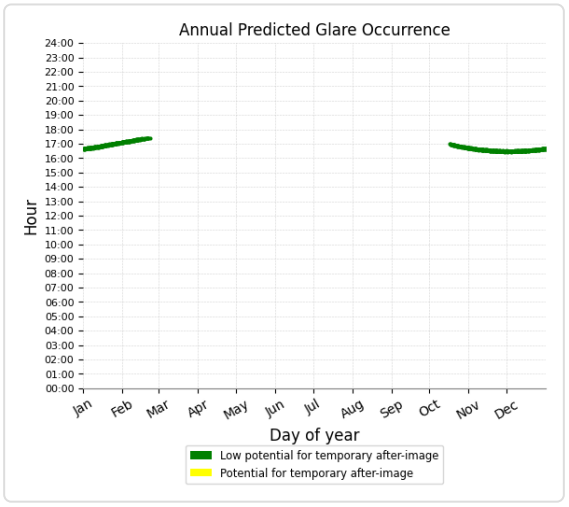
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	546	9.1	0	0.0
Route12	355	5.9	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 7	54	0.9	0	0.0
OP 8	128	2.1	0	0.0
OP 9	96	1.6	0	0.0
OP 11	79	1.3	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

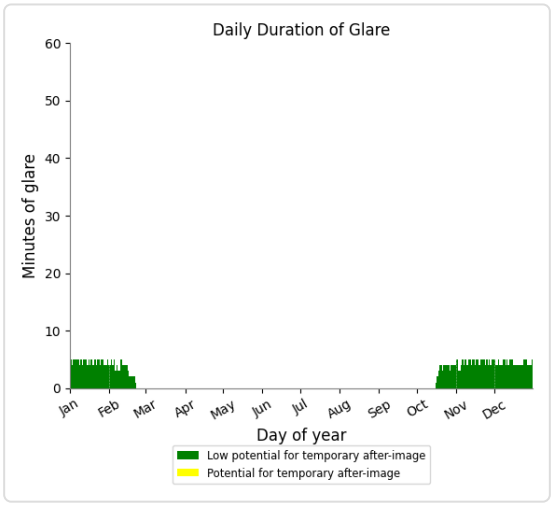
PC ORIGINAL PKG

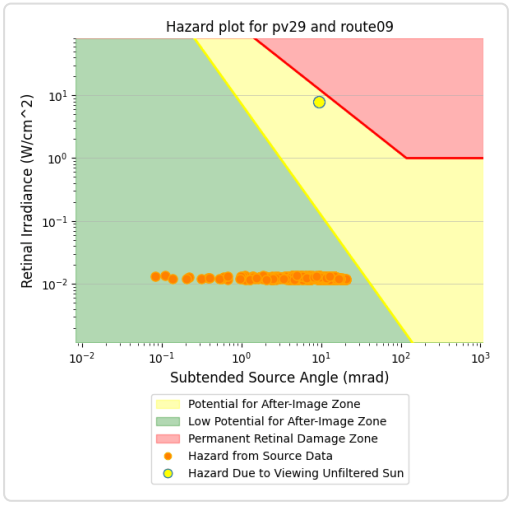
PV29 and Route: Route09

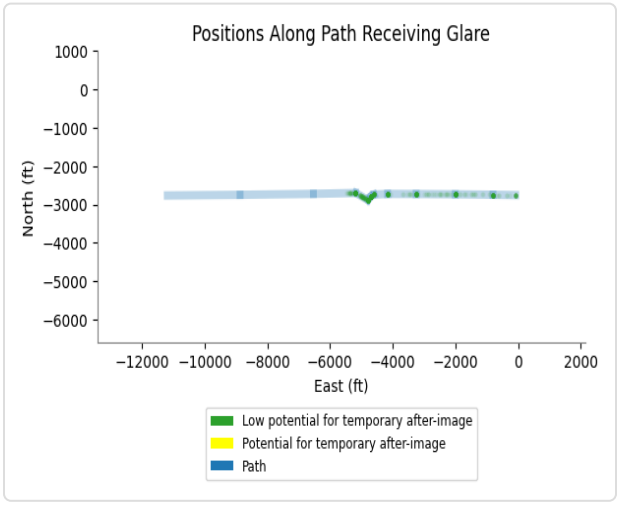
Yellow glare: none

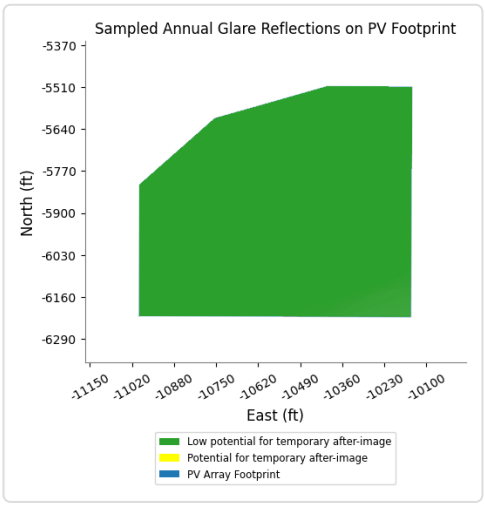
Green glare: 546 min.







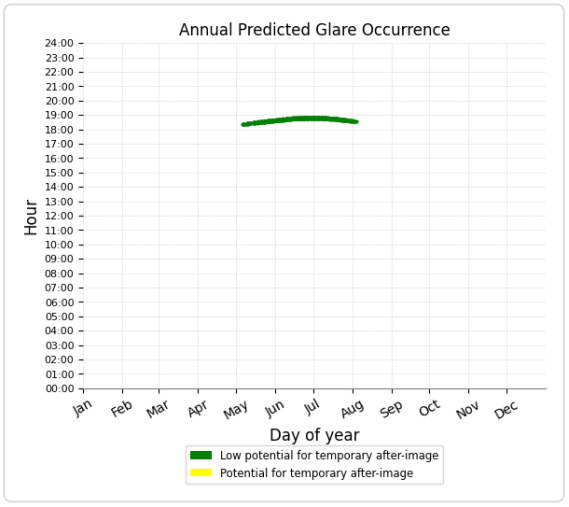


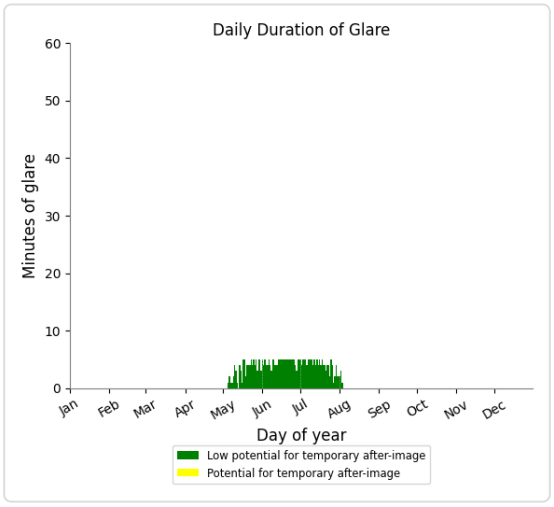


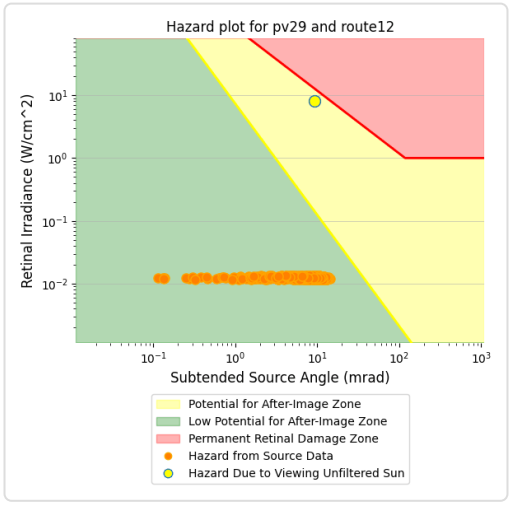
PV29 and Route: Route12

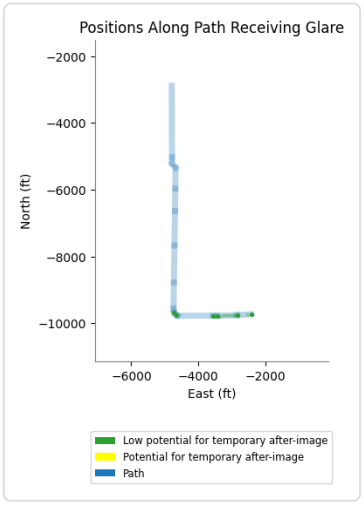
Yellow glare: none

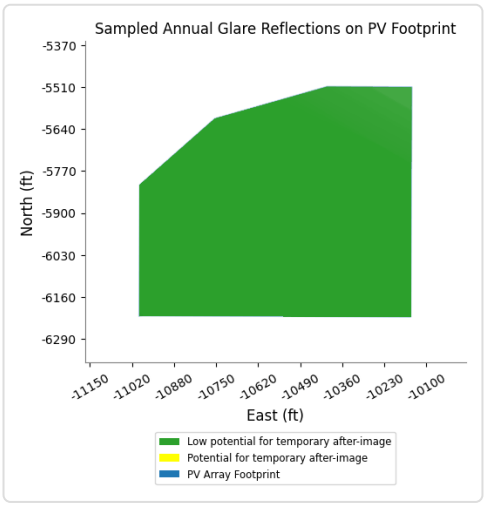
Green glare: 355 min.











PV29 and Route: Route01

No glare found

PV29 and Route: Route02

No glare found

PV29 and Route: Route04

No glare found

PV29 and Route: Route05

No glare found

PV29 and Route: Route06

No glare found

PV29 and Route: Route07

No glare found

PV29 and Route: Route08

No glare found

PV29 and Route: Route10

No glare found

PV29 and Route: Route11

No glare found

PV29 and FP: NJK08

No glare found

PV29 and FP: NJK12

No glare found

PV29 and FP: NJK26

No glare found

PV29 and FP: NJK30

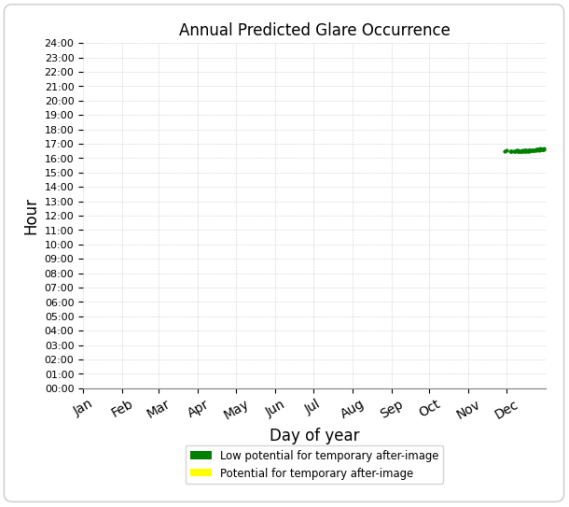
No glare found

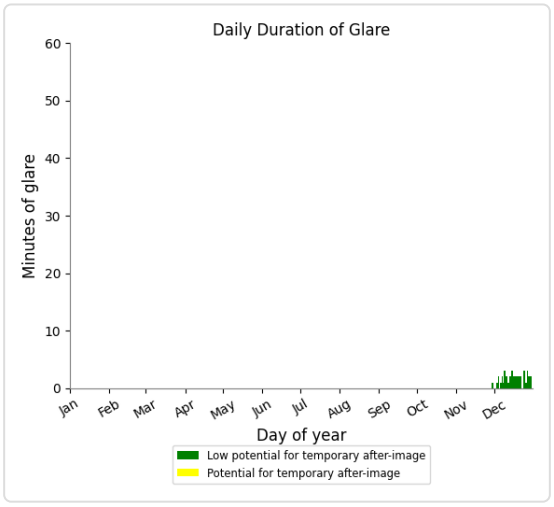
PC ORIGINAL PKG

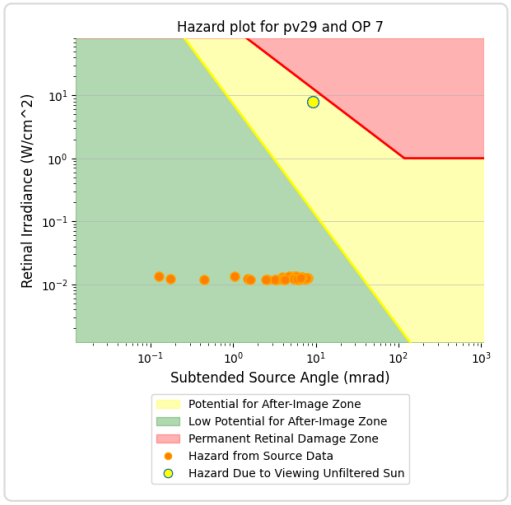
PV29 and OP 7

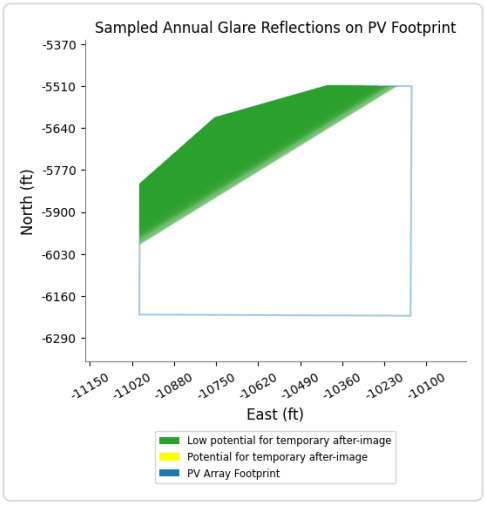
Yellow glare: none

Green glare: 54 min.





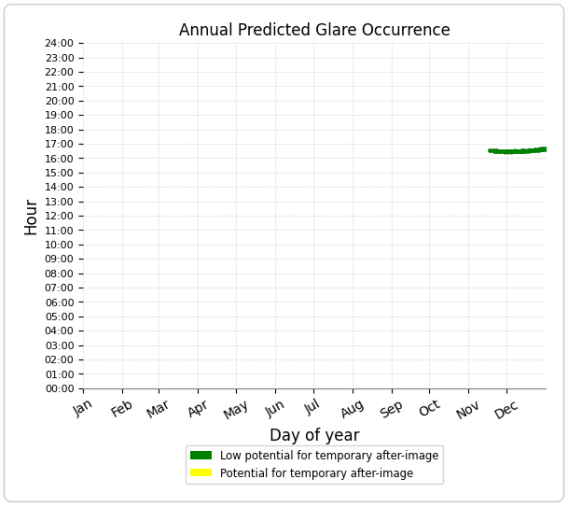


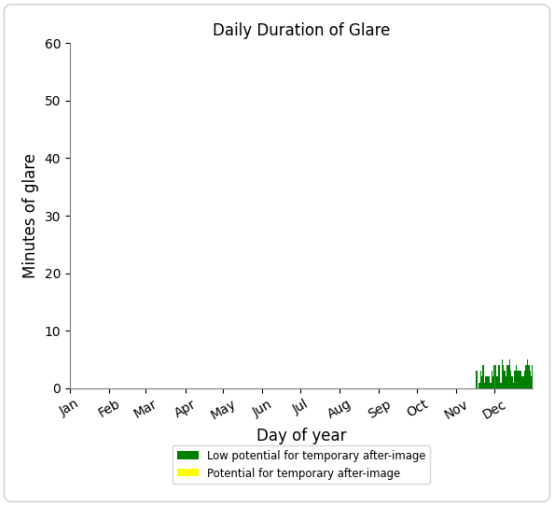


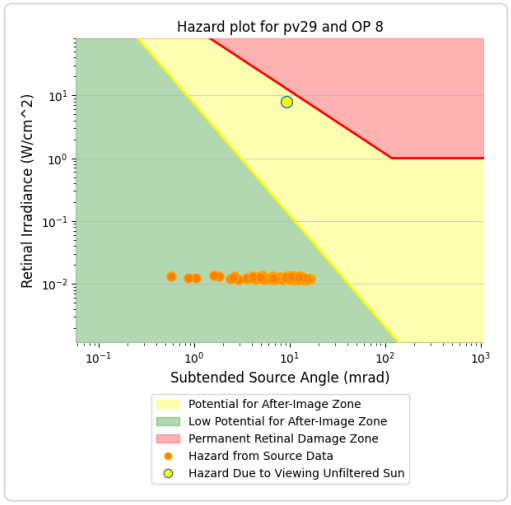
PV29 and OP 8

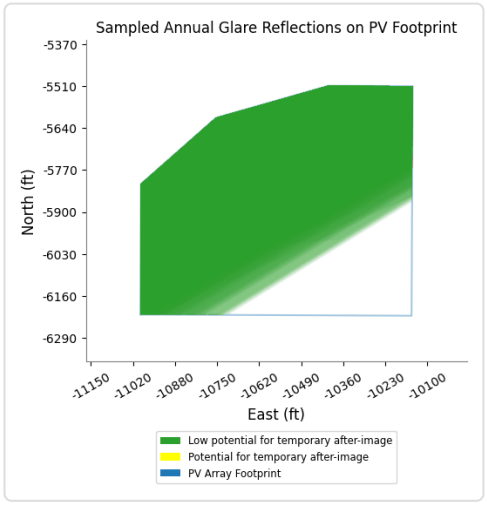
Yellow glare: none

Green glare: 128 min.





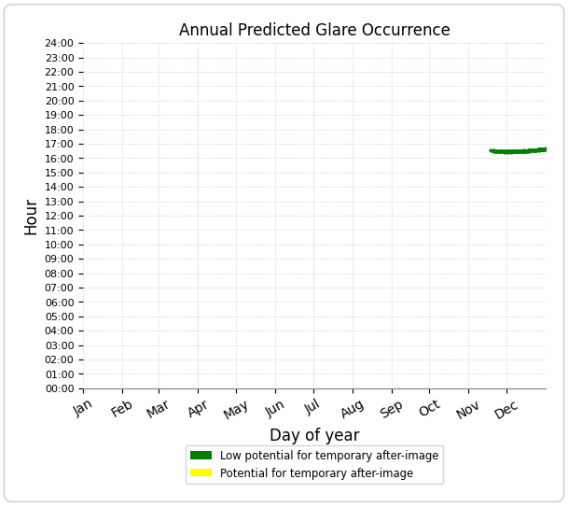


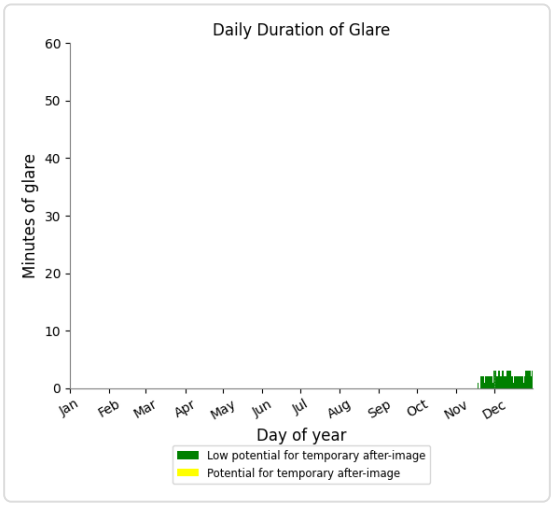


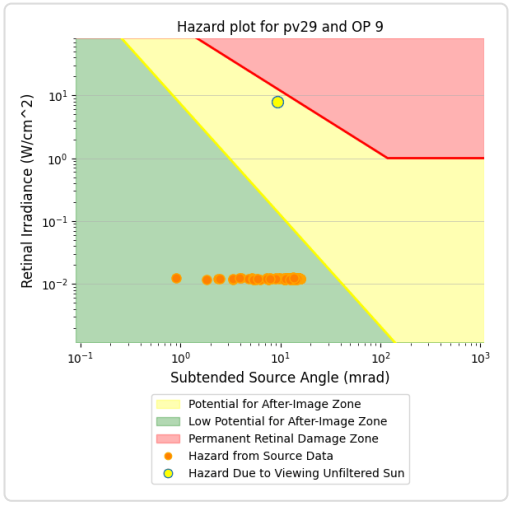
PV29 and OP 9

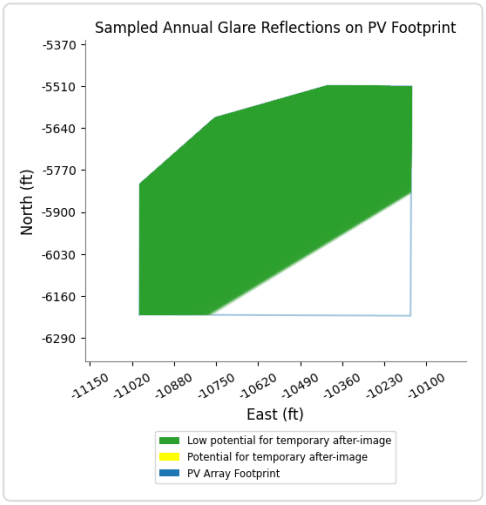
Yellow glare: none

Green glare: 96 min.



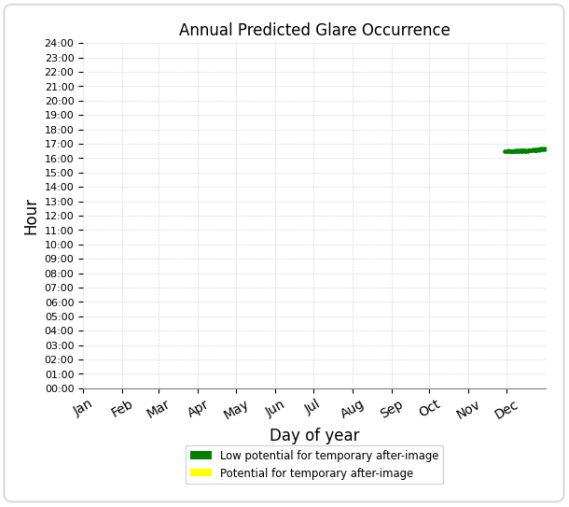


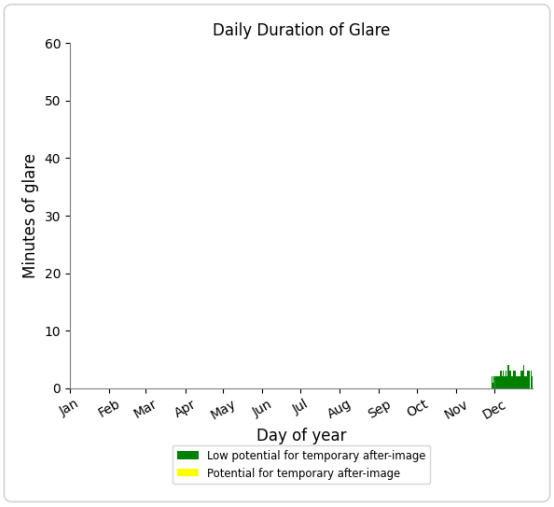


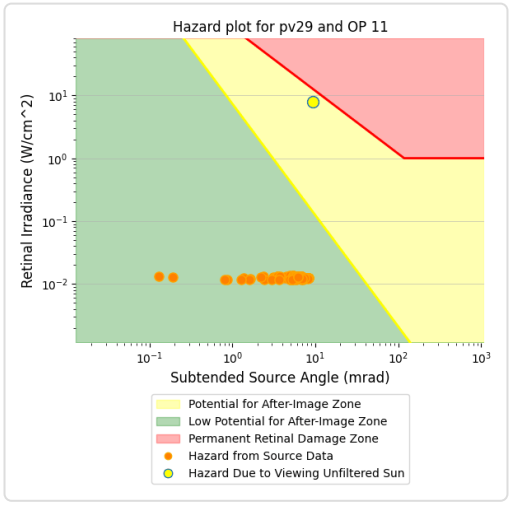


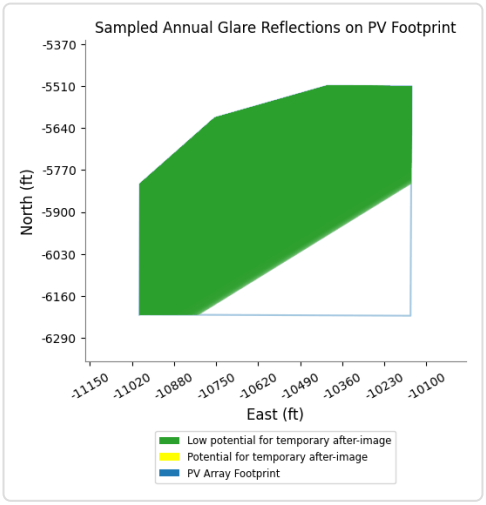
PV29 and OP 11

Yellow glare: none
Green glare: 79 min.









PV29 and OP 1

No glare found

PV29 and OP 2

No glare found

PV29 and OP 3

No glare found

PV29 and OP 4

No glare found

PV29 and OP 5

No glare found

PV29 and OP 6

No glare found

PV29 and OP 10

No glare found

PV29 and OP 12

No glare found

PV29 and OP 13

No glare found

PV29 and OP 14

No glare found

PV29 and OP 15

No glare found

PV29 and OP 16

No glare found

PV29 and OP 17

No glare found

PV29 and OP 18

No glare found

PV29 and OP 19

No glare found

PV29 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV30 low potential for temporary after-image

Receptor results ordered by category of glare

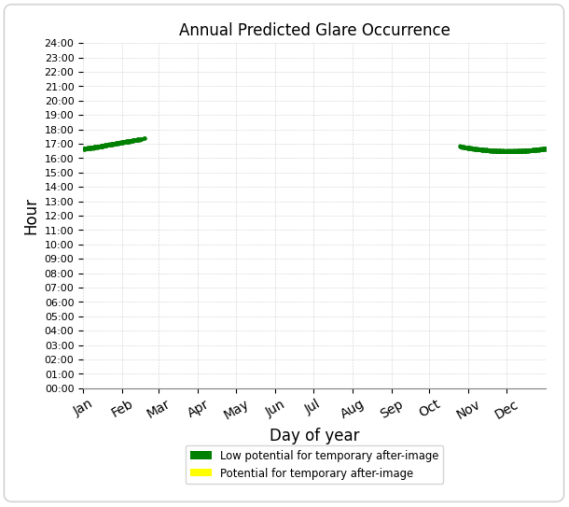
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	502	8.4	0	0.0
Route12	548	9.1	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 5	267	4.5	0	0.0
OP 8	31	0.5	0	0.0
OP 9	64	1.1	0	0.0
OP 11	21	0.3	0	0.0
OP 17	42	0.7	0	0.0
OP 18	55	0.9	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

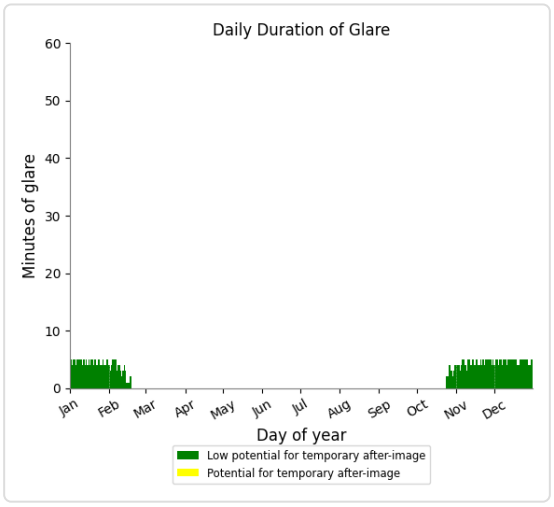
PC ORIGINAL PKG

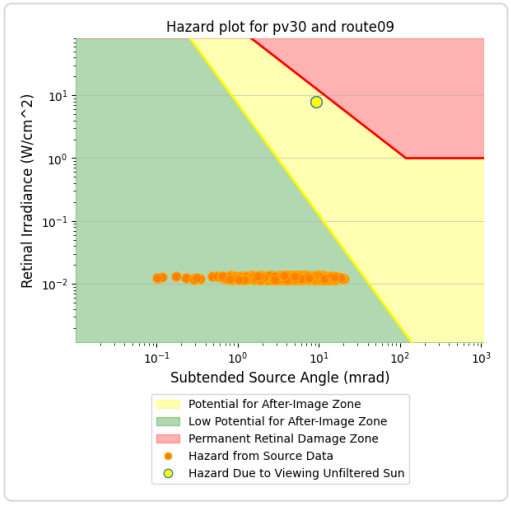
PV30 and Route: Route09

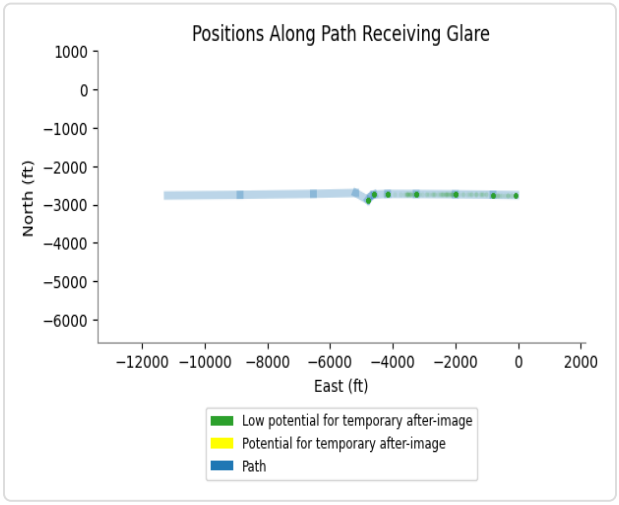
Yellow glare: none

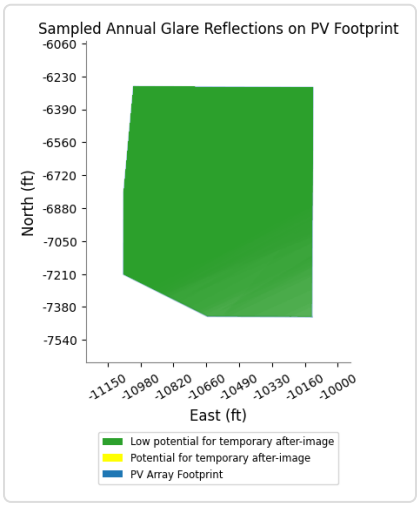
Green glare: 502 min.







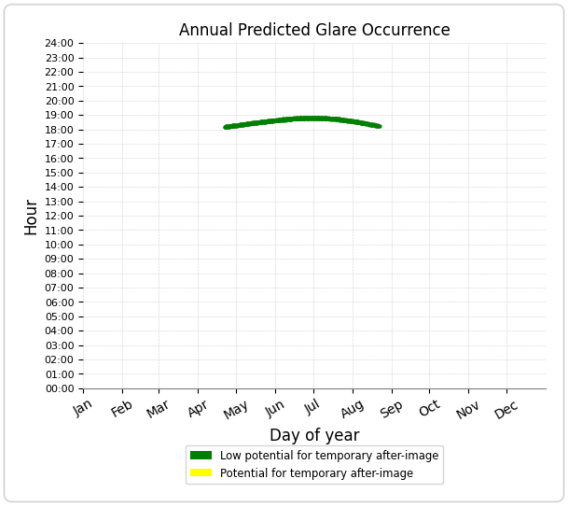


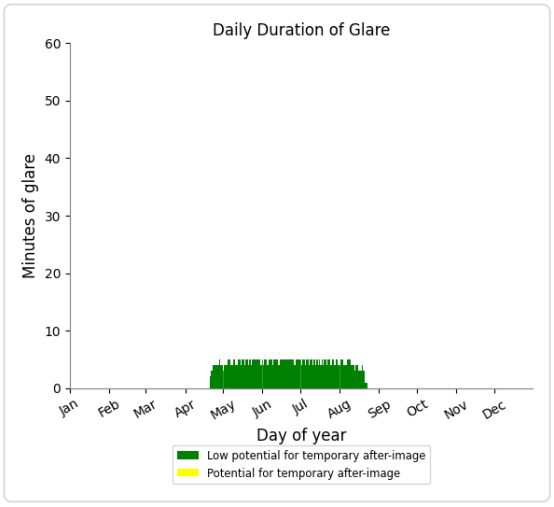


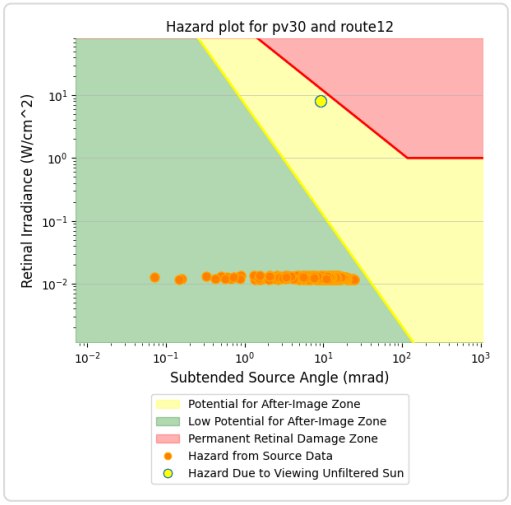
PV30 and Route: Route12

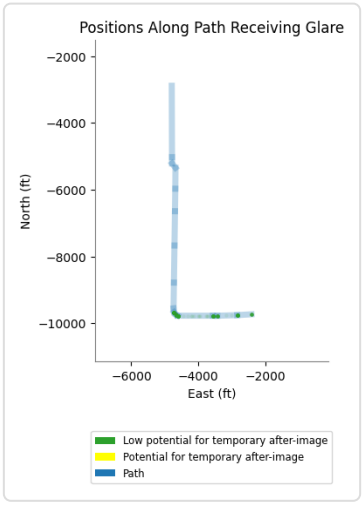
Yellow glare: none

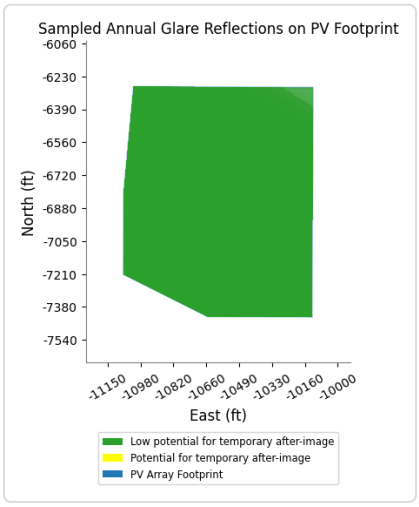
Green glare: 548 min.











PV30 and Route: Route01

No glare found

PC ORIGINAL PKG

PV30 and Route: Route02

No glare found

PV30 and Route: Route04

No glare found

PV30 and Route: Route05

No glare found

PV30 and Route: Route06

No glare found

PV30 and Route: Route07

No glare found

PV30 and Route: Route08

No glare found

PV30 and Route: Route10

No glare found

PV30 and Route: Route11

No glare found

PV30 and FP: NJK08

No glare found

PV30 and FP: NJK12

No glare found

PV30 and FP: NJK26

No glare found

PV30 and FP: NJK30

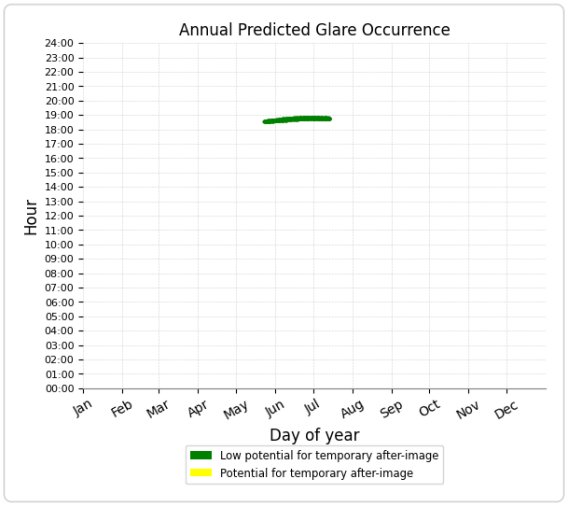
No glare found

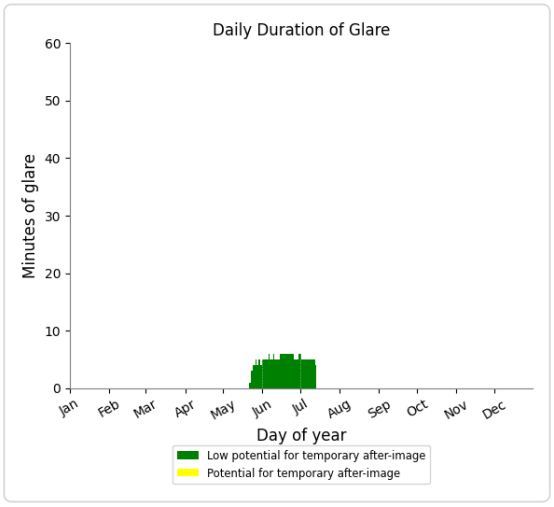
PC ORIGINAL PKG

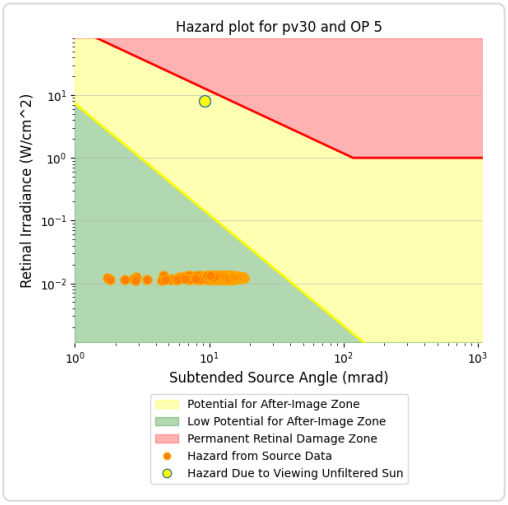
PV30 and OP 5

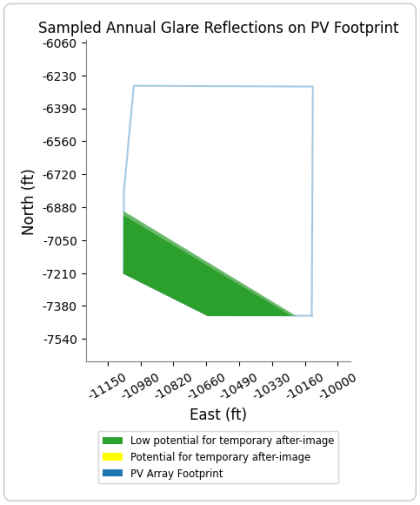
Yellow glare: none

Green glare: 267 min.





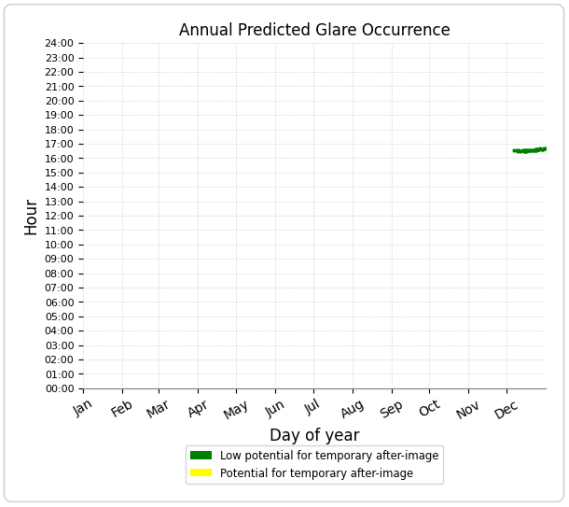


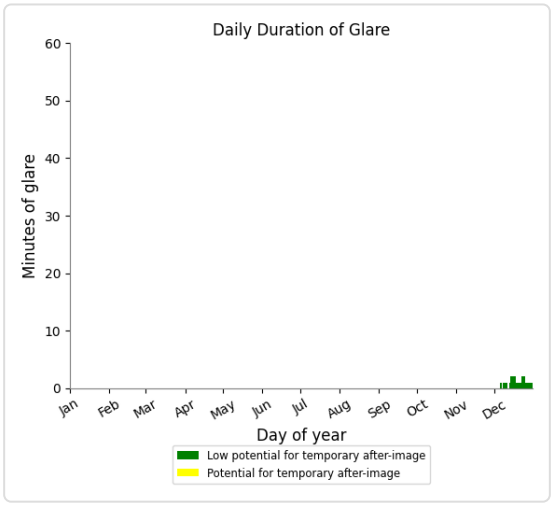


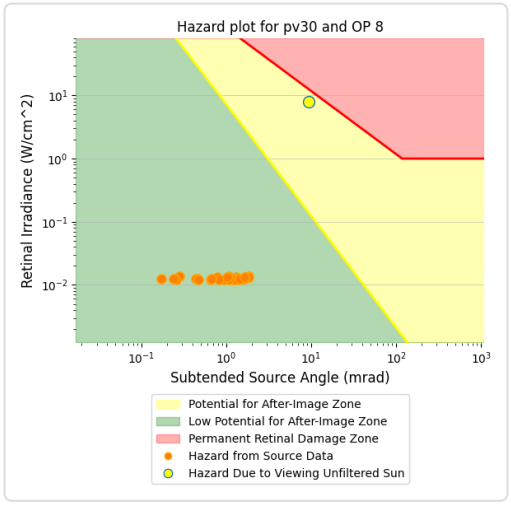
PV30 and OP 8

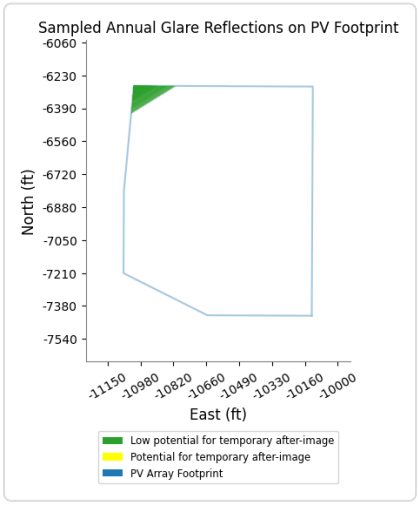
Yellow glare: none

Green glare: 31 min.





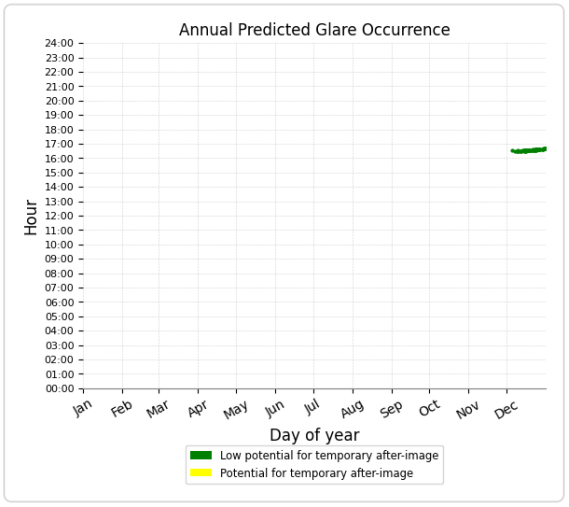


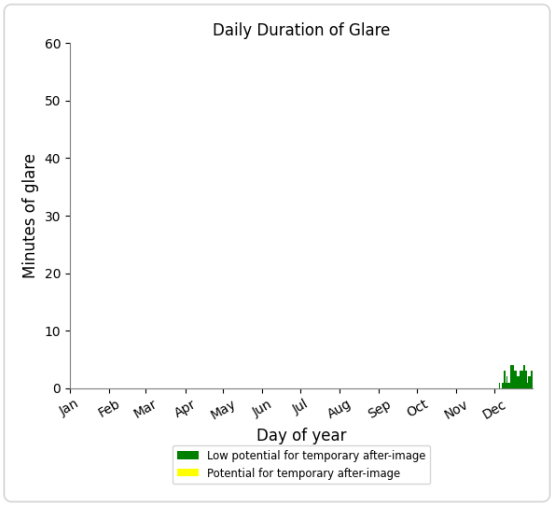


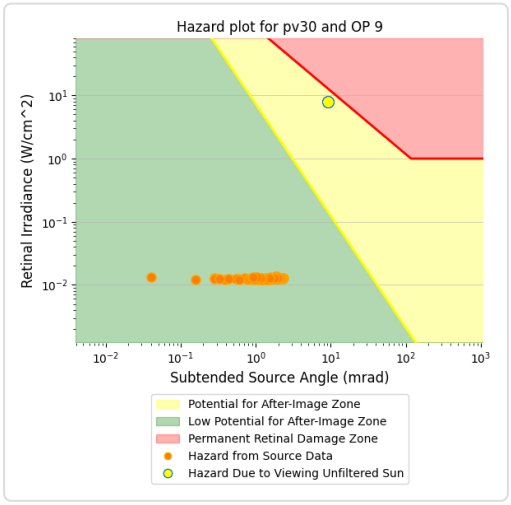
PV30 and OP 9

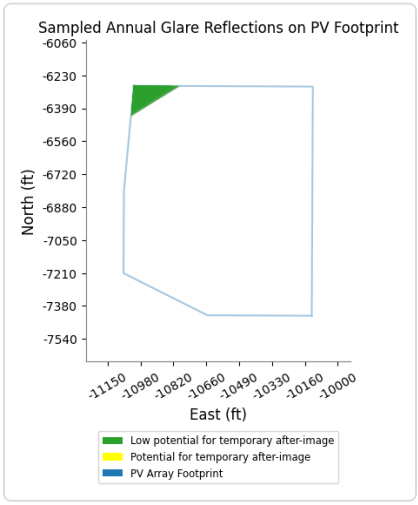
Yellow glare: none

Green glare: 64 min.





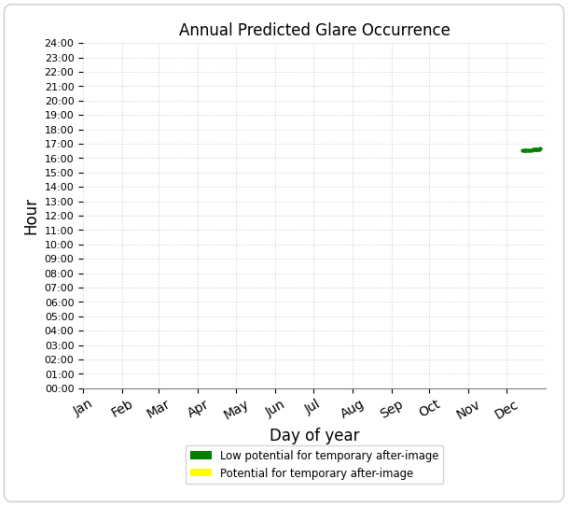


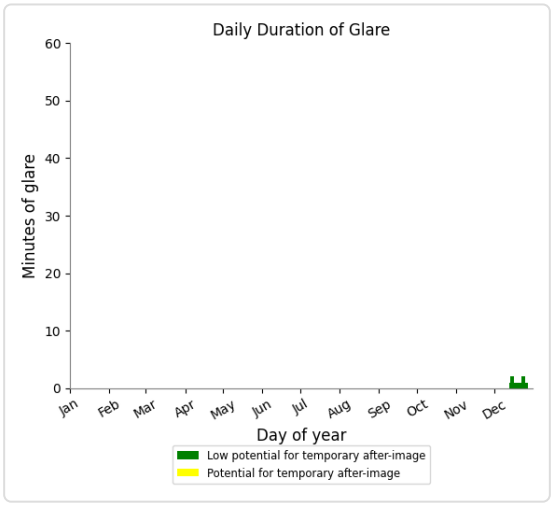


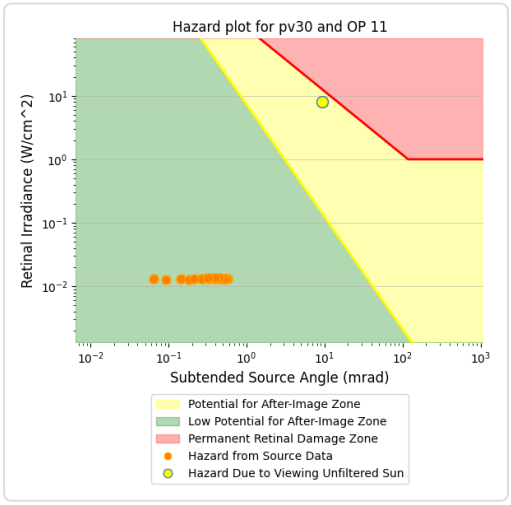
PV30 and OP 11

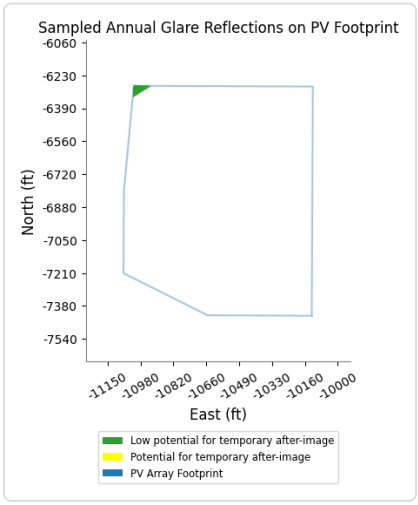
Yellow glare: none

Green glare: 21 min.





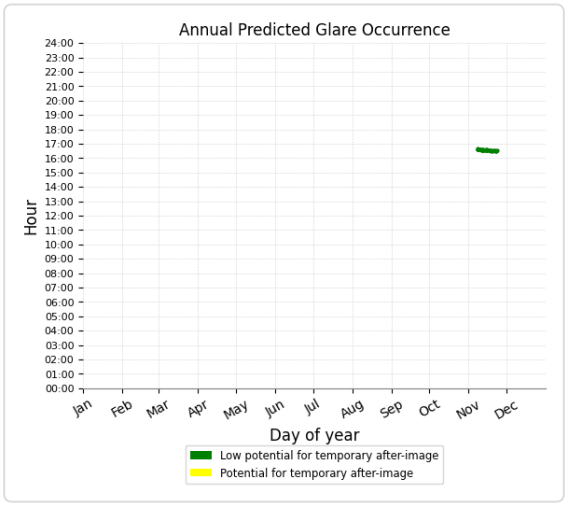


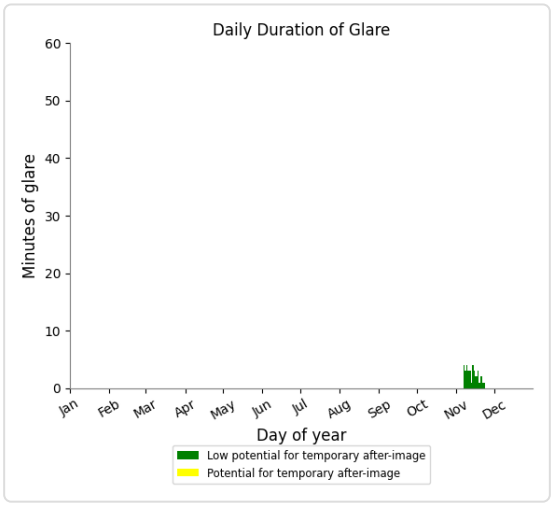


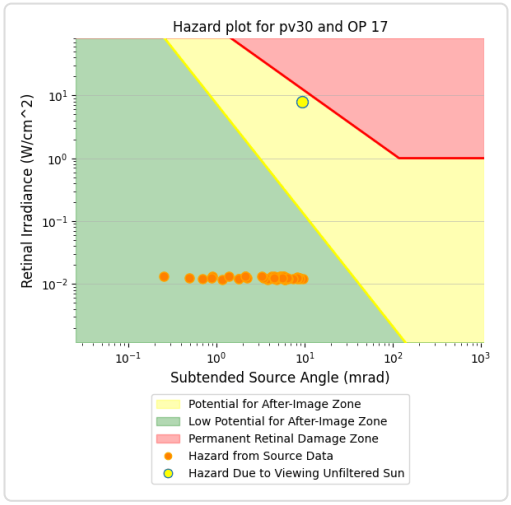
PV30 and OP 17

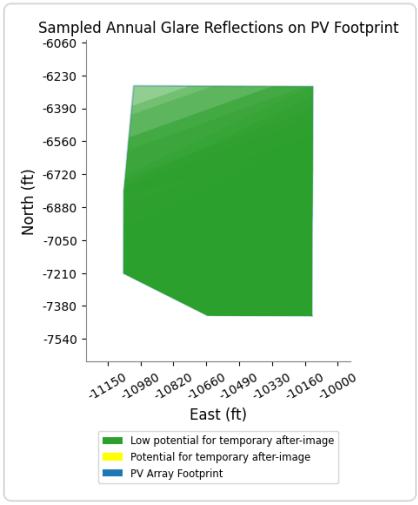
Yellow glare: none

Green glare: 42 min.



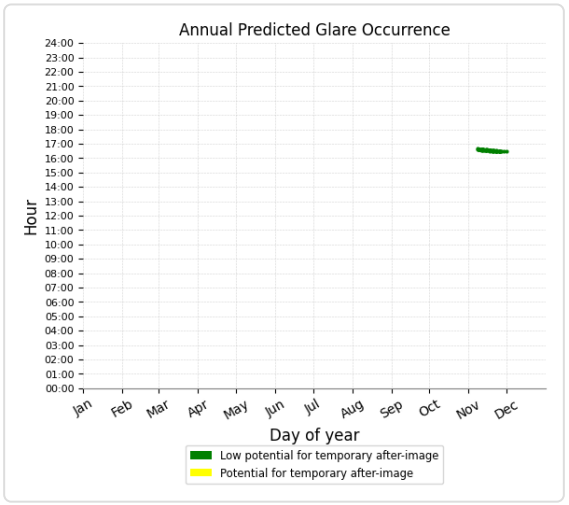


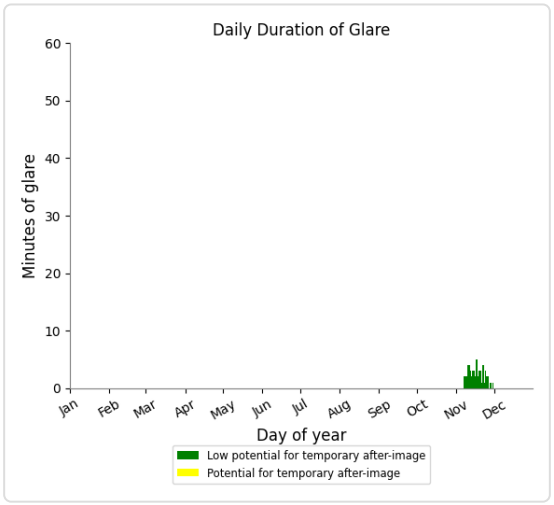


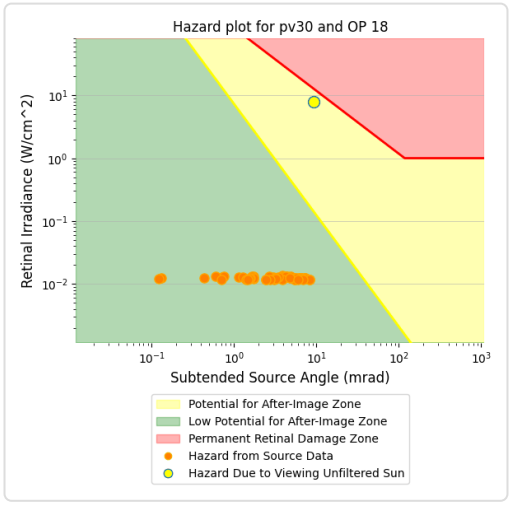


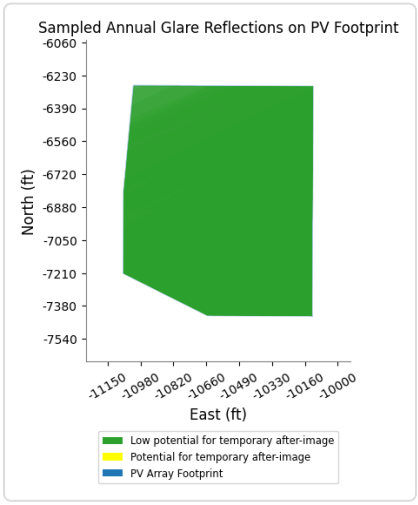
PV30 and OP 18

Yellow glare: none
Green glare: 55 min.









PV30 and OP 1

No glare found

PV30 and OP 2

No glare found

PV30 and OP 3

No glare found

PV30 and OP 4

No glare found

PV30 and OP 6

No glare found

PV30 and OP 7

No glare found

PV30 and OP 10

No glare found

PV30 and OP 12

No glare found

PV30 and OP 13

No glare found

PV30 and OP 14

No glare found

PV30 and OP 15

No glare found

PV30 and OP 16

No glare found

PV30 and OP 19

No glare found

PV30 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV31 low potential for temporary after-image

Receptor results ordered by category of glare

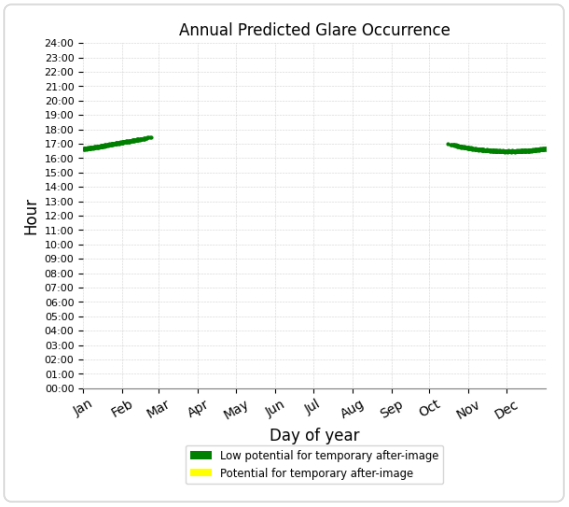
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	529	8.8	0	0.0
Route12	123	2.0	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 8	103	1.7	0	0.0
OP 9	79	1.3	0	0.0
OP 11	51	0.8	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

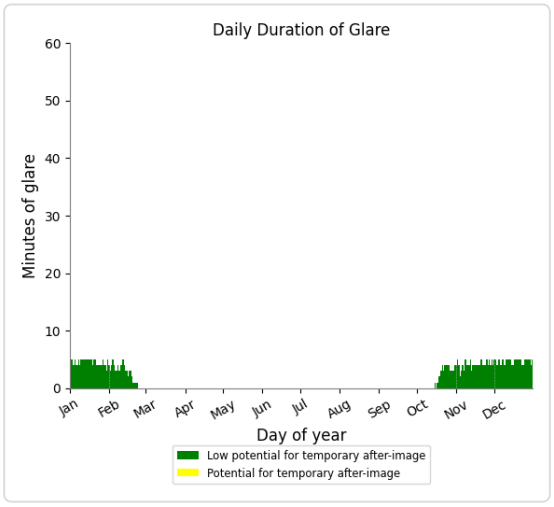
PC ORIGINAL PKG

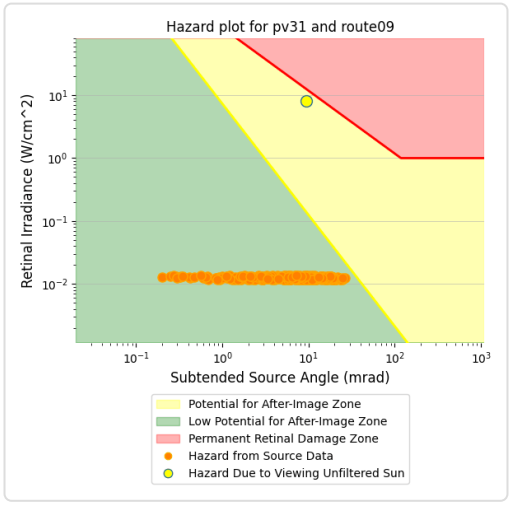
PV31 and Route: Route09

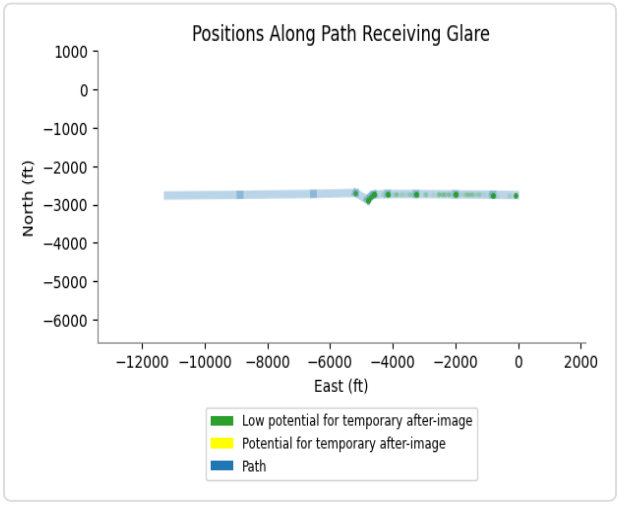
Yellow glare: none

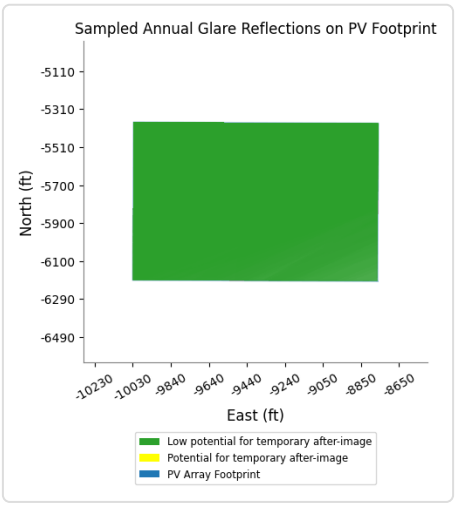
Green glare: 529 min.







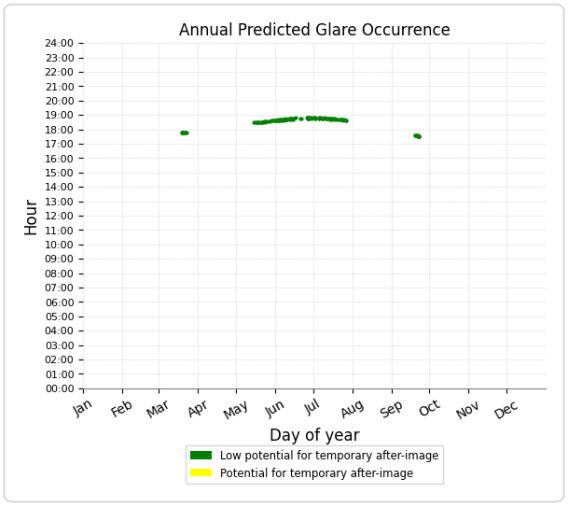


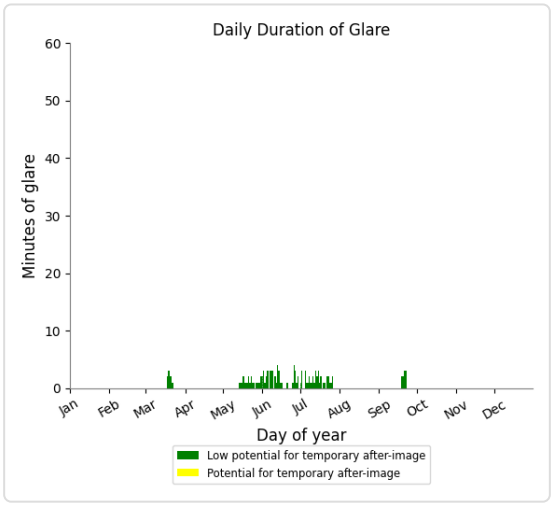


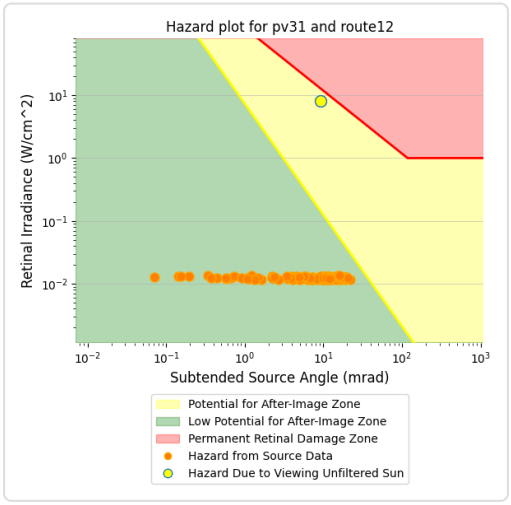
PV31 and Route: Route12

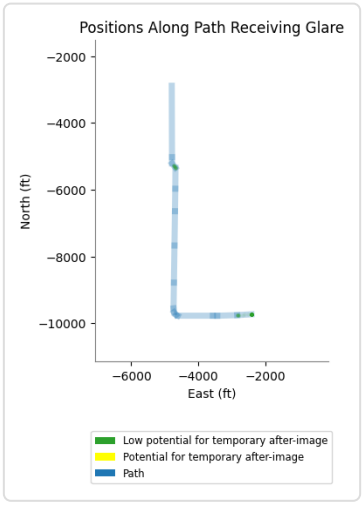
Yellow glare: none

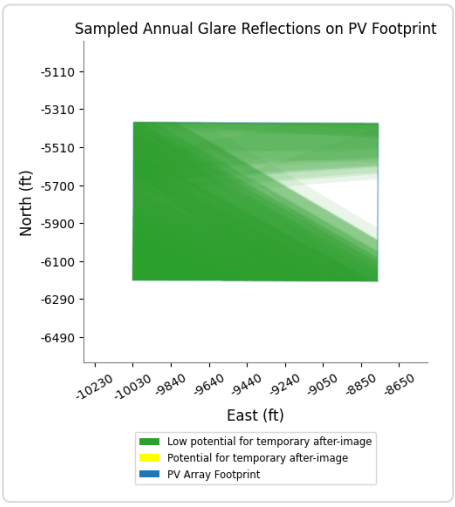
Green glare: 123 min.











PV31 and Route: Route01

No glare found

PV31 and Route: Route02

No glare found

PV31 and Route: Route04

No glare found

PV31 and Route: Route05

No glare found

PV31 and Route: Route06

No glare found

PV31 and Route: Route07

No glare found

PV31 and Route: Route08

No glare found

PV31 and Route: Route10

No glare found

PV31 and Route: Route11

No glare found

PV31 and FP: NJK08

No glare found

PV31 and FP: NJK12

No glare found

PV31 and FP: NJK26

No glare found

PV31 and FP: NJK30

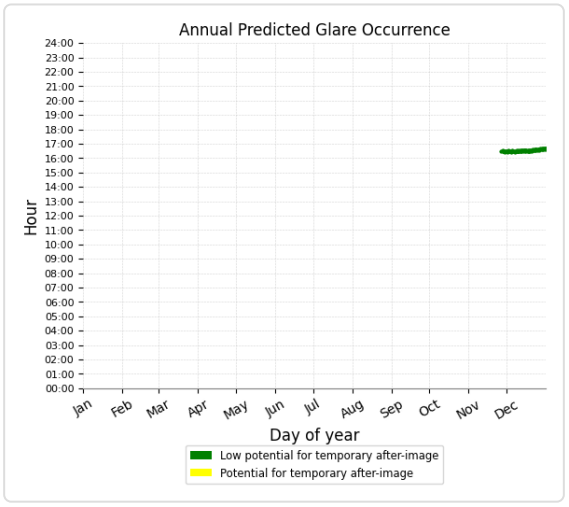
No glare found

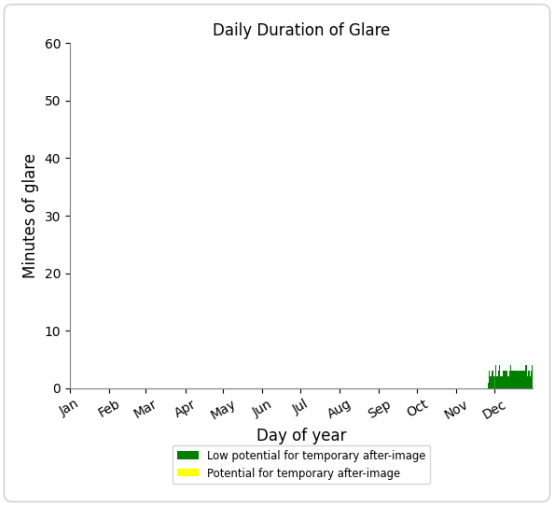
PC ORIGINAL PKG

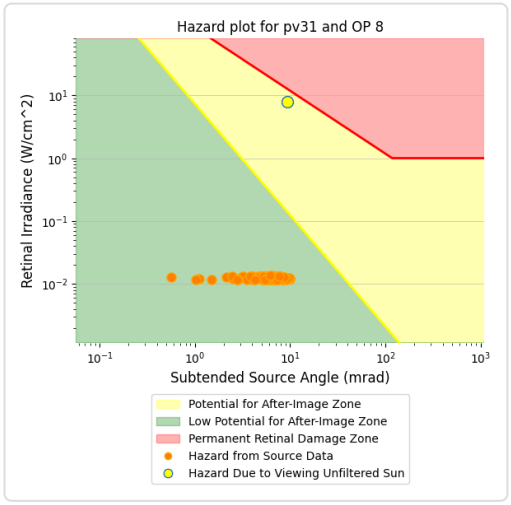
PV31 and OP 8

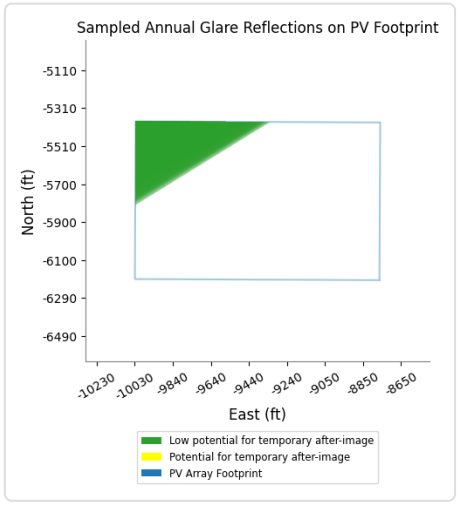
Yellow glare: none

Green glare: 103 min.





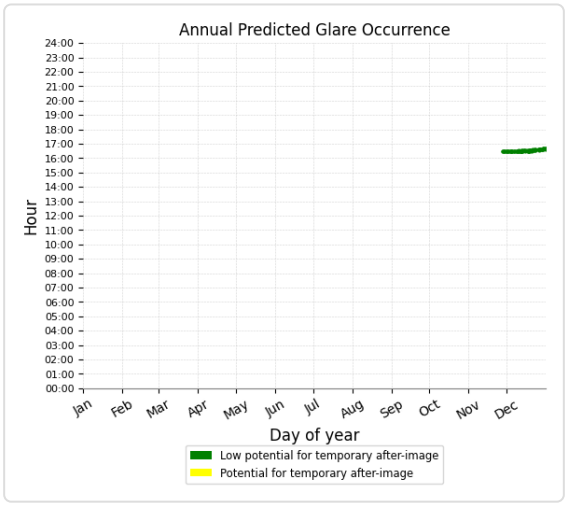


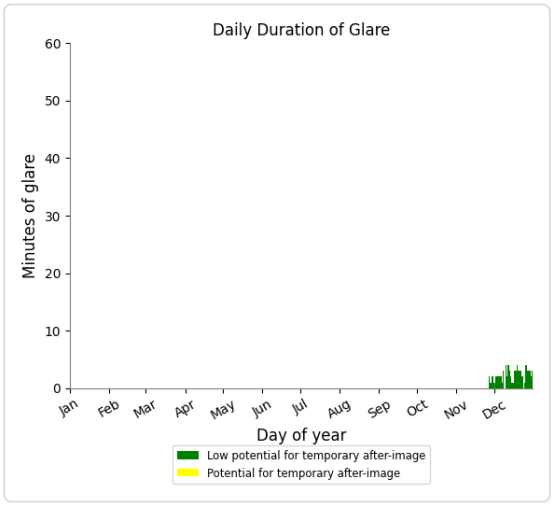


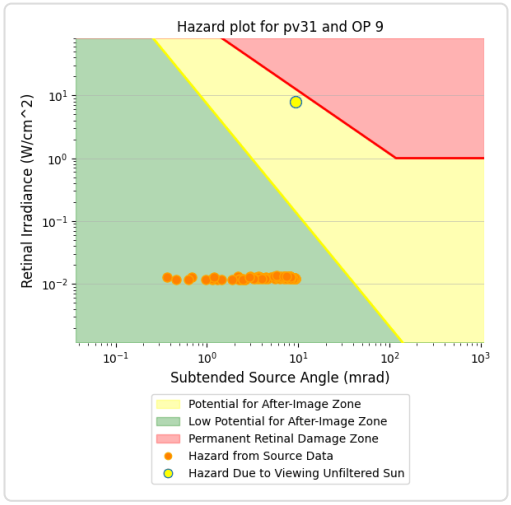
PV31 and OP 9

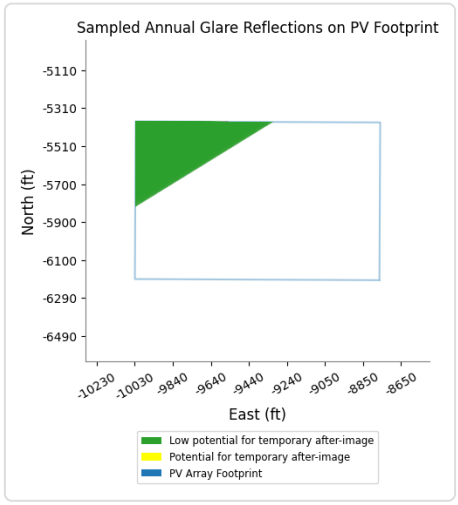
Yellow glare: none

Green glare: 79 min.



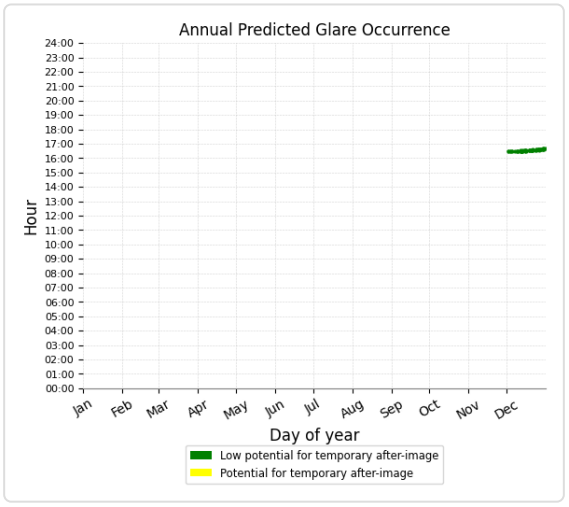


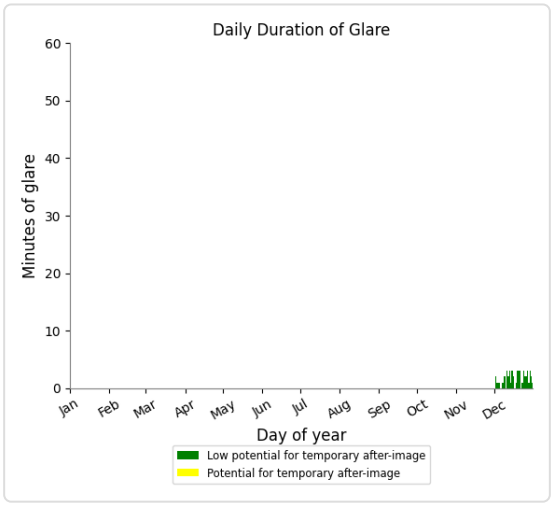


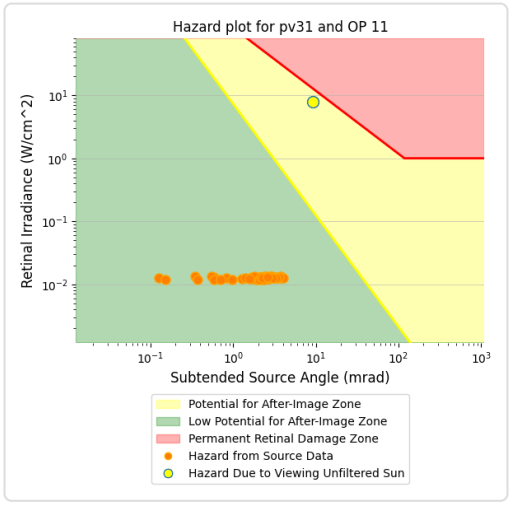


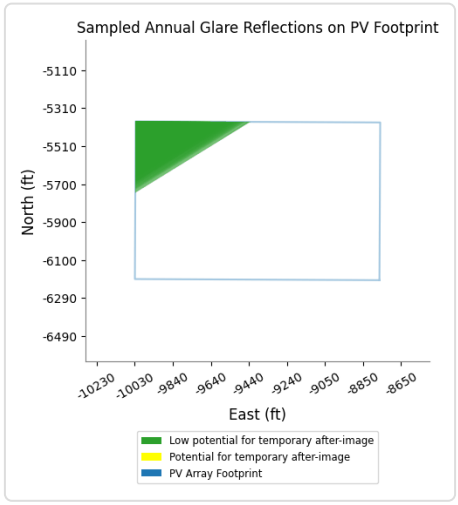
PV31 and OP 11

Yellow glare: none
Green glare: 51 min.









PV31 and OP 1

No glare found

PV31 and OP 2

No glare found

PV31 and OP 3

No glare found

PV31 and OP 4

No glare found

PV31 and OP 5

No glare found

PV31 and OP 6

No glare found

PV31 and OP 7

No glare found

PV31 and OP 10

No glare found

PV31 and OP 12

No glare found

PV31 and OP 13

No glare found

PV31 and OP 14

No glare found

PV31 and OP 15

No glare found

PV31 and OP 16

No glare found

PV31 and OP 17

No glare found

PV31 and OP 18

No glare found

PV31 and OP 19

No glare found

PV31 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV32 low potential for temporary after-image

Receptor results ordered by category of glare

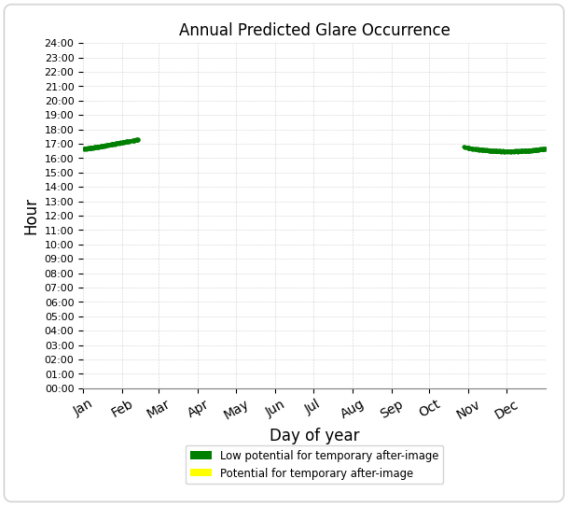
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	456	7.6	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 3	68	1.1	0	0.0
OP 17	15	0.2	0	0.0
OP 18	73	1.2	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

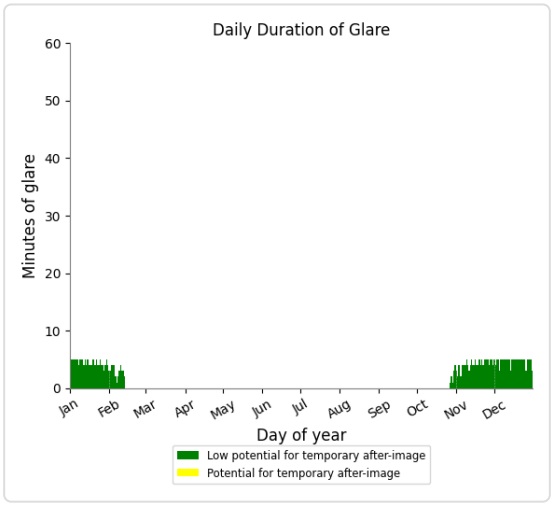
PC ORIGINAL PKG

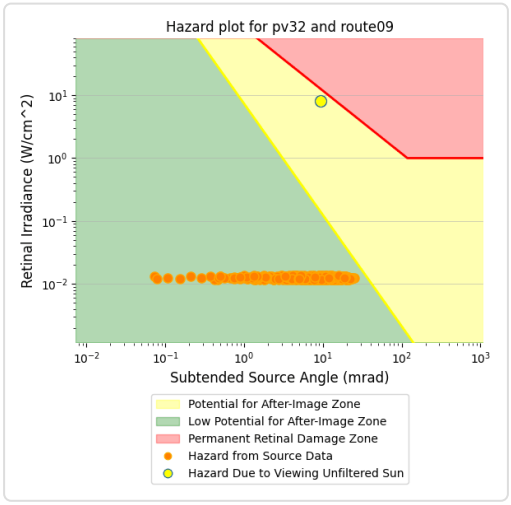
PV32 and Route: Route09

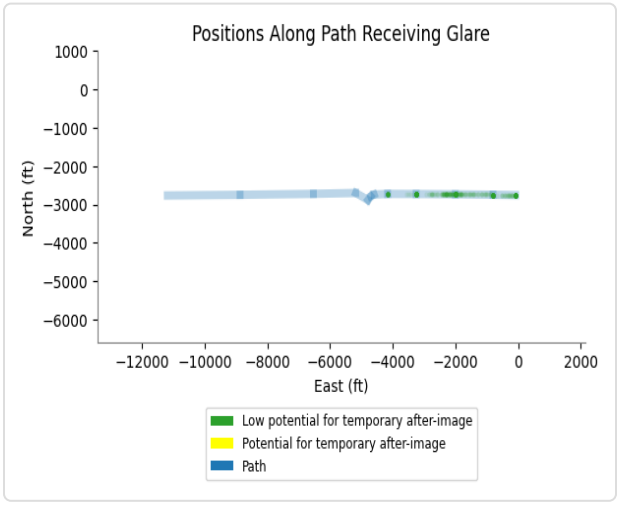
Yellow glare: none

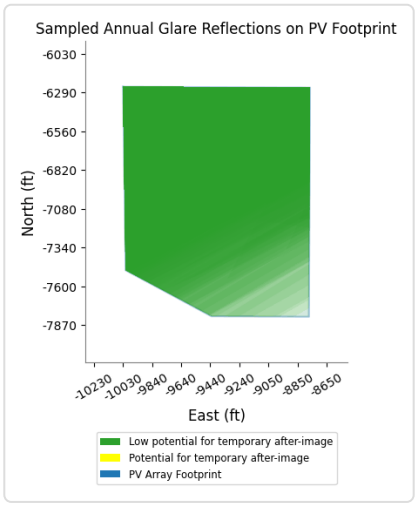
Green glare: 456 min.











PV32 and Route: Route01

No glare found

PV32 and Route: Route02

No glare found

PV32 and Route: Route04

No glare found

PV32 and Route: Route05

No glare found

PV32 and Route: Route06

No glare found

PV32 and Route: Route07

No glare found

PV32 and Route: Route08

No glare found

PV32 and Route: Route10

No glare found

PV32 and Route: Route11

No glare found

PV32 and Route: Route12

No glare found

PV32 and FP: NJK08

No glare found

PV32 and FP: NJK12

No glare found

PV32 and FP: NJK26

No glare found

PV32 and FP: NJK30

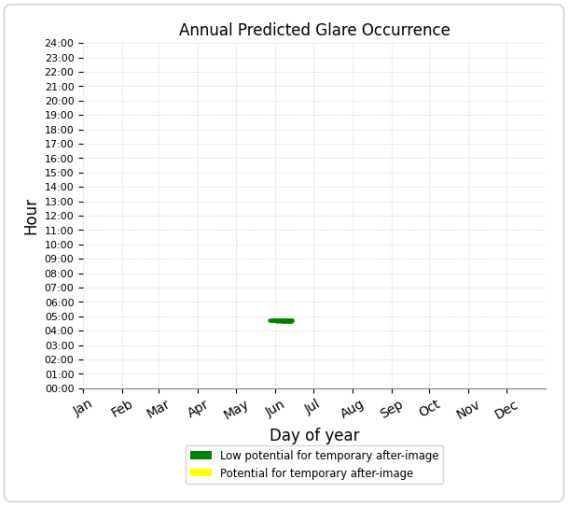
No glare found

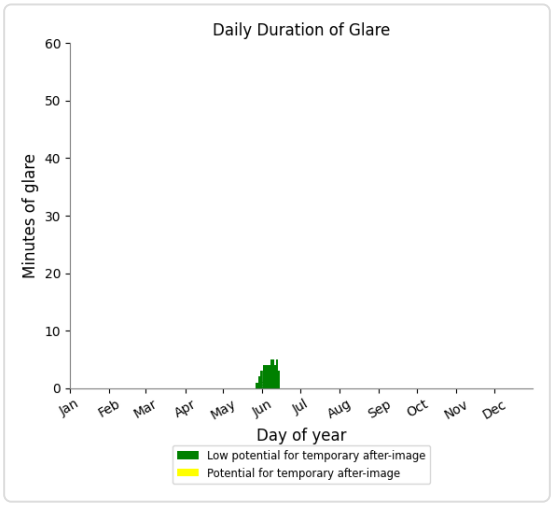
PC ORIGINAL PKG

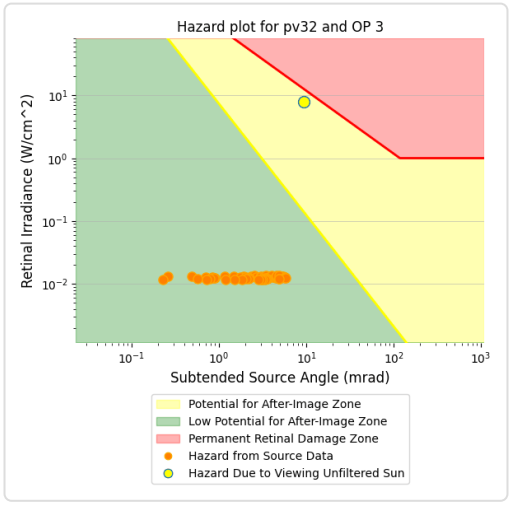
PV32 and OP 3

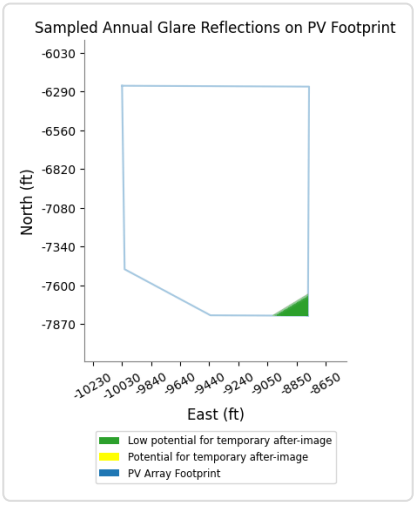
Yellow glare: none

Green glare: 68 min.





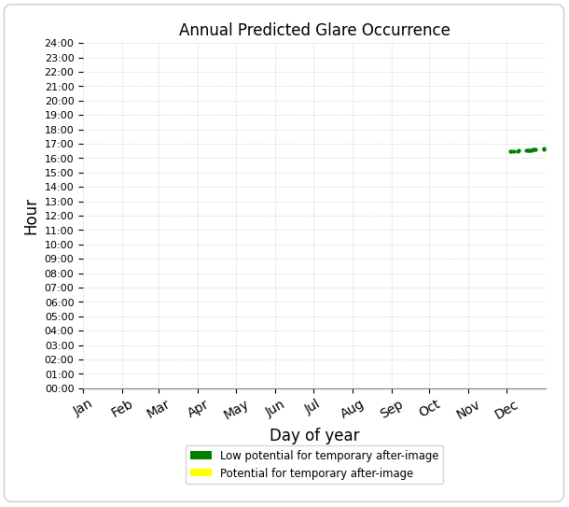


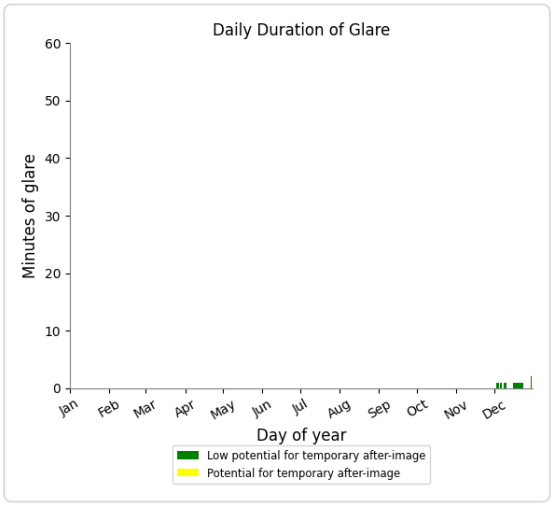


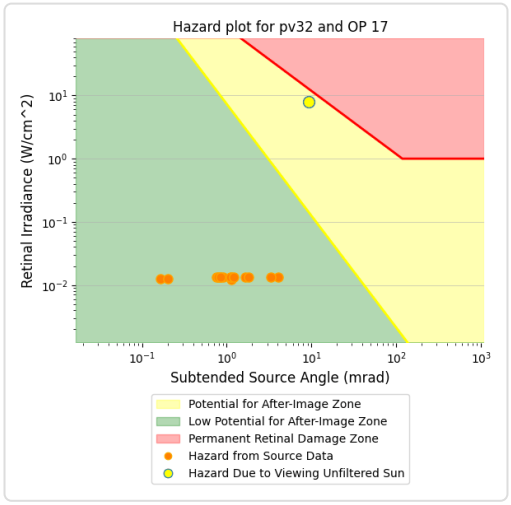
PV32 and OP 17

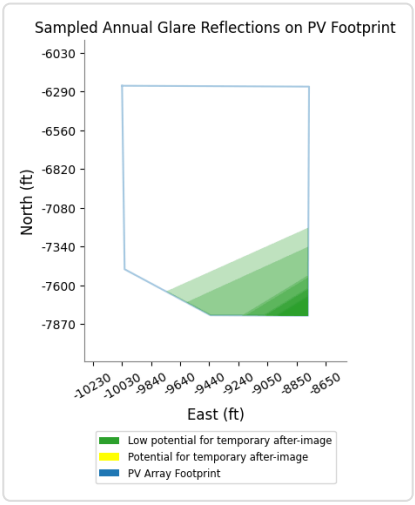
Yellow glare: none

Green glare: 15 min.



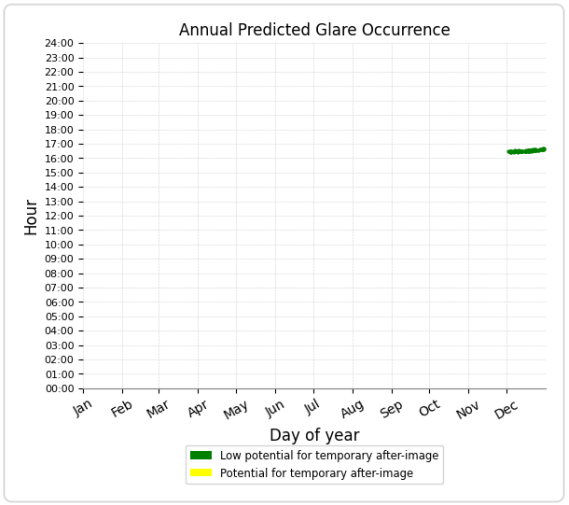


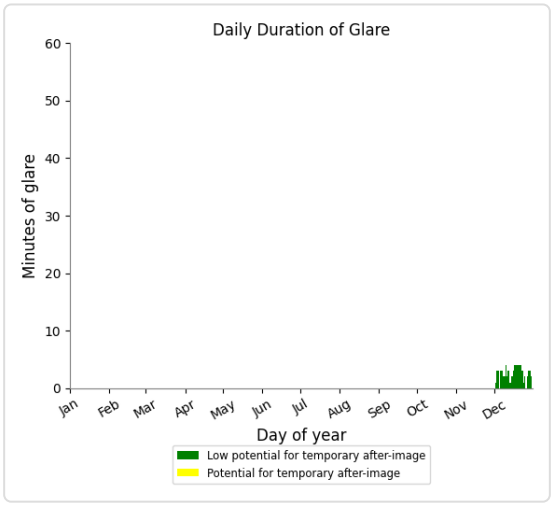


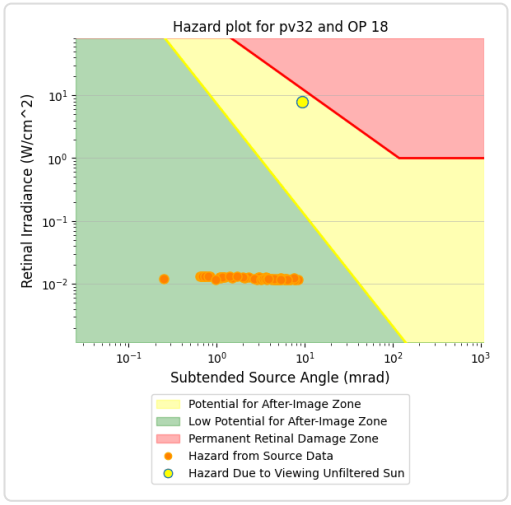


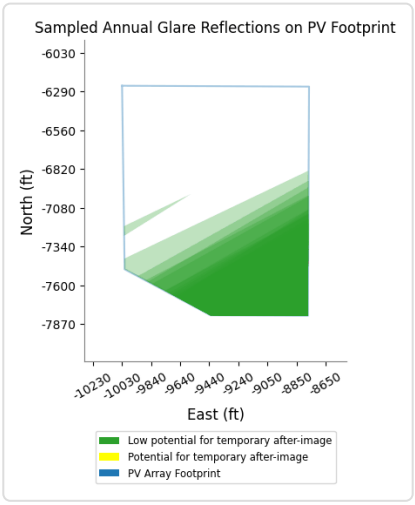
PV32 and OP 18

Yellow glare: none
Green glare: 73 min.









PV32 and OP 1

No glare found

PV32 and OP 2

No glare found

PV32 and OP 4

No glare found

PV32 and OP 5

No glare found

PV32 and OP 6

No glare found

PV32 and OP 7

No glare found

PV32 and OP 8

No glare found

PV32 and OP 9

No glare found

PV32 and OP 10

No glare found

PV32 and OP 11

No glare found

PV32 and OP 12

No glare found

PV32 and OP 13

No glare found

PV32 and OP 14

No glare found

PV32 and OP 15

No glare found

PV32 and OP 16

No glare found

PV32 and OP 19

No glare found

PV32 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV33 low potential for temporary after-image

Receptor results ordered by category of glare

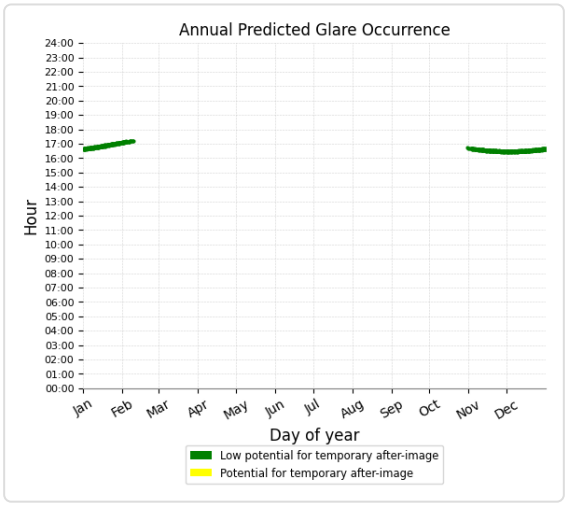
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route09	458	7.6	0	0.0
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 15	200	3.3	0	0.0
OP 17	149	2.5	0	0.0
OP 18	184	3.1	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

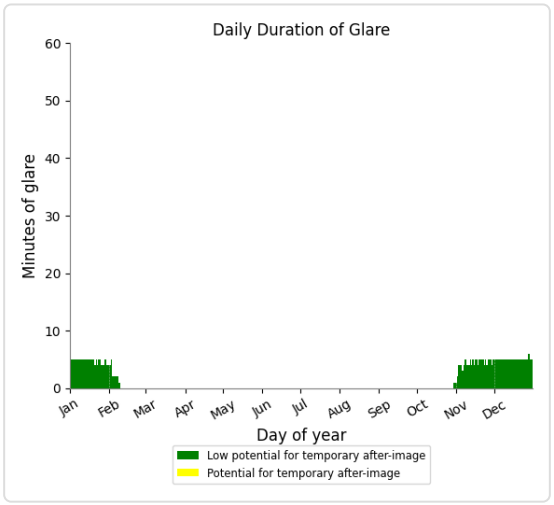
PC ORIGINAL PKG

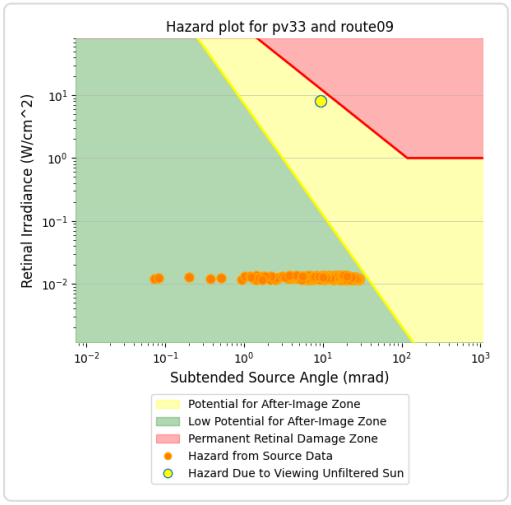
PV33 and Route: Route09

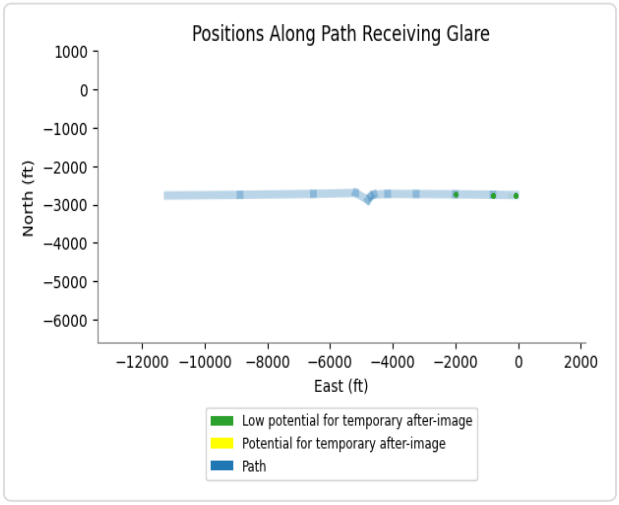
Yellow glare: none

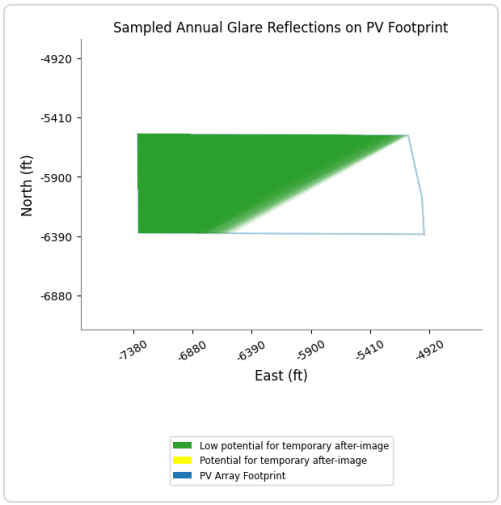
Green glare: 458 min.











PV33 and Route: Route01

No glare found

PV33 and Route: Route02

No glare found

PV33 and Route: Route04

No glare found

PV33 and Route: Route05

No glare found

PV33 and Route: Route06

No glare found

PV33 and Route: Route07

No glare found

PV33 and Route: Route08

No glare found

PV33 and Route: Route10

No glare found

PV33 and Route: Route11

No glare found

PV33 and Route: Route12

No glare found

PV33 and FP: NJK08

No glare found

PV33 and FP: NJK12

No glare found

PV33 and FP: NJK26

No glare found

PV33 and FP: NJK30

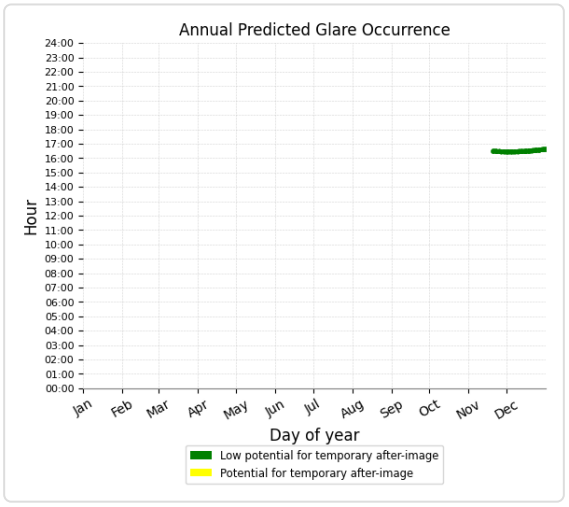
No glare found

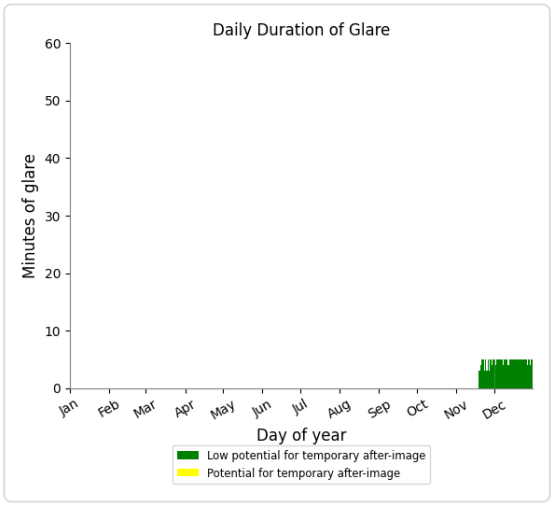
PC ORIGINAL PKG

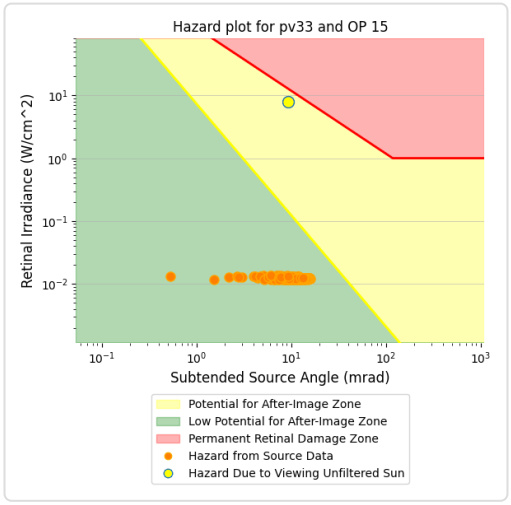
PV33 and OP 15

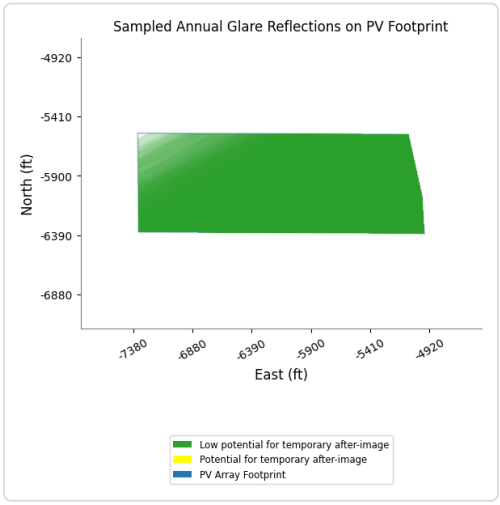
Yellow glare: none

Green glare: 200 min.





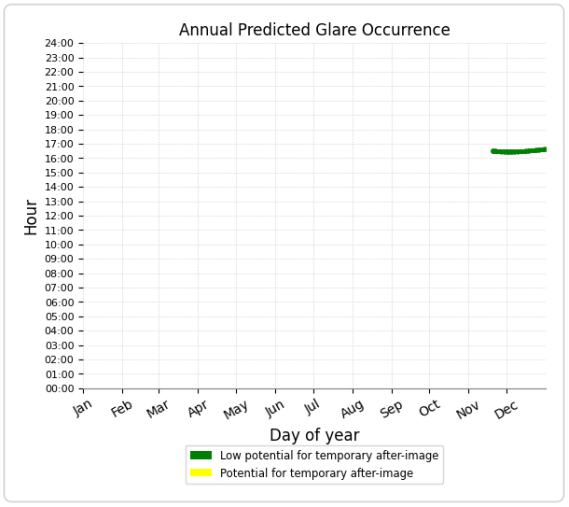


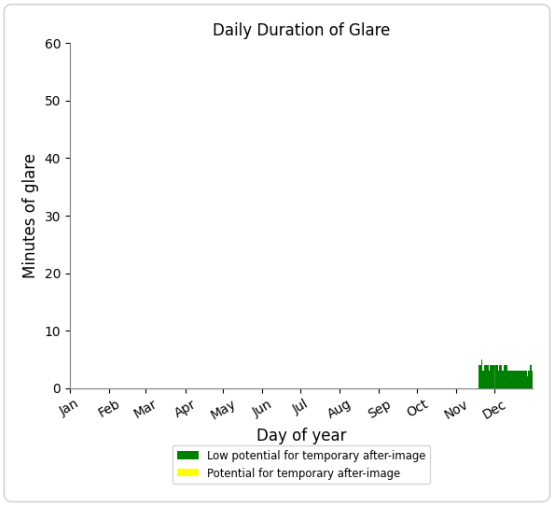


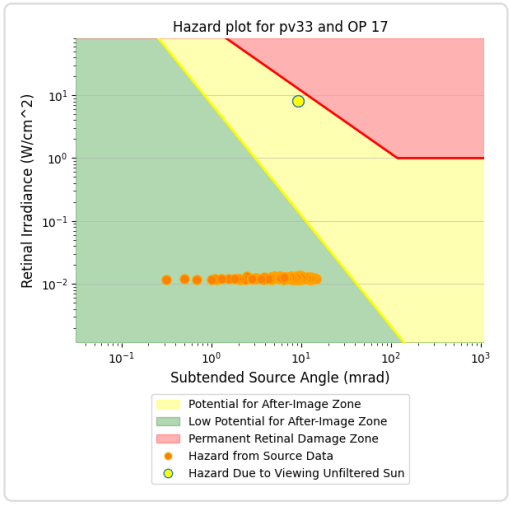
PV33 and OP 17

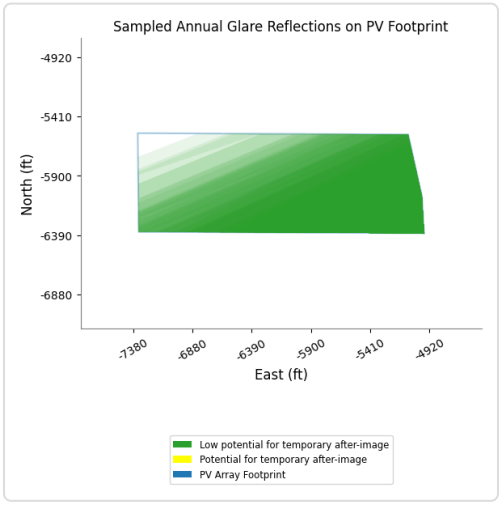
Yellow glare: none

Green glare: 149 min.



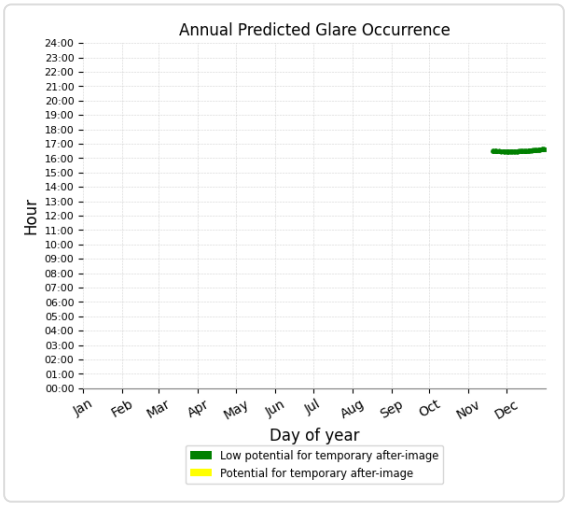


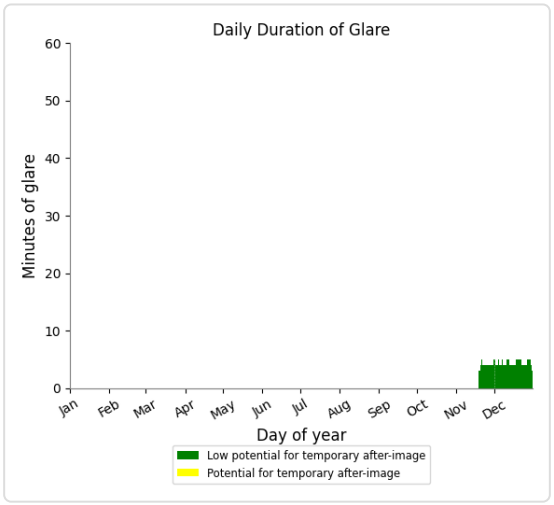


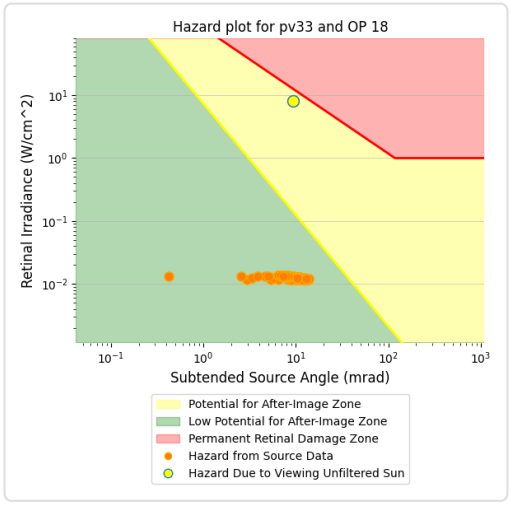


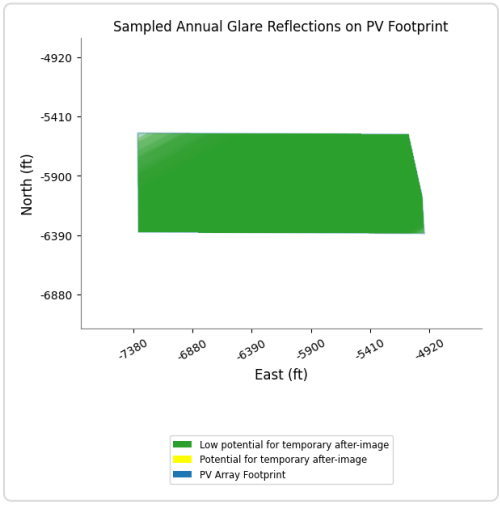
PV33 and OP 18

Yellow glare: none
Green glare: 184 min.









PV33 and OP 1

No glare found

PV33 and OP 2

No glare found

PV33 and OP 3

No glare found

PV33 and OP 4

No glare found

PV33 and OP 5

No glare found

PV33 and OP 6

No glare found

PV33 and OP 7

No glare found

PV33 and OP 8

No glare found

PV33 and OP 9

No glare found

PV33 and OP 10

No glare found

PV33 and OP 11

No glare found

PV33 and OP 12

No glare found

PV33 and OP 13

No glare found

PV33 and OP 14

No glare found

PV33 and OP 16

No glare found

PV33 and OP 19

No glare found

PV33 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV34 low potential for temporary after-image

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 3	114	1.9	0	0.0
OP 5	49	0.8	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV34 and Route: Route01

No glare found

PC ORIGINAL PKG

PV34 and Route: Route02

No glare found

PV34 and Route: Route04

No glare found

PV34 and Route: Route05

No glare found

PV34 and Route: Route06

No glare found

PV34 and Route: Route07

No glare found

PV34 and Route: Route08

No glare found

PV34 and Route: Route09

No glare found

PV34 and Route: Route10

No glare found

PV34 and Route: Route11

No glare found

PV34 and Route: Route12

No glare found

PV34 and FP: NJK08

No glare found

PV34 and FP: NJK12

No glare found

PV34 and FP: NJK26

No glare found

PV34 and FP: NJK30

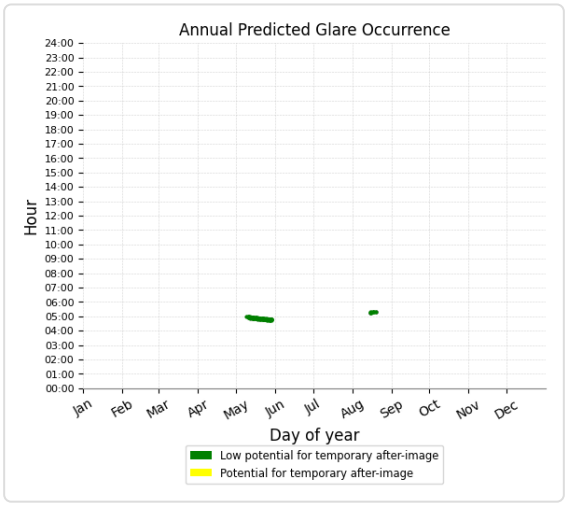
No glare found

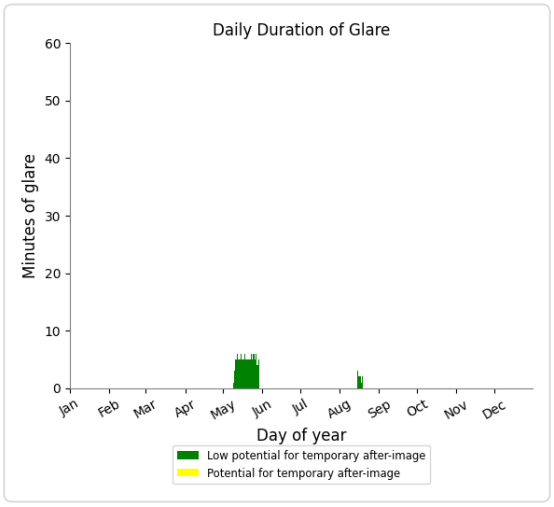
PC ORIGINAL PKG

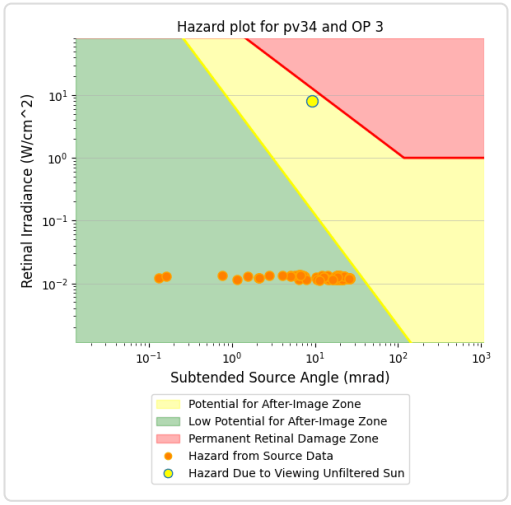
PV34 and OP 3

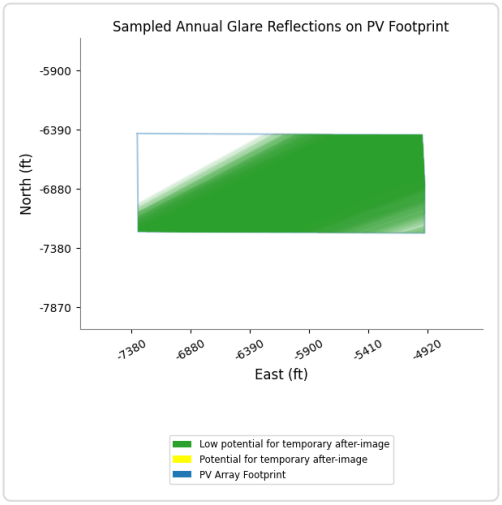
Yellow glare: none

Green glare: 114 min.



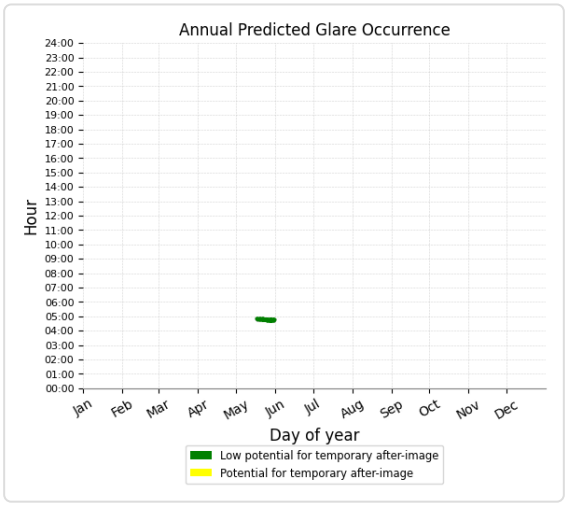


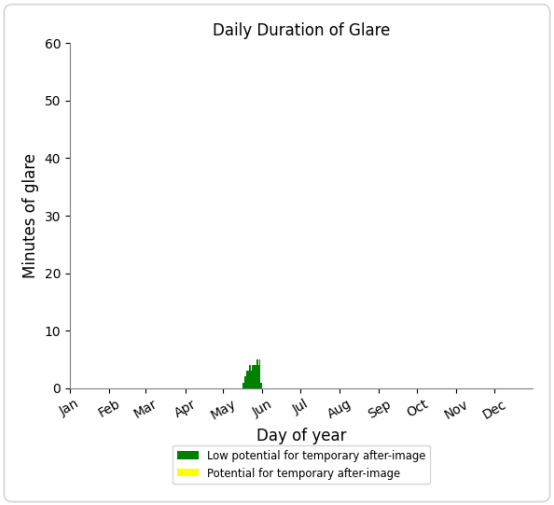


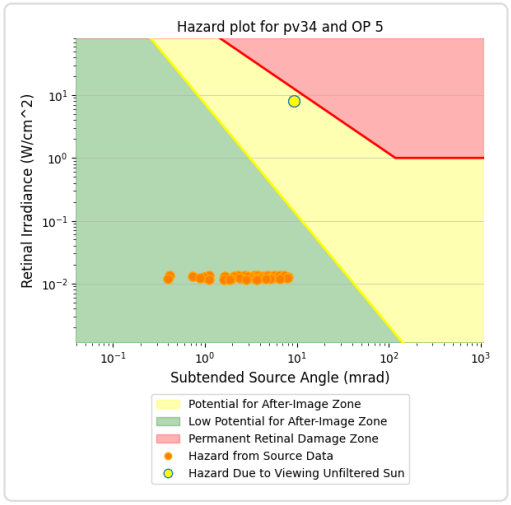


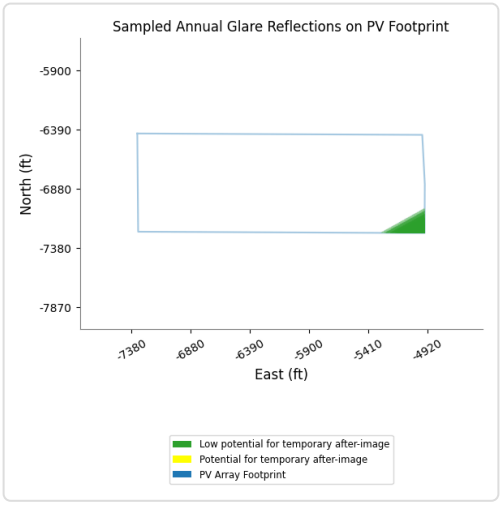
PV34 and OP 5

Yellow glare: none
Green glare: 49 min.









PV34 and OP 1

No glare found

PV34 and OP 2

No glare found

PV34 and OP 4

No glare found

PV34 and OP 6

No glare found

PV34 and OP 7

No glare found

PV34 and OP 8

No glare found

PV34 and OP 9

No glare found

PV34 and OP 10

No glare found

PV34 and OP 11

No glare found

PV34 and OP 12

No glare found

PV34 and OP 13

No glare found

PV34 and OP 14

No glare found

PV34 and OP 15

No glare found

PV34 and OP 16

No glare found

PV34 and OP 17

No glare found

PV34 and OP 18

No glare found

PV34 and OP 19

No glare found

PV34 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV35 potential temporary after-image

Receptor results ordered by category of glare

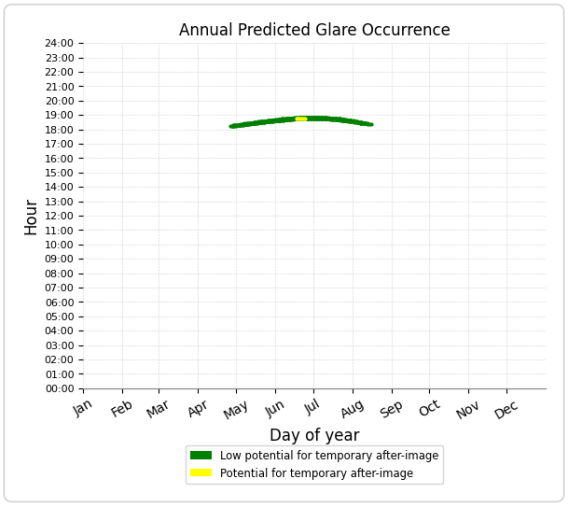
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route12	452	7.5	8	0.1
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 5	218	3.6	0	0.0
OP 15	93	1.6	0	0.0
OP 17	147	2.5	0	0.0
OP 18	111	1.9	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

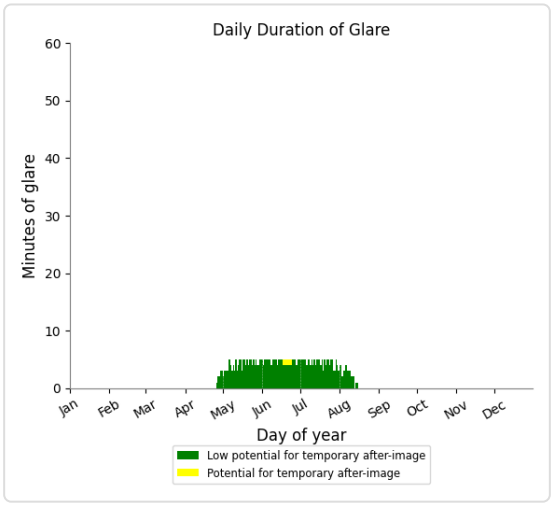
PC ORIGINAL PKG

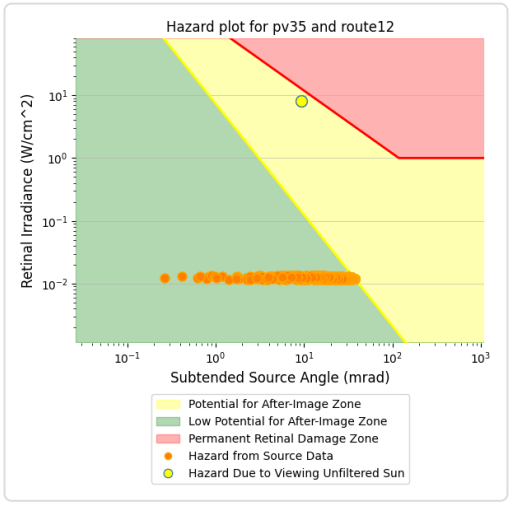
PV35 and Route: Route12

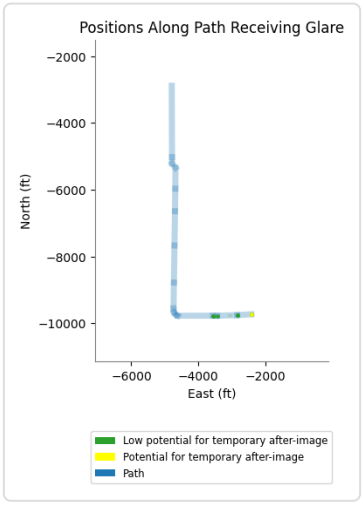
Yellow glare: 8 min.

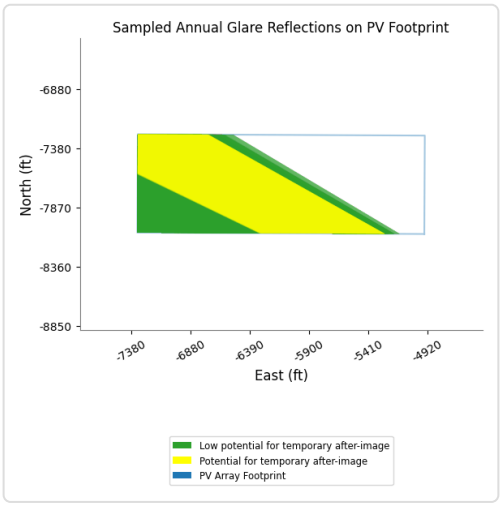
Green glare: 452 min.











PV35 and Route: Route01

No glare found

PV35 and Route: Route02

No glare found

PV35 and Route: Route04

No glare found

PV35 and Route: Route05

No glare found

PV35 and Route: Route06

No glare found

PV35 and Route: Route07

No glare found

PV35 and Route: Route08

No glare found

PV35 and Route: Route09

No glare found

PV35 and Route: Route10

No glare found

PV35 and Route: Route11

No glare found

PV35 and FP: NJK08

No glare found

PV35 and FP: NJK12

No glare found

PV35 and FP: NJK26

No glare found

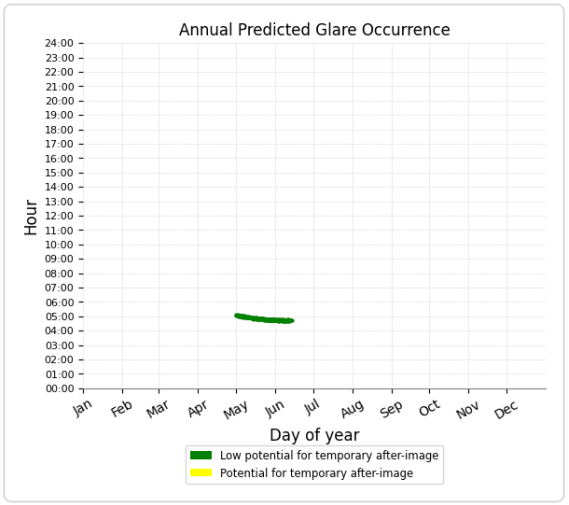
PV35 and FP: NJK30

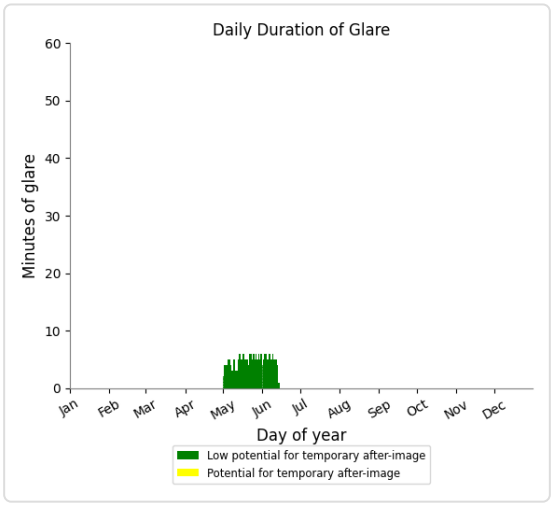
No glare found

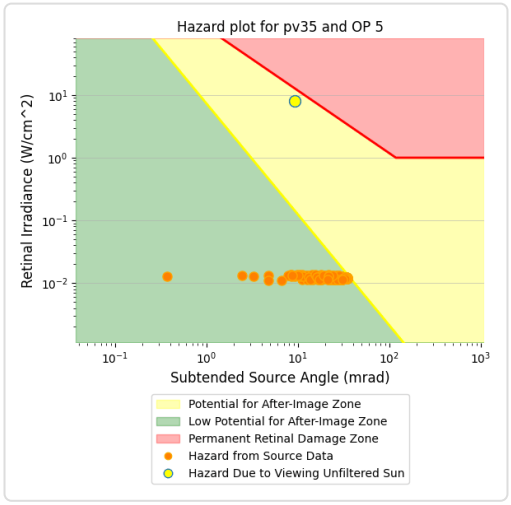
PV35 and OP 5

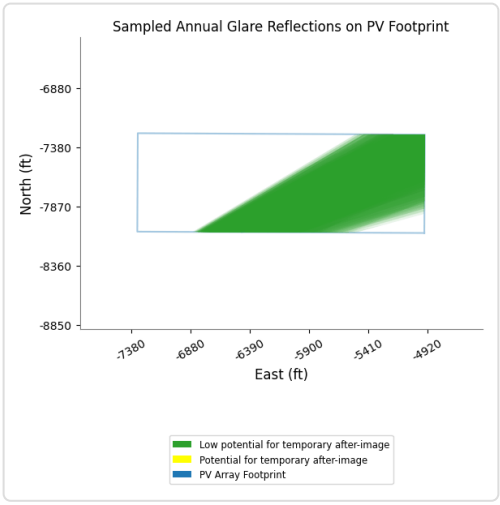
Yellow glare: none

Green glare: 218 min.





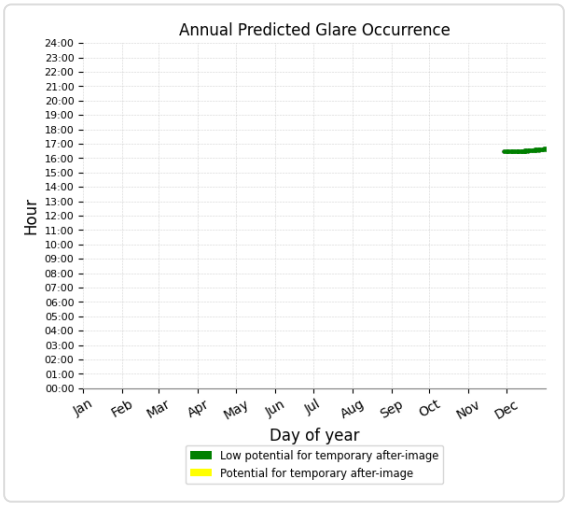


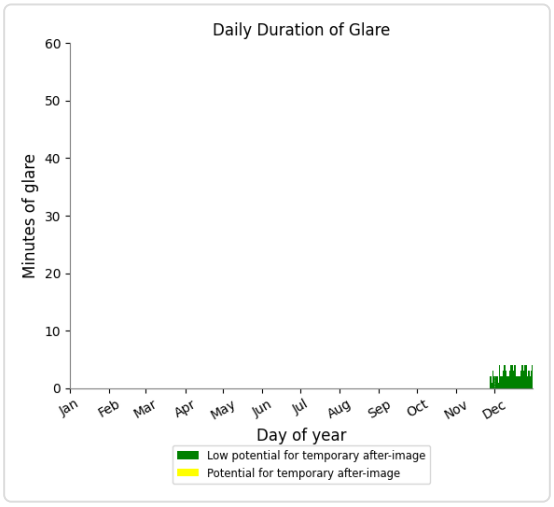


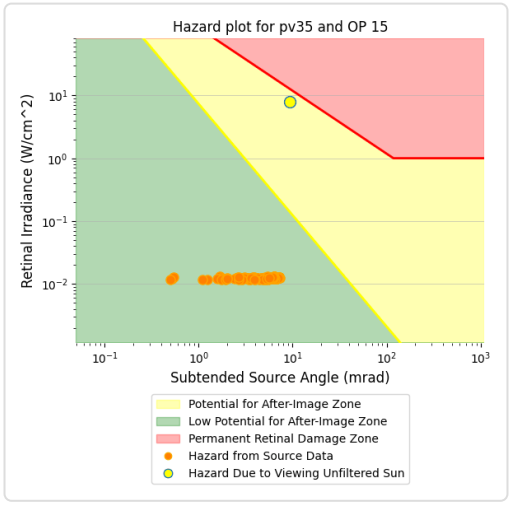
PV35 and OP 15

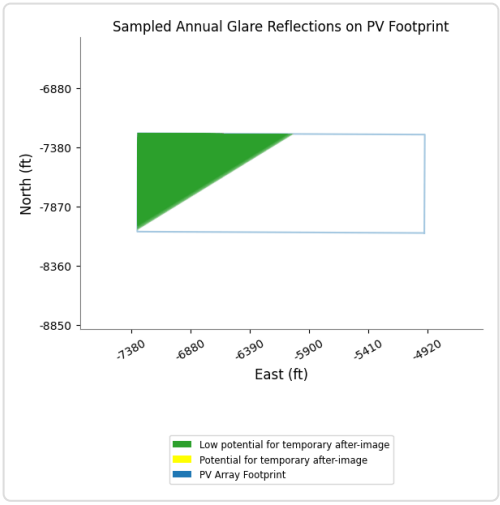
Yellow glare: none

Green glare: 93 min.





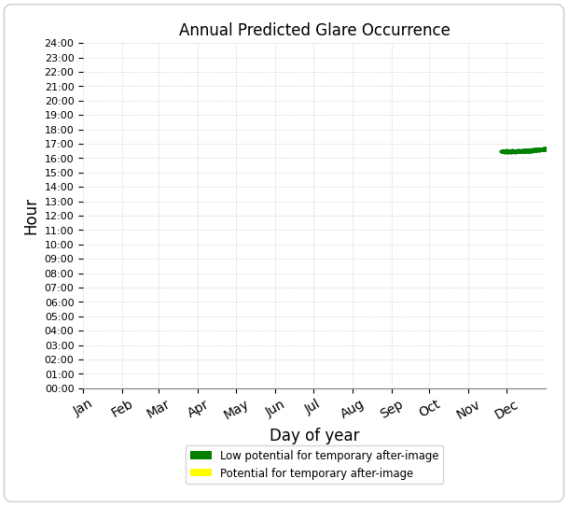


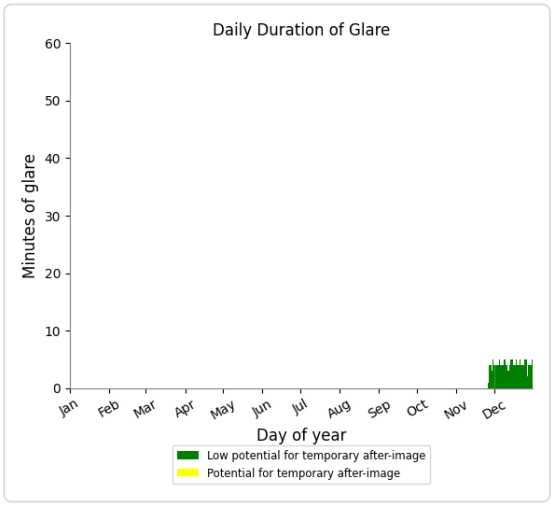


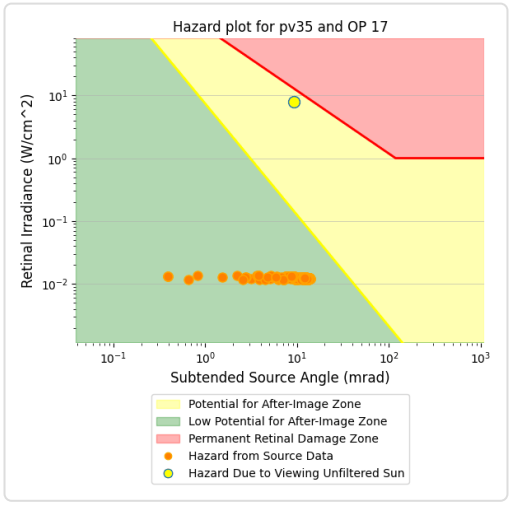
PV35 and OP 17

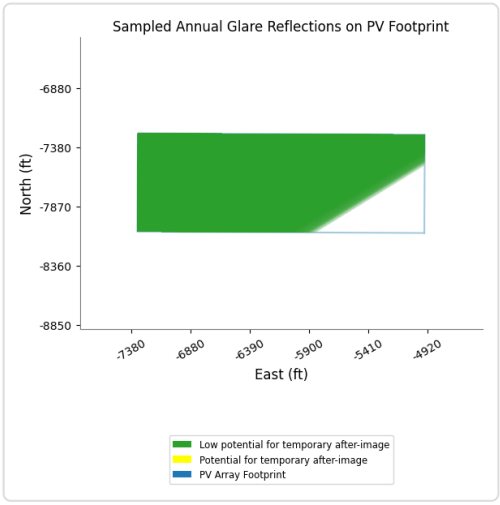
Yellow glare: none

Green glare: 147 min.



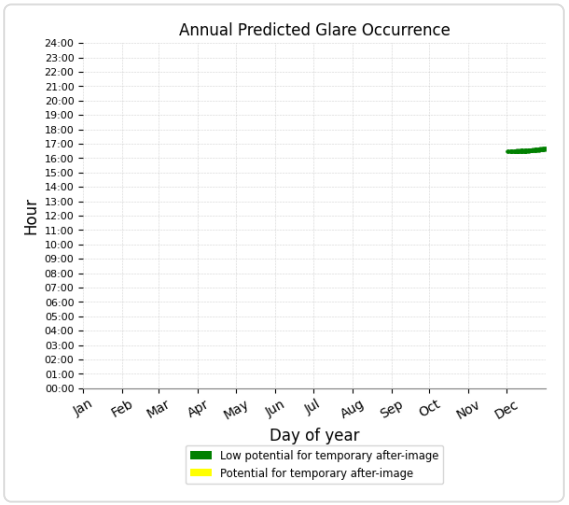


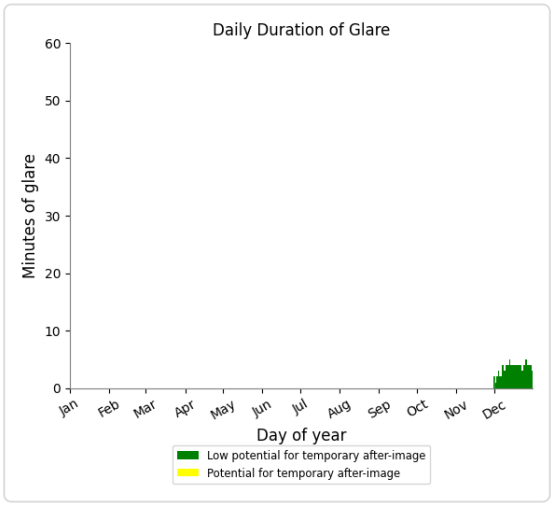


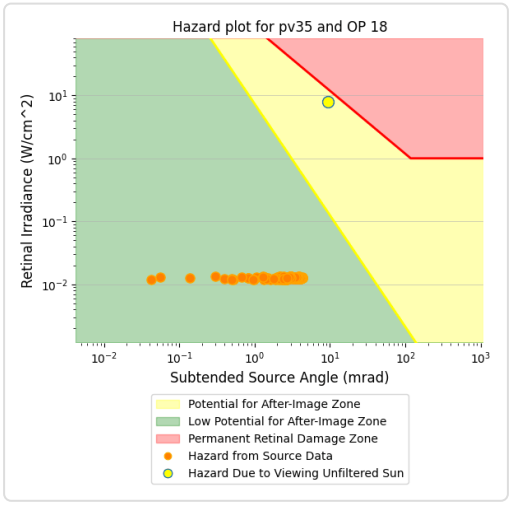


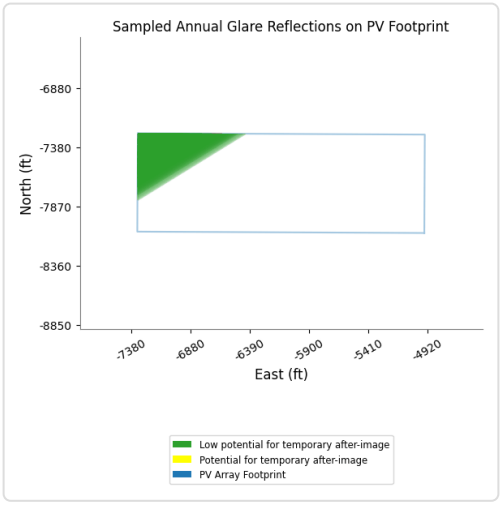
PV35 and OP 18

Yellow glare: none
Green glare: 111 min.









PV35 and OP 1

No glare found

PV35 and OP 2

No glare found

PV35 and OP 3

No glare found

PV35 and OP 4

No glare found

PV35 and OP 6

No glare found

PV35 and OP 7

No glare found

PV35 and OP 8

No glare found

PV35 and OP 9

No glare found

PV35 and OP 10

No glare found

PV35 and OP 11

No glare found

PV35 and OP 12

No glare found

PV35 and OP 13

No glare found

PV35 and OP 14

No glare found

PV35 and OP 16

No glare found

PV35 and OP 19

No glare found

PV35 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV36 potential temporary after-image

Receptor results ordered by category of glare

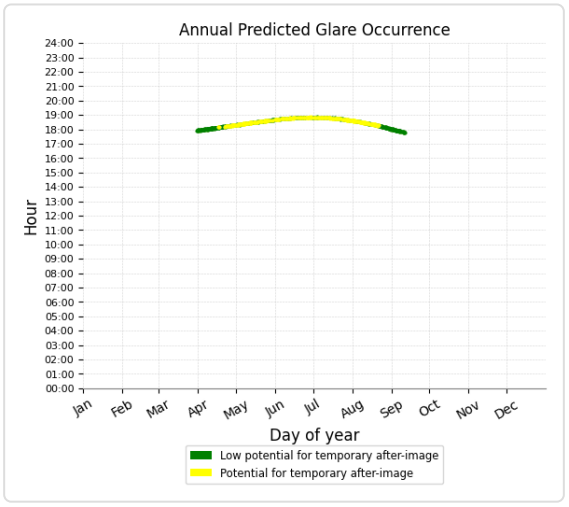
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route12	235	3.9	204	3.4
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 17	22	0.4	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

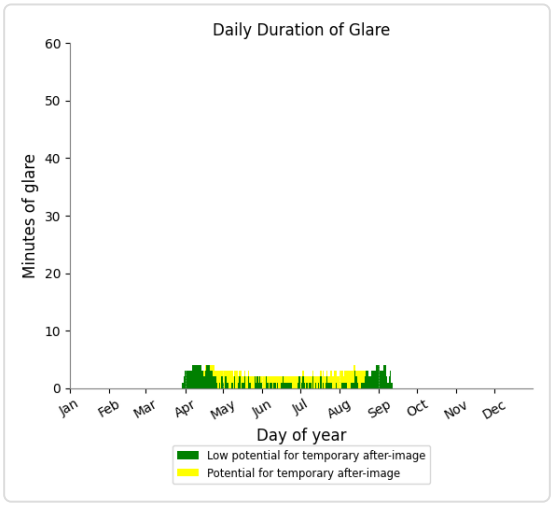
PC ORIGINAL PKG

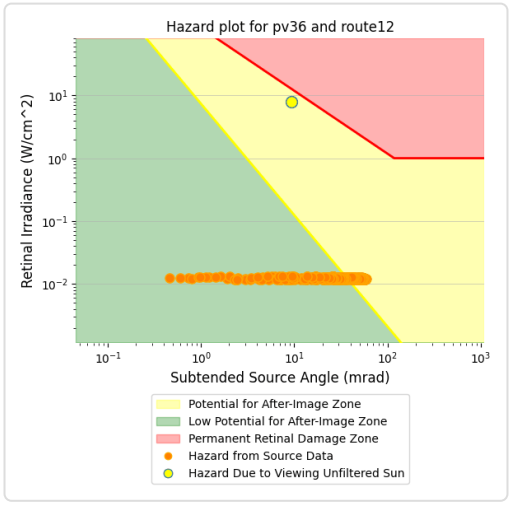
PV36 and Route: Route12

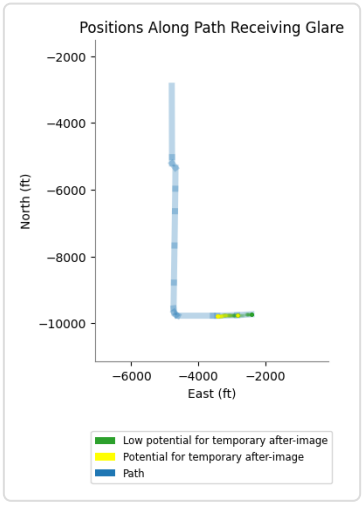
Yellow glare: 204 min.

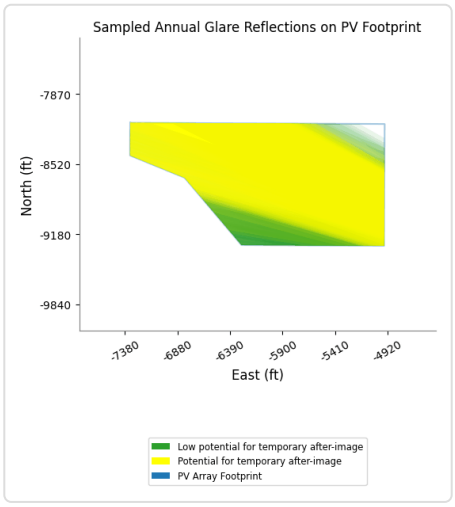
Green glare: 235 min.











PV36 and Route: Route01

No glare found

PV36 and Route: Route02

No glare found

PV36 and Route: Route04

No glare found

PV36 and Route: Route05

No glare found

PV36 and Route: Route06

No glare found

PV36 and Route: Route07

No glare found

PV36 and Route: Route08

No glare found

PV36 and Route: Route09

No glare found

PV36 and Route: Route10

No glare found

PV36 and Route: Route11

No glare found

PV36 and FP: NJK08

No glare found

PV36 and FP: NJK12

No glare found

PV36 and FP: NJK26

No glare found

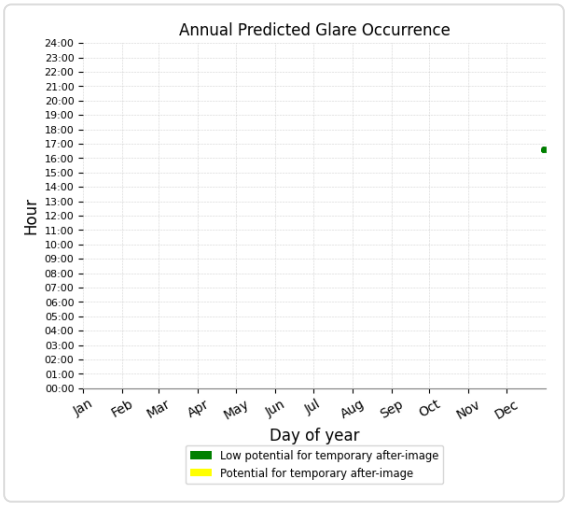
PV36 and FP: NJK30

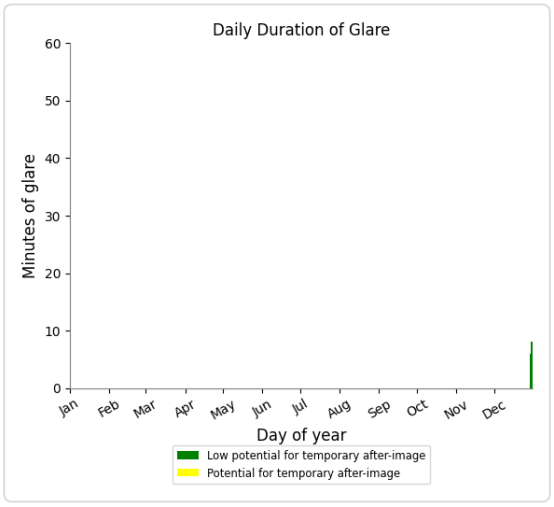
No glare found

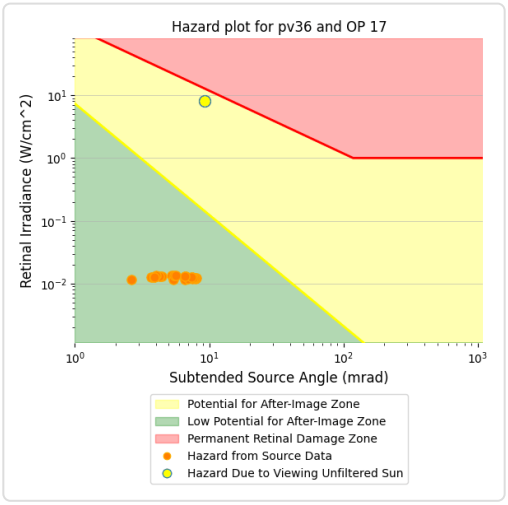
PC ORIGINAL PKG

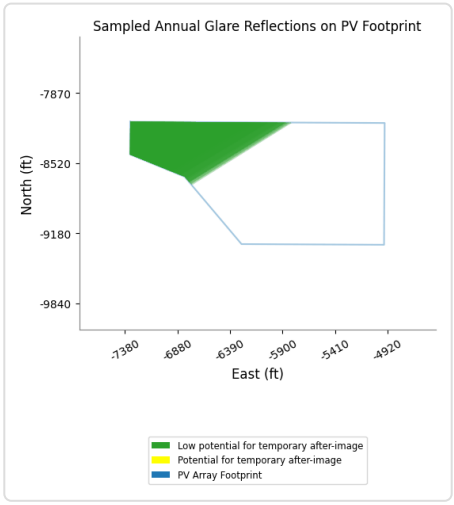
PV36 and OP 17

Yellow glare: none
Green glare: 22 min.









PV36 and OP 1

No glare found

PV36 and OP 2

No glare found

PV36 and OP 3

No glare found

PV36 and OP 4

No glare found

PV36 and OP 5

No glare found

PV36 and OP 6

No glare found

PV36 and OP 7

No glare found

PV36 and OP 8

No glare found

PV36 and OP 9

No glare found

PV36 and OP 10

No glare found

PV36 and OP 11

No glare found

PV36 and OP 12

No glare found

PV36 and OP 13

No glare found

PV36 and OP 14

No glare found

PV36 and OP 15

No glare found

PV36 and OP 16

No glare found

PV36 and OP 18

No glare found

PV36 and OP 19

No glare found

PV36 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV37 potential temporary after-image

Receptor results ordered by category of glare

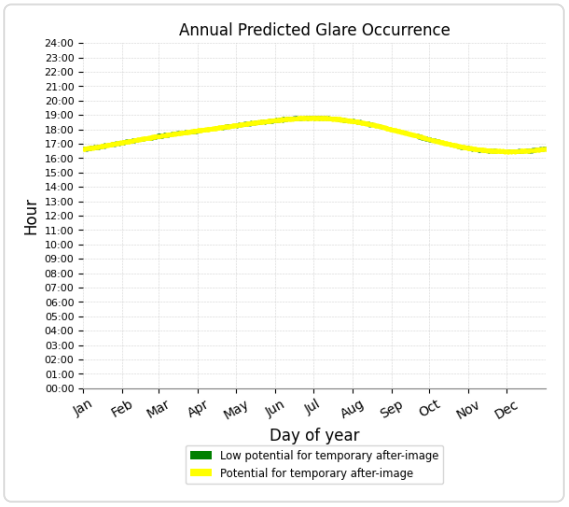
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route12	295	4.9	1,266	21.1
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

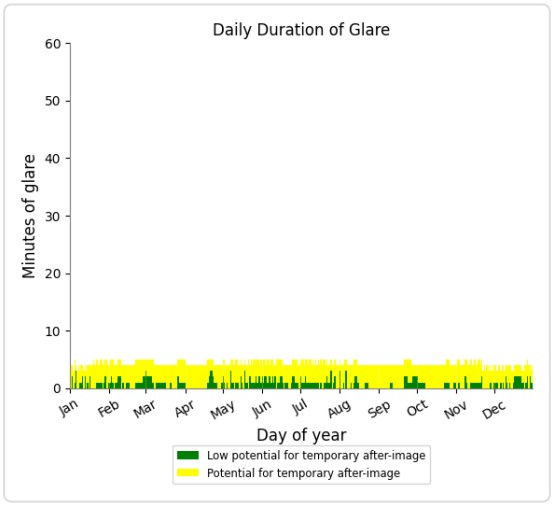
PC ORIGINAL PKG

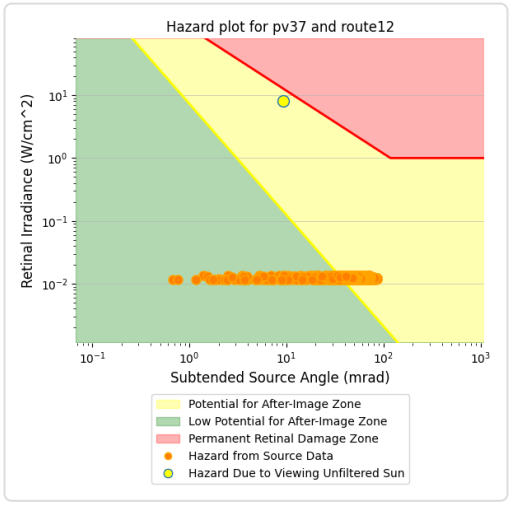
PV37 and Route: Route12

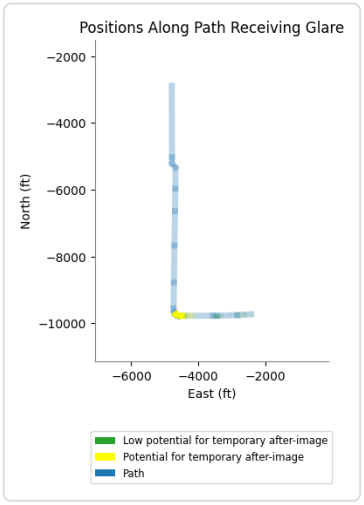
Yellow glare: 1,266 min.

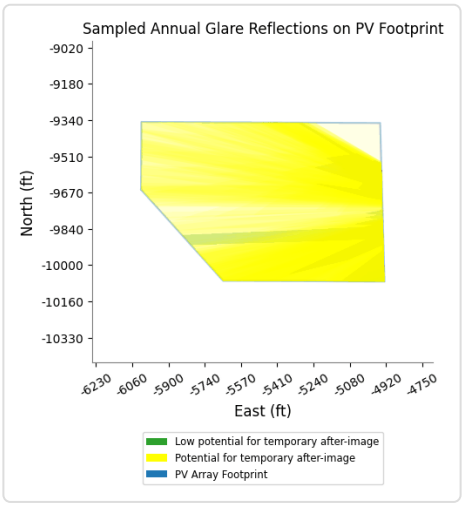
Green glare: 295 min.











PV37 and Route: Route01

No glare found

PV37 and Route: Route02

No glare found

PV37 and Route: Route04

No glare found

PV37 and Route: Route05

No glare found

PV37 and Route: Route06

No glare found

PV37 and Route: Route07

No glare found

PV37 and Route: Route08

No glare found

PV37 and Route: Route09

No glare found

PV37 and Route: Route10

No glare found

PV37 and Route: Route11

No glare found

PV37 and FP: NJK08

No glare found

PV37 and FP: NJK12

No glare found

PV37 and FP: NJK26

No glare found

PV37 and FP: NJK30

No glare found

PV37 and OP 1

No glare found

PC ORIGINAL PKG

PV37 and OP 2

No glare found

PV37 and OP 3

No glare found

PV37 and OP 4

No glare found

PV37 and OP 5

No glare found

PV37 and OP 6

No glare found

PV37 and OP 7

No glare found

PV37 and OP 8

No glare found

PV37 and OP 9

No glare found

PV37 and OP 10

No glare found

PV37 and OP 11

No glare found

PV37 and OP 12

No glare found

PV37 and OP 13

No glare found

PV37 and OP 14

No glare found

PV37 and OP 15

No glare found

PC ORIGINAL PKG

PV37 and OP 16

No glare found

PV37 and OP 17

No glare found

PV37 and OP 18

No glare found

PV37 and OP 19

No glare found

PV37 and 20-ATCT

No glare found

PC ORIGINAL PKG

PV: PV38 potential temporary after-image

Receptor results ordered by category of glare

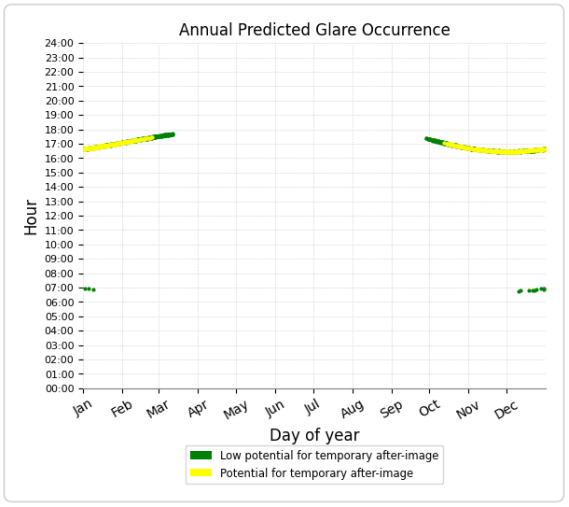
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route12	451	7.5	383	6.4
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 3	115	1.9	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

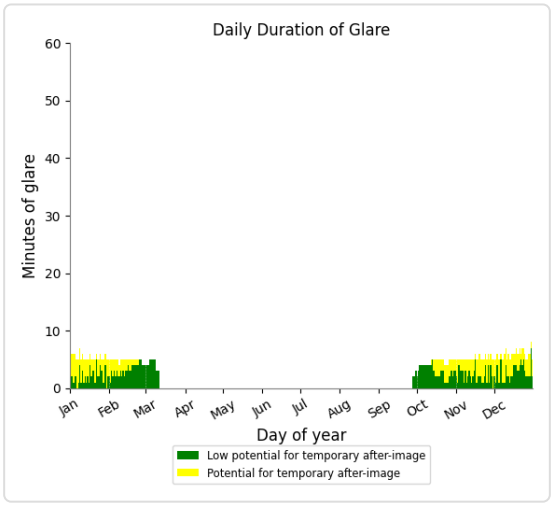
PC ORIGINAL PKG

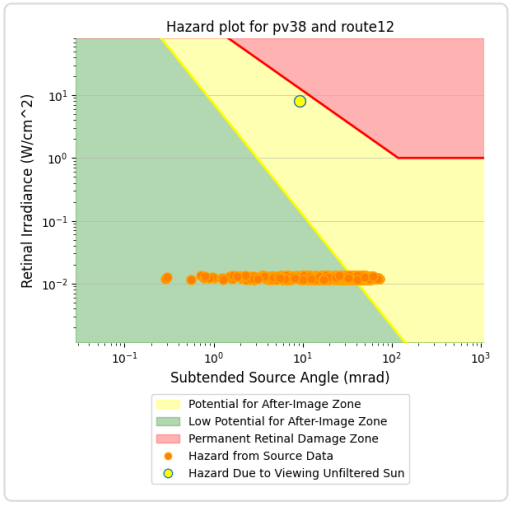
PV38 and Route: Route12

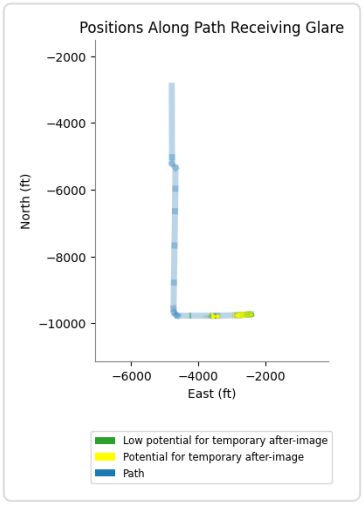
Yellow glare: 383 min.

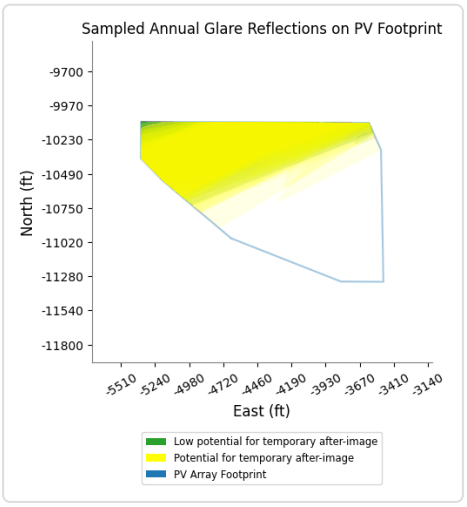
Green glare: 451 min.











PV38 and Route: Route01

No glare found

PV38 and Route: Route02

No glare found

PV38 and Route: Route04

No glare found

PV38 and Route: Route05

No glare found

PV38 and Route: Route06

No glare found

PV38 and Route: Route07

No glare found

PV38 and Route: Route08

No glare found

PV38 and Route: Route09

No glare found

PV38 and Route: Route10

No glare found

PV38 and Route: Route11

No glare found

PV38 and FP: NJK08

No glare found

PV38 and FP: NJK12

No glare found

PV38 and FP: NJK26

No glare found

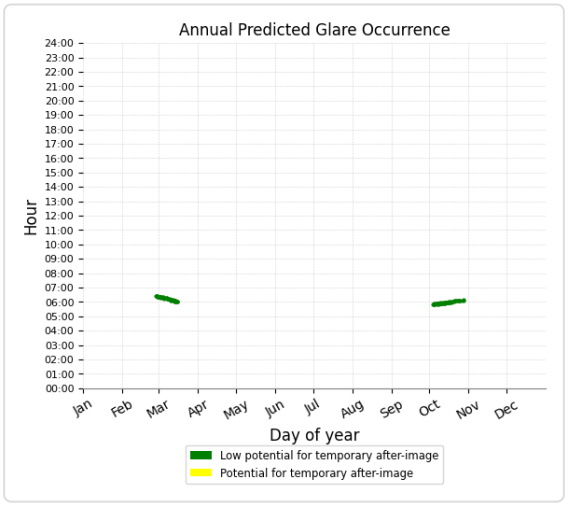
PV38 and FP: NJK30

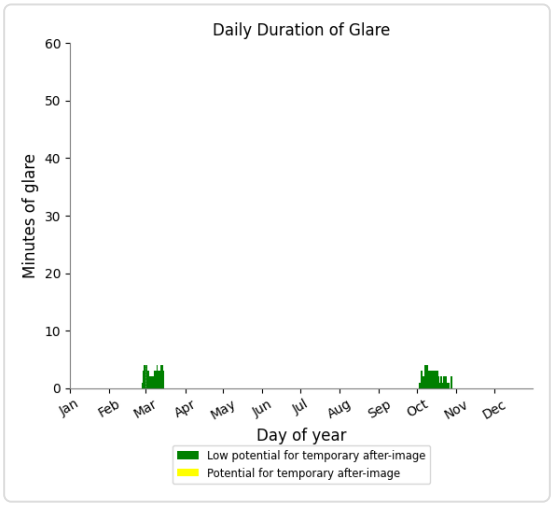
No glare found

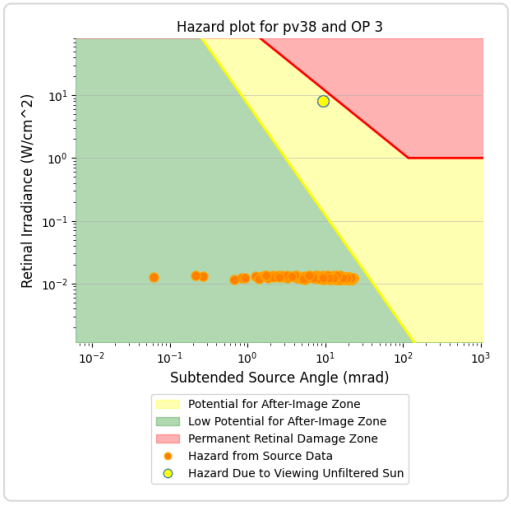
PC ORIGINAL PKG

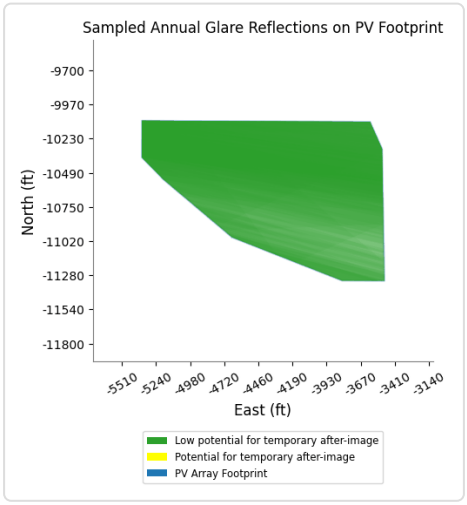
PV38 and OP 3

Yellow glare: none
Green glare: 115 min.









PV38 and OP 1

No glare found

PV38 and OP 2

No glare found

PV38 and OP 4

No glare found

PV38 and OP 5

No glare found

PV38 and OP 6

No glare found

PV38 and OP 7

No glare found

PV38 and OP 8

No glare found

PV38 and OP 9

No glare found

PV38 and OP 10

No glare found

PV38 and OP 11

No glare found

PV38 and OP 12

No glare found

PV38 and OP 13

No glare found

PV38 and OP 14

No glare found

PV38 and OP 15

No glare found

PV38 and OP 16

No glare found

PV38 and OP 17

No glare found

PV38 and OP 18

No glare found

PV38 and OP 19

No glare found

PV38 and 20-ATCT

No glare found

PV: PV39 low potential for temporary after-image

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route01	0	0.0	0	0.0
Route02	0	0.0	0	0.0
Route04	0	0.0	0	0.0
Route05	0	0.0	0	0.0
Route06	0	0.0	0	0.0
Route07	0	0.0	0	0.0
Route08	0	0.0	0	0.0
Route09	0	0.0	0	0.0
Route10	0	0.0	0	0.0
Route11	0	0.0	0	0.0
Route12	0	0.0	0	0.0
NJK08	0	0.0	0	0.0
NJK12	0	0.0	0	0.0
NJK26	0	0.0	0	0.0
NJK30	0	0.0	0	0.0
OP 3	131	2.2	0	0.0
OP 5	44	0.7	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
20-ATCT	0	0.0	0	0.0

PV39 and Route: Route01

No glare found

PC ORIGINAL PKG

PV39 and Route: Route02

No glare found

PV39 and Route: Route04

No glare found

PV39 and Route: Route05

No glare found

PV39 and Route: Route06

No glare found

PV39 and Route: Route07

No glare found

PV39 and Route: Route08

No glare found

PV39 and Route: Route09

No glare found

PV39 and Route: Route10

No glare found

PV39 and Route: Route11

No glare found

PV39 and Route: Route12

No glare found

PV39 and FP: NJK08

No glare found

PV39 and FP: NJK12

No glare found

PV39 and FP: NJK26

No glare found

PV39 and FP: NJK30

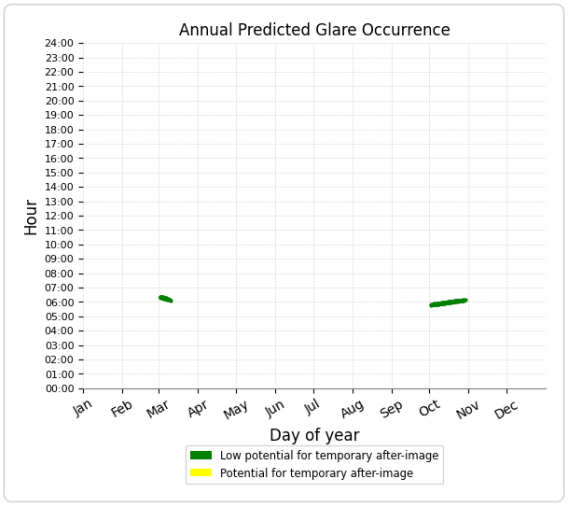
No glare found

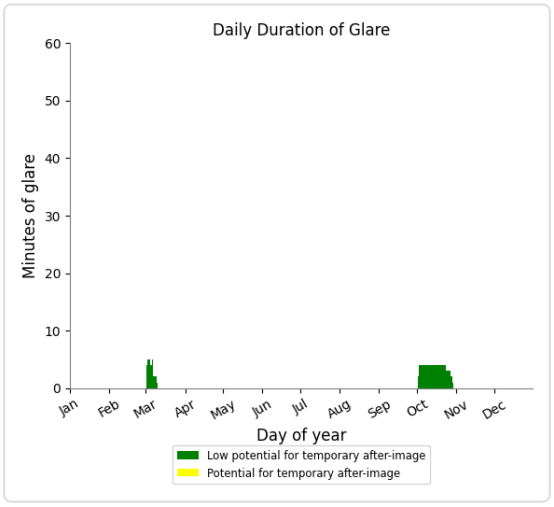
PC ORIGINAL PKG

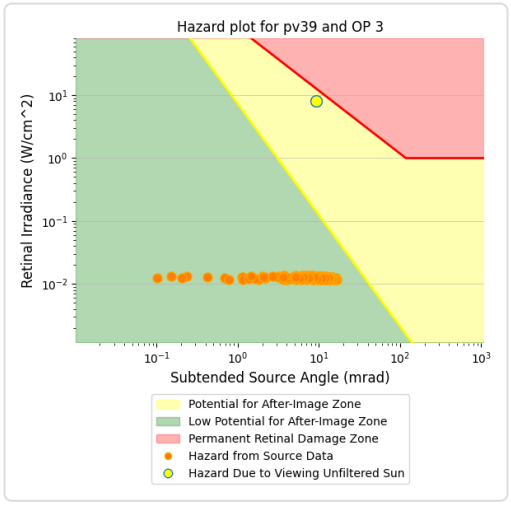
PV39 and OP 3

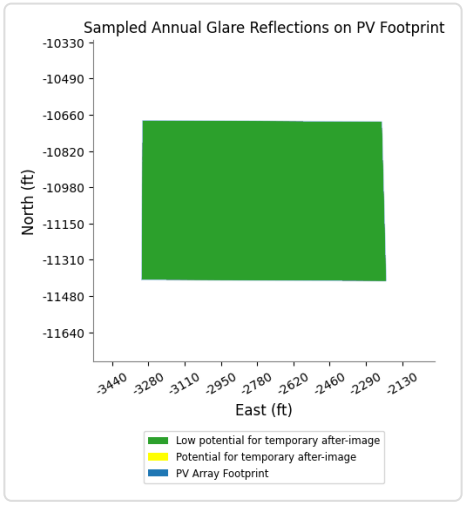
Yellow glare: none

Green glare: 131 min.



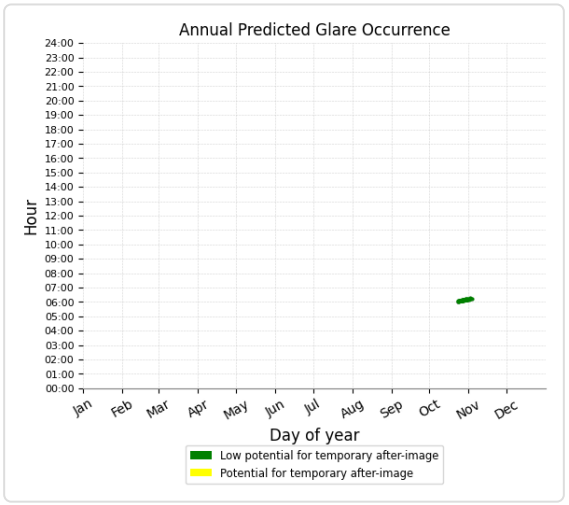


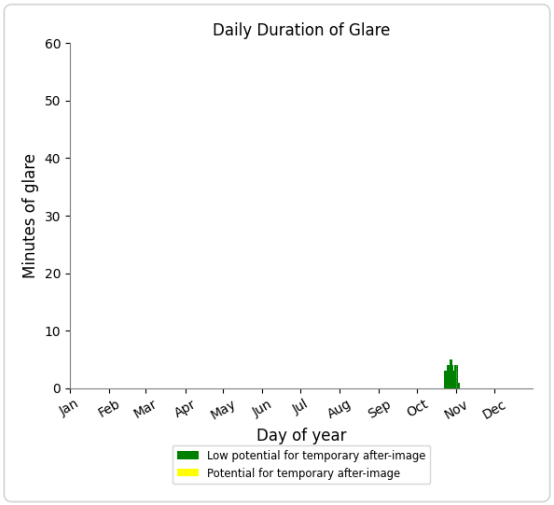


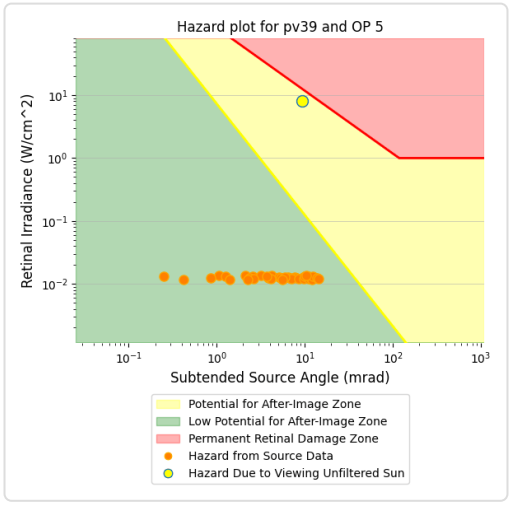


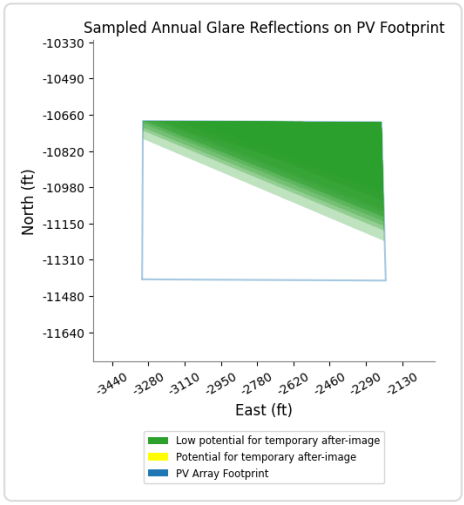
PV39 and OP 5

Yellow glare: none
Green glare: 44 min.









PV39 and OP 1

No glare found

PV39 and OP 2

No glare found

PV39 and OP 4

No glare found

PV39 and OP 6

No glare found

PV39 and OP 7

No glare found

PV39 and OP 8

No glare found

PV39 and OP 9

No glare found

PV39 and OP 10

No glare found

PV39 and OP 11

No glare found

PV39 and OP 12

No glare found

PV39 and OP 13

No glare found

PV39 and OP 14

No glare found

PV39 and OP 15

No glare found

PV39 and OP 16

No glare found

PV39 and OP 17

No glare found

PV39 and OP 18

No glare found

PV39 and OP 19

No glare found

PV39 and 20-ATCT

No glare found

PC ORIGINAL PKG

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

© Sims Industries d/b/a ForgeSolar, All Rights Reserved.

Land Evaluation and Site Assessment Model

Big Rock 2 Cluster and Storage Project

Imperial County, CA
December 2024

PC ORIGINAL PKG

Contents

1 Land Evaluation and Site Assessment Model 1
1.1 Introduction 1
2 Project Location 1
3 Project Description 3
4 Land Evaluation and Site Assessment 3
4.1 Land Evaluation 3
4.2 Site Assessment Factors 9
4.2.1 Project Size Rating 9
4.2.2 Water Resources Availability Rating 9
4.2.3 Surrounding Agricultural Land Rating 10
4.2.4 Surrounding Protected Resource Land Rating 10
5 Summary 19
6 References 20

Tables

Table 1. Soil Suitability 5
Table 2. Land Evaluation Worksheet 7
Table 3. Site Assessment Worksheet 1 – Project Size Score 9
Table 4. Site Assessment Worksheet 2 – Water Resources Availability 10
Table 5. Surrounding Agricultural and Protected Resource Lands 13
Table 6. Zone of Influence Surrounding Agricultural Land and Protected Resource Land Scores 17
Table 7. Final Land Evaluation Site Assessment Score Sheet Summary 19
Table 8. California LESA Model Scoring Thresholds 19

Figures

Figure 1. Regional Location 2
Figure 2. Project Soil Types 6
Figure 3. Zone of Influence 12

Appendices

A Custom Soil Report

PC ORIGINAL PKG

This page is intentionally left blank.

PC ORIGINAL PKG

1 Land Evaluation and Site Assessment Model

1.1 Introduction

Land evaluation and site assessment (LESA) is a term used to define an approach for rating the relative quality of land resources based upon specific measurable features. The LESA system is a point-based approach composed of six different factors. Two land evaluation (LE) factors are based upon measures of soil resource quality. Four site assessment (SA) factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, each of these factors is separately rated on a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. This score becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds (California Department of Conservation 1997).

Appendix G of the California Environmental Quality Act Guidelines (CEQA) identifies the California Agricultural LESA Model as an optional model to use in assessing impacts on agriculture and farmland. A LESA model was prepared for the proposed Big Rock 2 Cluster and Storage Project (project), and the results are provided in this report.

2 Project Location

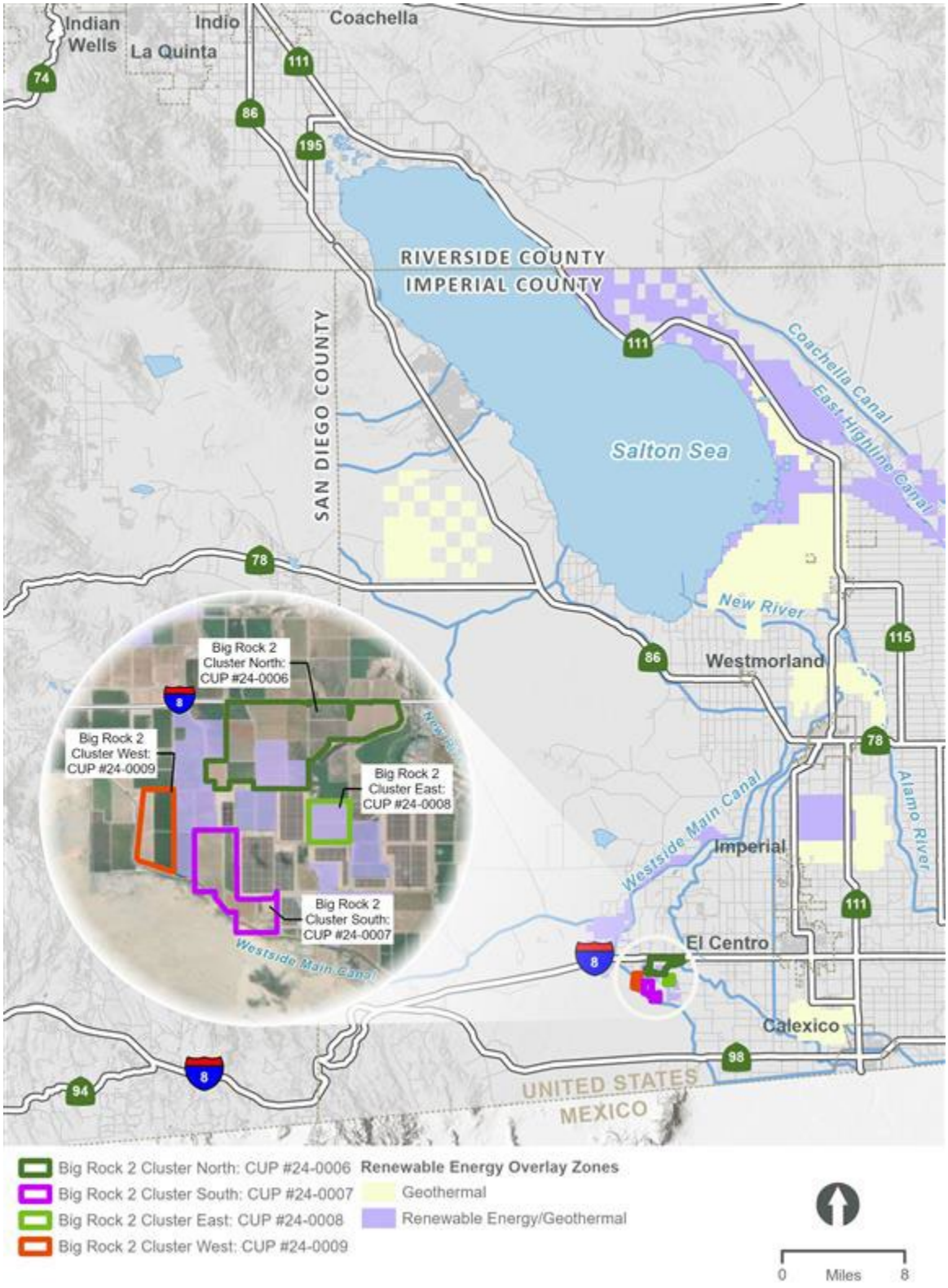
The project is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The project site comprises approximately 1,849 acres of land. Figure 1 shows the regional location of the project.

The project area is relatively flat, consisting primarily of agriculture fields and unpaved roads. All of the project parcels have been extensively cleared, plowed, and maintained for agricultural production. Current land use of the project area includes cropland, dryland grain crops, and irrigated grain and hayfields, row crops, orchards, and pastureland.

The project is adjacent and proximal to both agricultural and rural lands that have been rezoned for renewable energy (RE), specifically for solar and battery energy storage projects that have been approved by Imperial County. Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. To the south of the project, the San Diego Gas and Electric (SDG&E) Imperial Valley Substation as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

PC ORIGINAL PKG

Figure 1. Regional Location



PC ORIGINAL PKG

3 Project Description

The project applicant is seeking approval of four Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The proposed project would involve utilization of approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the proposed project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The proposed project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads; 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "proposed project" or "project."

4 Land Evaluation and Site Assessment

The site was evaluated using the California LESA model to rate the quality and availability of agricultural resources for the project site and identify whether the proposed project would meet the threshold criteria as a significant impact to Agricultural Resources under the CEQA Guidelines. The LESA evaluates LE and SA factors to identify if the project would result in a significant agricultural resources impact. The factors are evaluated in the following sections.

4.1 Land Evaluation

The LE portion of the LESA Model focuses on two main components that are separately rated:

1. **Land Capability Classification Rating:** The land capability classification (LCC) indicates the suitability of soils for most kinds of crops. Soils are rated from Class 1 to Class 8, with soils having the fewest limitations receiving the highest rating.

PC ORIGINAL PKG

2. **Storie Index Rating:** The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture use. This rating is based upon soil characteristics only.

Figure 2 depicts the distribution of soil types on the project site. Table 1 details the varieties of soils found on the project site, along with their Capability Class and Storie Index rating.

The LESA model assigns ratings to each land capability class and multiplies that number by the proportion of the project area that contains each soil class to find the LCC score. A Storie Index score is calculated by multiplying the proportion of the project within each soil type by the soil type's Storie Index rating. Table 2 provides a summary of the LE scores. The final LE and SA scores are entered into the final LESA Score Sheet, as shown in Table 6.

PC ORIGINAL PKG

Table 1. Soil Suitability

Map Symbol	Mapping Unit	LCC Capability Class	Storie Index Rating*
102	Badland	N/A	0
107	Glenbar loam	1	95
110	Holtville silty clay, wet	1	54
114	Imperial silty clay, wet	3w	36
115	Imperial-Glenbar silty clay loams complex, 0 to 2 percent slopes, wet	3w	66*
118	Indio loam, wet	1	59
119	Indio-Vint complex, 0 to 2 percent slopes	2s	90*
121	Meloland fine sand	3s	95
122	Meloland very fine sandy loam, wet	3s	85
123	Meloland-Holtville 0 to 2 percent slopes, wet	1	66*
126	Niland fine sand	1	62
130	Rositas sand, 0 to 2 percent slopes	1	51
132	Rositas fine sand, 0 to 2 percent slopes	3s	55
135	Rositas fine sand, wet	3s	45
142	Vint loamy very fine sand, wet	2w	60
144	Vint and Indio very fine sandy loams undifferentiated group, 0 to 2 percent slopes, Wet	2w	63*
145	Water	N/A	0

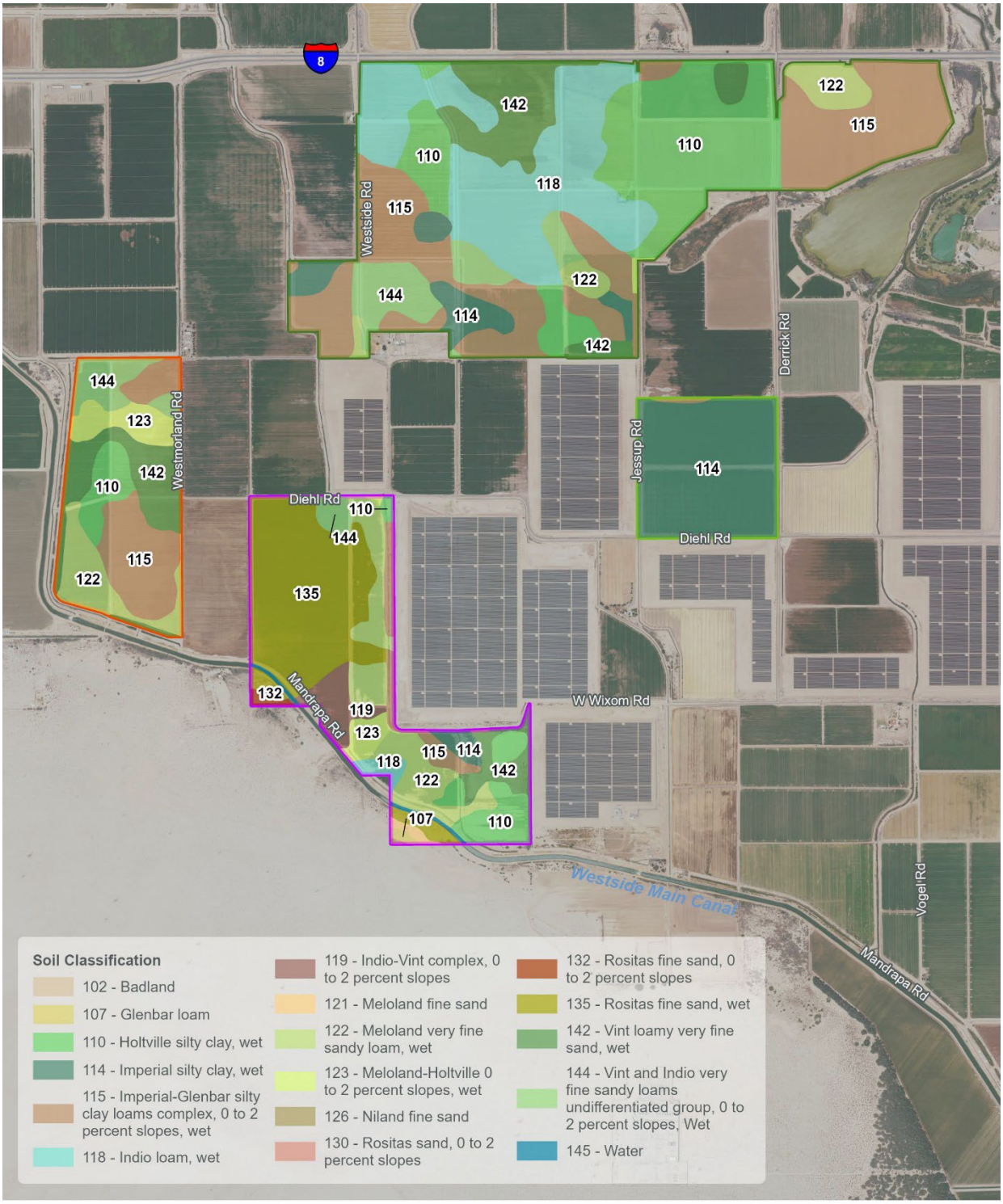
Source: Appendix A of this LESA

Notes: LCC = Land Capability Classification; NR = not rated; e = erosion; w = excess wetness; s = problems in the rooting zone; — = not applicable.

* The average of the two Storie Index values for the soil type are reported in the table.

PC ORIGINAL PKG

Figure 2. Project Soil Types



PC ORIGINAL PKG

Table 2. Land Evaluation Worksheet

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC (Irrigated)	LCC Rating (Irrigated)	LCC Score (C x E)	Storie Index	Storie Index Score (C x G)
102	0.19	0.0%	N/A	0	0.0	0	0.0
107	2.07	0.1%	1	100	0.11	95	0.10
110	308.86	16.7%	1	100	16.68	54	9.01
114	213.93	11.5%	3w	60	6.92	36	4.15
115	400.33	21.6%	3w	60	12.97	66*	14.26
118	255.27	13.8%	1	100	13.78	59	8.13
119	23.74	1.3%	2s	80	1.02	90*	1.15
121	3.31	0.2%	3s	60	0.11	95	0.17
122	152.63	8.3%	3s	60	4.95	85	7.01
123	41.58	2.3%	1	100	2.25	66*	1.49
126	0.20	0.0%	1	100	0.01	62	0.01
130	0.22	0.0%	1	100	0.01	51	0.01
132	3.79	0.2%	3s	60	0.12	55	0.11
135	174.12	9.4%	3s	60	5.64	45	4.23
142	166.25	9.0%	2w	80	7.17	60	5.38
144	102.08	5.5%	2w	80	4.42	63*	3.48
145	4.45	0.2%	N/A	0	0.00	0	0.00
Totals[1]	**1853.03**	**100%**	**--**	**--**	**76.16**	**--**	**58.68**

Notes: LCC = Land Capability Classification; NR = not rated; e = erosion; w = excess wetness; s = problems in the rooting zone; — = not applicable.
* The average of the two Storie Index values for the soil type are reported in the table.
1 - Totals may not sum precisely due to rounding.

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

4.2 Site Assessment Factors

The California LESA model includes four SA factors that are separately rated and include:

1. Project size rating
2. Water resources availability rating
3. Surrounding agricultural land rating
4. Surrounding protected resource land rating

4.2.1 Project Size Rating

The project size rating recognizes the role that farm size plays in the viability of commercial agricultural operations. In general, larger farming operations can provide greater flexibility in farm management and marketing decisions. Larger operations tend to have greater impacts upon the local economy through direct employment, as well as impacts upon supporting industries and food processing industries (California Department of Conservation 1997).

In terms of agricultural productivity, the size of the farming operation can be considered not only from its total acreage but the acreage of different quality lands that comprise the operation. Lands with higher quality soils lend themselves to greater management and cropping flexibility and have the potential to provide greater economic return per acre unit. For a given project, instead of relying upon a single acreage figure in the project size rating, the project is divided into three acreage groupings based upon the LCC ratings previously determined in the LE analysis. Under the project size rating, relatively fewer acres of high quality soils are required to achieve a maximum project size score. Alternatively, a maximum score on lesser quality soils could also achieve a maximum project size score. Table 3 summarizes the project size score for the proposed project.

Table 3. Site Assessment Worksheet 1 – Project Size Score

	LCC Class I-II	LCC Class III	LCC Class IV-VIII
Total Acres	900.28	948.11	0
Project Size Scores	100	100	0
Highest Project Size Score	100	100	0

4.2.2 Water Resources Availability Rating

The water resources availability rating is based upon identifying the various water sources that may supply a given property, and then determining whether different restrictions in supply are likely to take place in years that are characterized as being periods of drought and non-drought.

PC ORIGINAL PKG

The project site is completely served by irrigation water provided by the Imperial Irrigation District. The proposed project was given the highest water resource availability rating given the consistent water delivery provided by Imperial Irrigation District to the project site. The project has no physical or economic restrictions that may alter water resource supply during either drought or non-drought years. Table 4 summarizes the water resources availability score.

Table 4. Site Assessment Worksheet 2 – Water Resources Availability

A	B	C	D	E
Project Portion	**Water Source**	**Proportion of Project Area**	**Water Availability Score**	**Weighted Availability Score (C x D)**
1	Irrigation Water	1.0	100	100
Total Water Resource Score				**100**

4.2.3 Surrounding Agricultural Land Rating

The surrounding agricultural land rating is designed to provide a measurement of the level of agricultural land use for lands within the zone of influence of the subject parcel. The definition of a 'zone of influence' is the amount of surrounding lands up to a minimum of 0.25 mile from the project boundary. Parcels that are intersected by the 0.25-mile buffer are included in their entirety (Figure 3). Based upon the percentage of agricultural land in the zone of influence, the project site is assigned a surrounding agricultural land score. The LESA model rates the potential significance of the conversion of an agricultural parcel that has a large proportion of surrounding land in agricultural production more highly than one that has a relatively small percentage of surrounding land in agricultural production (California Department of Conservation 1997).

Table 5 identifies the agricultural lands within the Zone of Influence. The surrounding agricultural land score for the proposed project is provided in Table 6.

4.2.4 Surrounding Protected Resource Land Rating

The surrounding protected resource land rating is essentially an extension of the surrounding agricultural land rating and scored in a similar manner. Protected resource lands are those lands with long-term use restrictions compatible with or supportive of agricultural uses of land. Included among them are the following:

- Williamson Act contracted land
- Publicly owned lands maintained as park, forest, or watershed resources
- Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses

On February 23, 2010, the Imperial County Board of Supervisors voted to reject any new Williamson Act contracts and not to renew existing contracts because of the elimination of the subvention funding from the state budget. Imperial County reaffirmed this decision in a vote on October 12, 2010, and notices of nonrenewal were sent to landowners with Williamson Act contracts following that vote. The applicable deadlines for challenging

PC ORIGINAL PKG

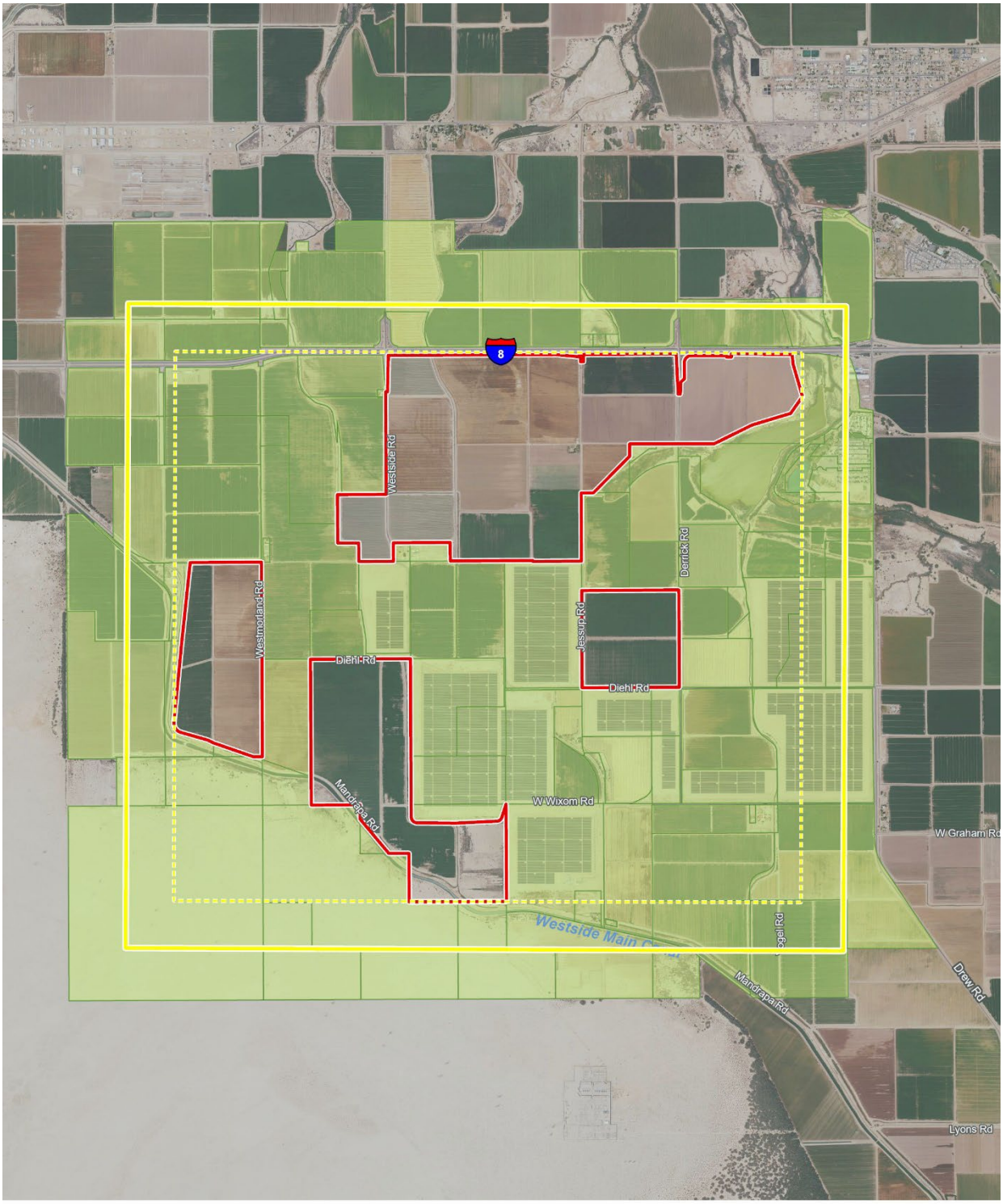
Imperial County's actions have expired, and, therefore, all Williamson Act contracts in Imperial County will terminate on or before December 31, 2018. For the purposes of this LESA, the parcels located within the zone of influence identified as being located on Williamson Act contracted land (non-renewal) are not considered protected resources.

Protected resources within 0.25 mile of the project site include public lands managed by the Bureau of Land Management and Imperial County lands zoned for open space and preservation.

Table 5 identifies the protected resource lands within the Zone of Influence. The surrounding protected resource land score for the proposed project is provided in Table 6.

PC ORIGINAL PKG

Figure 3. Zone of Influence



PC ORIGINAL PKG

Table 5. Surrounding Agricultural and Protected Resource Lands

Surrounding Parcels	Acres	Protected Resource Land?	Acres in Protected Land	Percent Protected Resource Land	Agricultural Land?	Acres of Agriculture	Percent Agricultural Land
051-260-004	160.54	NO	0.00	0.0%	YES	157.41	98.0%
051-260-017	80.44	NO	0.00	0.0%	YES	80.42	100.0%
051-260-022	68.15	NO	0.00	0.0%	YES	68.15	100.0%
051-260-023	63.96	NO	0.00	0.0%	YES	63.96	100.0%
051-260-030	79.04	NO	0.00	0.0%	YES	78.71	99.6%
051-260-031	79.94	NO	0.00	0.0%	YES	67.91	84.9%
051-270-001	24.09	NO	0.00	0.0%	YES	24.09	100.0%
051-270-007	159.10	NO	0.00	0.0%	YES	159.10	100.0%
051-270-016	13.14	NO	0.00	0.0%	YES	13.14	100.0%
051-270-023	159.56	NO	0.00	0.0%	YES	157.67	98.8%
051-270-025	15.37	NO	0.00	0.0%	YES	15.37	100.0%
051-270-027	138.73	NO	0.00	0.0%	YES	138.73	100.0%
051-270-035	131.63	NO	0.00	0.0%	YES	131.63	100.0%
051-270-037	58.63	NO	0.00	0.0%	YES	58.63	100.0%
051-270-038	0.98	NO	0.00	0.0%	YES	0.98	100.0%
051-270-039	21.39	NO	0.00	0.0%	YES	21.39	100.0%
051-270-040	194.53	NO	0.00	0.0%	YES	183.10	94.1%
051-270-042	2.65	NO	0.00	0.0%	YES	2.65	100.0%
051-270-043	2.64	NO	0.00	0.0%	YES	2.64	100.0%
051-270-044	2.61	NO	0.00	0.0%	YES	2.61	100.0%
051-270-045	17.95	NO	0.00	0.0%	YES	17.95	100.0%

PC ORIGINAL PKG

051-270-046	0.14	NO	0.00	0.0%	YES	0.14	100.0%
051-270-047	80.62	NO	0.00	0.0%	YES	80.62	100.0%
051-280-044	83.35	NO	0.00	0.0%	YES	82.77	99.3%
051-280-045	0.56	NO	0.00	0.0%	YES	0.56	100.0%
051-280-050	34.58	NO	0.00	0.0%	YES	5.47	15.8%
051-280-052	100.22	NO	0.00	0.0%	YES	84.46	84.3%
051-280-056	10.69	NO	0.00	0.0%	NO	0	0%
051-280-057	25.73	NO	0.00	0.0%	NO	0	0%
051-280-058	24.75	NO	0.00	0.0%	NO	0	0%
051-280-059	27.82	NO	0.00	0.0%	NO	0	0%
051-280-060	5.26	NO	0.00	0.0%	NO	0	0%
051-280-061	14.96	NO	0.00	0.0%	NO	0	0%
051-280-062	102.50	NO	0.00	0.0%	YES	7.55	7.4%
051-290-013	80.42	NO	0.00	0.0%	YES	80.42	100.0%
051-290-014	78.20	NO	0.00	0.0%	YES	78.20	100.0%
051-290-021	5.85	NO	0.00	0.0%	NO	0	0%
051-290-027	24.17	NO	0.00	0.0%	YES	1.21	5.0%
051-290-028	148.74	YES	147.07	98.9%	YES	139.07	93.5%
051-290-034	4.60	NO	0.00	0.0%	YES	0.21	4.7%
051-290-035	236.33	NO	0.00	0.0%	YES	232.23	98.3%
051-290-038	14.14	NO	0.00	0.0%	YES	14.14	100.0%
051-300-004	11.25	NO	0.00	0.0%	YES	2.99	26.6%
051-300-005	80.09	NO	0.00	0.0%	YES	76.96	96.1%
051-300-008	79.92	NO	0.00	0.0%	YES	79.89	100.0%
051-300-009	76.02	NO	0.00	0.0%	YES	74.33	97.8%
051-300-010	5.21	NO	0.00	0.0%	NO	0	0%

PC ORIGINAL PKG

051-300-025	164.87	NO	0.00	0.0%	YES	1.58	1.0%
051-300-027	12.60	NO	0.00	0.0%	NO	0	0%
051-300-030	209.72	NO	0.00	0.0%	YES	209.72	100.0%
051-300-031	2.57	NO	0.00	0.0%	YES	2.57	100.0%
051-300-034	4.67	NO	0.00	0.0%	YES	0.38	8.2%
051-300-038	76.00	NO	0.00	0.0%	YES	40.94	53.9%
051-300-039	48.58	NO	0.00	0.0%	YES	47.09	96.9%
051-310-002	16.28	NO	0.00	0.0%	YES	0.27	1.7%
051-310-017	29.78	NO	0.00	0.0%	YES	26.40	88.7%
051-310-018	72.45	NO	0.00	0.0%	YES	56.29	77.7%
051-310-023	60.27	NO	0.00	0.0%	YES	56.07	93.0%
051-310-026	40.18	NO	0.00	0.0%	YES	40.18	100.0%
051-310-040	89.27	NO	0.00	0.0%	YES	0.31	0.4%
051-310-044	5.91	NO	0.00	0.0%	YES	3.45	58.3%
051-310-049	12.32	NO	0.00	0.0%	YES	6.76	54.9%
051-310-050	42.38	NO	0.00	0.0%	YES	42.08	99.3%
051-310-053	38.15	NO	0.00	0.0%	YES	29.01	76.0%
051-310-054	67.04	NO	0.00	0.0%	YES	61.15	91.2%
051-310-055	59.31	NO	0.00	0.0%	YES	57.93	97.7%
051-310-056	80.49	NO	0.00	0.0%	YES	0.27	0.3%
051-310-062	155.00	NO	0.00	0.0%	YES	14.02	9.0%
051-310-063	58.92	NO	0.00	0.0%	NO	0	0%
051-320-003	205.62	YES	202.70	98.6%	YES	197.49	96.0%
051-320-004	37.47	NO	0.00	0.0%	YES	5.47	14.6%
051-320-008	4.67	NO	0.00	0.0%	NO	0	0%
051-320-009	79.84	YES	59.74	74.8%	YES	0.05	0.1%

PC ORIGINAL PKG

051-320-011	39.86	NO	0.00	0.0%	NO	0	0%
051-330-001	89.46	NO	0.00	0.0%	YES	88.36	98.8%
051-330-002	30.36	YES	30.13	99.3%	YES	0.91	3.0%
051-330-005	78.03	NO	0.00	0.0%	NO	0	0%
051-330-015	115.05	NO	0.00	0.0%	YES	0.14	0.1%
051-330-016	0.91	NO	0.00	0.0%	YES	0.01	0.8%
051-330-017	2.56	NO	0.00	0.0%	YES	0.92	35.8%
051-330-019	101.83	NO	0.00	0.0%	YES	9.98	9.8%
051-330-020	39.96	NO	0.00	0.0%	NO	0	0%
051-330-021	8.80	NO	0.00	0.0%	YES	4.15	47.2%
051-330-022	37.02	NO	0.00	0.0%	YES	36.28	98.0%
051-330-023	18.84	NO	0.00	0.0%	YES	11.21	59.5%
051-330-024	58.54	NO	0.00	0.0%	YES	49.33	84.3%
051-340-002	639.41	NO	0.00	0.0%	NO	0	0%
051-350-001	120.07	YES	120.07	100.0%	NO	0	0%
051-350-002	400.28	YES	11.38	2.8%	YES	2.50	0.6%
051-350-003	8.31	YES	4.06	48.9%	NO	0	0%
051-350-005	27.91	NO	0.00	0.0%	YES	2.36	8.4%
051-350-009	120.04	YES	11.14	9.3%	YES	5.63	4.7%
051-350-010	80.07	YES	75.17	93.9%	YES	79.39	99.2%
051-350-011	66.74	YES	61.60	92.3%	YES	56.20	84.2%
051-350-015	105.88	NO	0.00	0.0%	YES	98.50	93.0%
051-350-016	0.07	NO	0.00	0.0%	NO	0	0%
051-350-017	0.91	NO	0.00	0.0%	NO	0	0%
051-350-018	172.11	NO	0.00	0.0%	YES	28.38	16.5%
051-350-019	14.65	NO	0.00	0.0%	YES	10.47	71.5%

PC ORIGINAL PKG

051-360-001	57.06	NO	0.00	0.0%	YES	0.50	0.9%
051-360-002	23.16	NO	0.00	0.0%	NO	0	0%
051-360-003	32.03	NO	0.00	0.0%	NO	0	0%
051-360-004	54.48	NO	0.00	0.0%	YES	0.76	1.4%
051-360-005	110.88	NO	0.00	0.0%	YES	102.43	92.4%
051-360-014	80.08	NO	0.00	0.0%	YES	80.08	100.0%
051-360-018	1.80	NO	0.00	0.0%	YES	1.63	90.5%
051-360-021	100.94	NO	0.00	0.0%	YES	81.47	80.7%
051-360-022	3.25	NO	0.00	0.0%	YES	0.24	7.4%
051-360-028	128.06	NO	0.00	0.0%	YES	127.35	99.4%
051-360-031	243.48	NO	0.00	0.0%	YES	242.92	99.8%
051-360-032	204.05	NO	0.00	0.0%	YES	0.07	0.0%
051-360-037	1.86	NO	0.00	0.0%	NO	0	0%
051-360-038	57.50	NO	0.00	0.0%	YES	45.85	79.7%
051-390-001	37.53	NO	0.00	0.0%	YES	1.92	5.1%
051-390-003	80.11	NO	0.00	0.0%	YES	76.00	94.9%
TOTALS[1]	**8099.48**	**--**	**723.07**	**8.9%**	**--**	**4632.88**	**57.2%**

1 - Totals may not sum precisely due to rounding.

Table 6. Zone of Influence Surrounding Agricultural Land and Protected Resource Land Scores

Total Acreage within Zone of Influence	Acres in Agricultural Production	Acres of Protected Resource Land	Percent in Agriculture	Percent Protected Resource Land	Surrounding Agricultural Land Score (from LESA Manual Table 6)	Surrounding Protected Resource Land Score (from LESA Manual Table 7)
8099.48	**4632.88**	**723.07**	**57.2%**	**8.9%**	**40**	**0**

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

5 Summary

The LESA Model is weighted so half of the total score of a given project is derived from the LE and half from the SA. As shown in Table 7, the LE subscore is 33.71, while the SA subscore is 36.00. The final LESA score is 69.71. As shown in Table 8, a final LESA score between 60 and 79 points is considered significant unless either LE or SA subscore is less than 20 points. Therefore, with both subscores above 20, the project is considered to have a significant impact on agricultural resources.

Table 7. Final Land Evaluation Site Assessment Score Sheet Summary

	Factor Rating (0-100 Rating)	Factor Weighting (Total =1.00)	Weighted Factor Rating
Land Evaluation			
1. LCC Rating	76.16	0.25	19.04
1. Storie Index Rating	58.68	0.25	14.67
LE Subscore	--	--	33.71
Site Assessment			
1. Project Size Rating	100	0.15	15
2. Water Resource Availability Rating	100	0.15	15
3. Surrounding Agricultural Land Rating	40	0.15	6
4. Surrounding Protected Resource Lands Rating	0	0.05	0
Site Assessment Subscore	--	--	36
TOTAL	**--**	**--**	**69.71**

Table 8. California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA subscores are greater than or equal to 20 points
60 to 79 points	Considered significant unless either LE or SA subscore is less than 20 points
80 to 100 points	Considered significant

PC ORIGINAL PKG

6 References

California Department of Conservation. 1997. California Agricultural Land Evaluation and Site Assessment Model Instruction Manual.

PC ORIGINAL PKG

Appendix A. Custom Soil Report

PC ORIGINAL PKG

United States Department of Agriculture

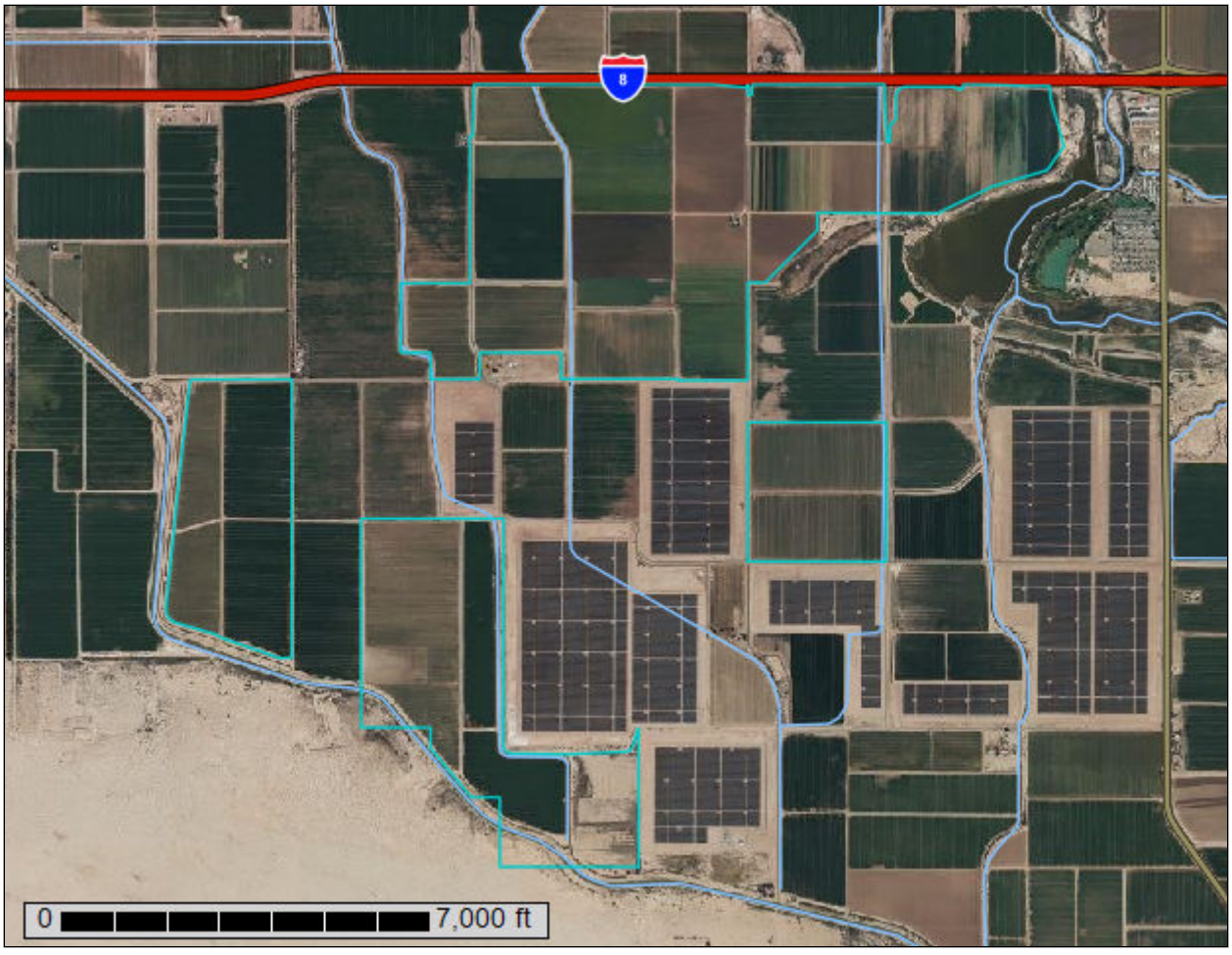
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Imperial County, California, Imperial Valley Area

Site Areas



PC ORIGINAL PKG

December 18, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

PC ORIGINAL PKG

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

PC ORIGINAL PKG

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Imperial County, California, Imperial Valley Area.....14
102—Badland.....14
107—Glenbar loam.....15
110—Holtville silty clay, wet.....17
114—Imperial silty clay, wet.....19
115—Imperial-Glenbar silty clay loams complex, 0 to 2 percent slopes, wet.....20
118—Indio loam, wet.....22
119—Indio-Vint complex, 0 to 2 percent slopes.....24
121—Meloland fine sand.....26
122—Meloland very fine sandy loam, wet.....28
123—Meloland-Holtville 0 to 2 percent slopes, wet.....29
126—Niland fine sand.....32
130—Rositas sand, 0 to 2 percent slopes.....33
132—Rositas fine sand, 0 to 2 percent slopes.....35
135—Rositas fine sand, wet.....37
142—Vint loamy very fine sand, wet.....38
144—Vint and Indio very fine sandy loams undifferentiated group, 0 to 2 percent slopes, Wet.....40
145—Water.....42
References.....43

PC ORIGINAL PKG

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

PC ORIGINAL PKG

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

PC ORIGINAL PKG

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

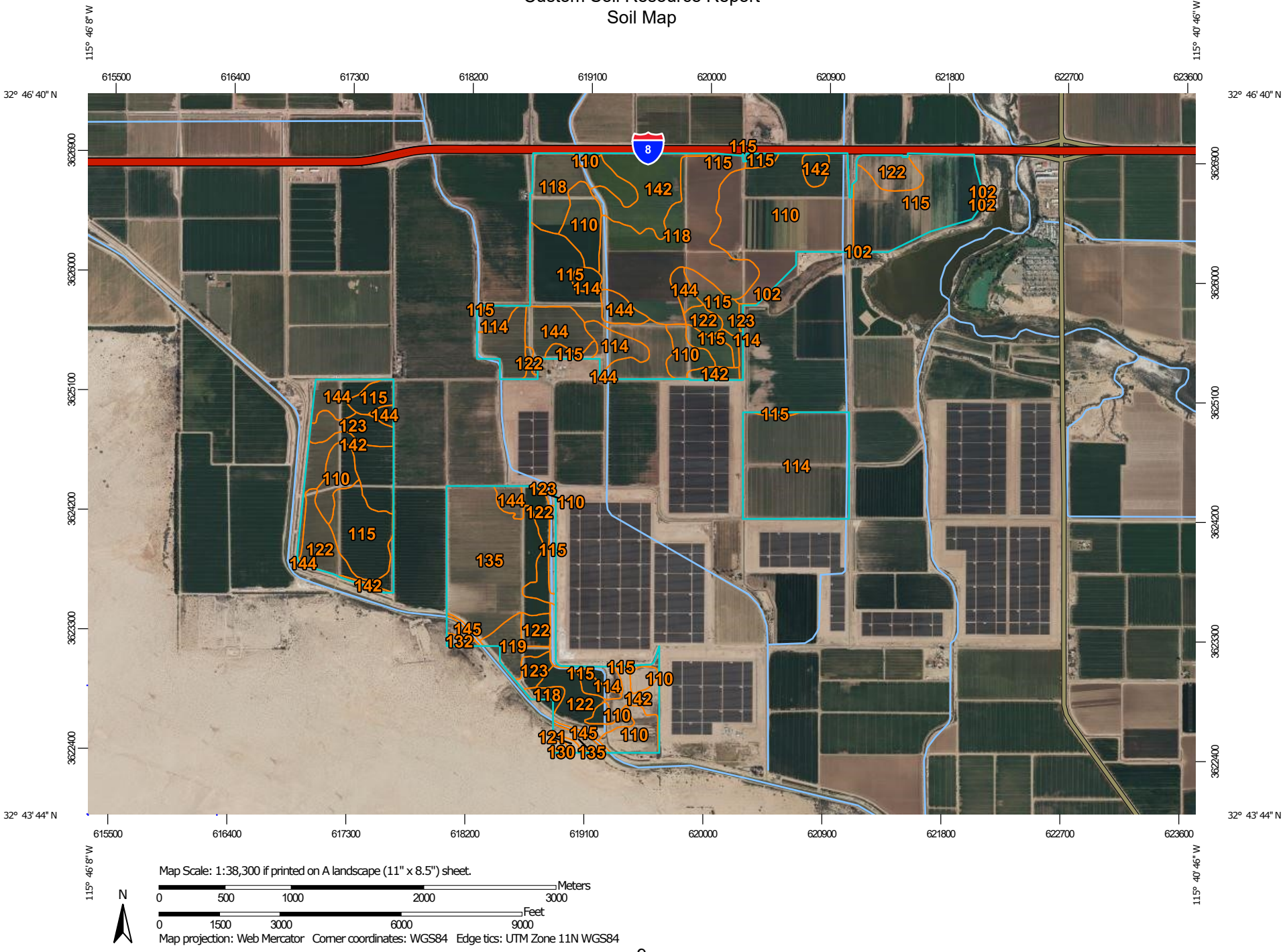
PC ORIGINAL PKG

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

PC ORIGINAL PKG

Custom Soil Resource Report
Soil Map



PC ORIGINAL PKG

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 17, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2021—May 22, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

PC ORIGINAL PKG

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
102	Badland	0.2	0.0%
107	Glenbar loam	2.1	0.1%
110	Holtville silty clay, wet	309.1	16.7%
114	Imperial silty clay, wet	213.9	11.5%
115	Imperial-Glenbar silty clay loams complex, 0 to 2 percent slopes, wet	400.7	21.6%
118	Indio loam, wet	255.1	13.8%
119	Indio-Vint complex, 0 to 2 percent slopes	23.7	1.3%
121	Meloland fine sand	3.3	0.2%
122	Meloland very fine sandy loam, wet	152.8	8.2%
123	Meloland-Holtville 0 to 2 percent slopes, wet	41.6	2.2%
126	Niland fine sand	0.2	0.0%
130	Rositas sand, 0 to 2 percent slopes	0.2	0.0%
132	Rositas fine sand, 0 to 2 percent slopes	3.8	0.2%
135	Rositas fine sand, wet	173.8	9.4%
142	Vint loamy very fine sand, wet	166.2	9.0%
144	Vint and Indio very fine sandy loams undifferentiated group, 0 to 2 percent slopes, Wet	102.0	5.5%
145	Water	4.4	0.2%
Totals for Area of Interest		**1,853.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class.

PC ORIGINAL PKG

Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The

PC ORIGINAL PKG

pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

PC ORIGINAL PKG

Imperial County, California, Imperial Valley Area

102—Badland

Map Unit Setting

National map unit symbol: h8z8
Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Badland: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Badland

Setting

Landform: Fan piedmonts
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium derived from igneous rock

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Minor Components

Imperial

Percent of map unit: 4 percent
Landform: Fan piedmonts
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Indio

Percent of map unit: 4 percent
Landform: Beach terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Meloland

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

PC ORIGINAL PKG

Holtville

Percent of map unit: 3 percent
Landform: Basin floors
Down-slope shape: Concave
Across-slope shape: Convex
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

107—Glenbar loam

Map Unit Setting

National map unit symbol: 2mxlc
Elevation: -230 to 310 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Glenbar and similar soils: 60 percent
Minor components: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Glenbar

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

C1 - 0 to 13 inches: loam
C2 - 13 to 23 inches: clay loam
C3 - 23 to 36 inches: clay loam
C4 - 36 to 53 inches: silty clay loam
C5 - 53 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

PC ORIGINAL PKG

Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 22.0
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Minor Components

Indio

Percent of map unit: 10 percent
Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Imperial

Percent of map unit: 10 percent
Landform: Fan piedmonts
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Holtville

Percent of map unit: 5 percent
Landform: Basin floors
Down-slope shape: Concave
Across-slope shape: Convex
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Meloland

Percent of map unit: 5 percent
Landform: Basin floors
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Rositas

Percent of map unit: 4 percent
Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

PC ORIGINAL PKG

Niland

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Vint

Percent of map unit: 2 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

110—Holtville silty clay, wet

Map Unit Setting

National map unit symbol: 31hlb
Elevation: -230 to 310 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Holtville, wet, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holtville, Wet

Setting

Landform: Flood plains, basin floors
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

Ap - 0 to 17 inches: silty clay
C1 - 17 to 26 inches: silty clay
2C2 - 26 to 35 inches: silt loam
3C3 - 35 to 60 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very high

PC ORIGINAL PKG

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: About 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.5
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Minor Components

Glenbar, wet

Percent of map unit: 5 percent
Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Imperial, wet

Percent of map unit: 5 percent
Landform: Fan piedmonts
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Indio, wet

Percent of map unit: 3 percent
Landform: Beach terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Vint, wet

Percent of map unit: 2 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

PC ORIGINAL PKG

114—Imperial silty clay, wet

Map Unit Setting

National map unit symbol: h8zn
Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Imperial, wet, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed and/or clayey lacustrine deposits derived from mixed

Typical profile

H1 - 0 to 12 inches: silty clay
H2 - 12 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

PC ORIGINAL PKG

Minor Components

Glenbar
Percent of map unit: 4 percent
Hydric soil rating: No

Holtville
Percent of map unit: 4 percent
Hydric soil rating: No

Meloland
Percent of map unit: 4 percent
Hydric soil rating: No

Niland
Percent of map unit: 3 percent
Hydric soil rating: No

115—Imperial-Glenbar silty clay loams complex, 0 to 2 percent slopes, wet

Map Unit Setting
National map unit symbol: 2n7xh
Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition
Imperial, wet, and similar soils: 41 percent
Glenbar, wet, and similar soils: 40 percent
Minor components: 19 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Imperial, Wet

Setting
Landform: Flood plains, lakebeds
Down-slope shape: Concave, linear
Across-slope shape: Convex, linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile
C1 - 0 to 12 inches: silty clay loam
C2 - 12 to 24 inches: silty clay
C3 - 24 to 60 inches: silty clay

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

PC ORIGINAL PKG

Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Description of Glenbar, Wet

Setting

Landform: Flood plains, lakebeds
Down-slope shape: Concave, linear
Across-slope shape: Convex, linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

C1 - 0 to 13 inches: silty clay loam
C2 - 13 to 23 inches: clay loam
C3 - 23 to 25 inches: sandy clay loam
C4 - 25 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

PC ORIGINAL PKG

Minor Components

Meloland

Percent of map unit: 10 percent
Landform: Basin floors
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Holtville, wet

Percent of map unit: 9 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

118—Indio loam, wet

Map Unit Setting

National map unit symbol: 2myt1
Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Indio, wet, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Indio, Wet

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium

Typical profile

Ap - 0 to 12 inches: loam
C1 - 12 to 30 inches: silt loam
C2 - 30 to 44 inches: loamy very fine sand
C3 - 44 to 58 inches: silt loam
C4 - 58 to 72 inches: loamy very fine sand

PC ORIGINAL PKG

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

Minor Components

Vint

Percent of map unit: 6 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Holtville

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear, convex
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Meloland

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Glenbar

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear

PC ORIGINAL PKG

Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

119—Indio-Vint complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2mxlg
Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Indio and similar soils: 35 percent
Vint and similar soils: 30 percent
Minor components: 35 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Indio

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium

Typical profile

Ap - 0 to 12 inches: loam
C1 - 12 to 30 inches: silt loam
C2 - 30 to 44 inches: loamy very fine sand
C3 - 44 to 58 inches: silt loam
C4 - 58 to 72 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 9.4 inches)

PC ORIGINAL PKG

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

Description of Vint

Setting

Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loamy fine sand
C1 - 10 to 12 inches: sandy loam
C2 - 12 to 16 inches: loamy fine sand
C3 - 16 to 30 inches: loamy fine sand
C4 - 30 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (2.83 to 9.92 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Minor Components

Holtville

Percent of map unit: 12 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear, convex
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

PC ORIGINAL PKG

Meloland

Percent of map unit: 12 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Rositas

Percent of map unit: 11 percent
Landform: Sand sheets
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

121—Meloland fine sand

Map Unit Setting

National map unit symbol: 2myt3
Elevation: -260 to 160 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 355 days
Farmland classification: Not prime farmland

Map Unit Composition

Meloland and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Meloland

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: fine sand
C1 - 12 to 19 inches: loamy very fine sand
C2 - 19 to 24 inches: silt loam
C3 - 24 to 38 inches: silty clay
C4 - 38 to 71 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

PC ORIGINAL PKG

Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 22.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Minor Components

Glenbar

Percent of map unit: 4 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Niland

Percent of map unit: 4 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Meloland, loamy fine sand surface

Percent of map unit: 4 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Rositas

Percent of map unit: 3 percent
Landform: Beach terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

PC ORIGINAL PKG

122—Meloland very fine sandy loam, wet

Map Unit Setting

National map unit symbol: 2myt4
Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Meloland, wet, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Meloland, Wet

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: very fine sandy loam
C1 - 12 to 26 inches: loamy fine sand
3C3 - 26 to 38 inches: silty clay
3C4 - 38 to 71 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 22.0
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain

PC ORIGINAL PKG

Hydric soil rating: Unranked

Minor Components

Holtville

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear, convex
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Indio, wet

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Glenbar

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Vint

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Imperial

Percent of map unit: 3 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

123—Meloland-Holtville 0 to 2 percent slopes, wet

Map Unit Setting

National map unit symbol: 31hlp

PC ORIGINAL PKG

Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Meloland, wet, and similar soils: 41 percent
Holtville, wet, and similar soils: 40 percent
Minor components: 19 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Meloland, Wet

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loam
C1 - 12 to 19 inches: loamy fine sand
2C2 - 19 to 24 inches: silt loam
3C3 - 24 to 38 inches: silty clay
3C4 - 38 to 71 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 22.0
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C/D
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Description of Holtville, Wet

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over ancient fluviomarine deposits

PC ORIGINAL PKG

Typical profile

A - 0 to 12 inches: loam
C1 - 12 to 24 inches: silty clay
C2 - 24 to 35 inches: silt loam
C3 - 35 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Minor Components

Indio, wet

Percent of map unit: 4 percent
Landform: Beach terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Imperial

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Rositas

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

Vint

Percent of map unit: 4 percent

PC ORIGINAL PKG

Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Glenbar

Percent of map unit: 3 percent
Landform: Fan piedmonts
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

126—Niland fine sand

Map Unit Setting

National map unit symbol: 2mxlk
Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Niland and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Niland

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over ancient fluviomarine deposits

Typical profile

C1 - 0 to 23 inches: fine sand
2C2 - 23 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

PC ORIGINAL PKG

Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Minor Components

Meloland

Percent of map unit: 5 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Rositas

Percent of map unit: 5 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: No

Glenbar

Percent of map unit: 5 percent
Landform: Flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

130—Rositas sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2mxlq
Elevation: -230 to 310 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

PC ORIGINAL PKG

Map Unit Composition

Rositas and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rositas

Setting

Landform: Dunes, flood plains, terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

C1 - 0 to 27 inches: sand
C2 - 27 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (7.09 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

Minor Components

Carsitas

Percent of map unit: 6 percent
Landform: Flood plains, terraces, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD019CA - Coarse Gravelly Wash
Hydric soil rating: Unranked

Vint

Percent of map unit: 6 percent
Landform: Flood plains, terraces, basin floors
Down-slope shape: Linear

PC ORIGINAL PKG

Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Niland

Percent of map unit: 3 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

132—Rositas fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2mxln
Elevation: -230 to 350 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Rositas and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rositas

Setting

Landform: Flood plains, terraces, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock and/or eolian deposits derived from igneous and sedimentary rock

Typical profile

C1 - 0 to 9 inches: fine sand
C2 - 9 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (7.09 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

PC ORIGINAL PKG

Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: No

Minor Components

Rositas, fine sandy loam surface

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: No

Niland

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

Vint

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: No

Holtville

Percent of map unit: 1 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

Antho

Percent of map unit: 1 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

Superstition

Percent of map unit: 1 percent
Landform: Basin floors

PC ORIGINAL PKG

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: No

135—Rositas fine sand, wet

Map Unit Setting

National map unit symbol: 2mxlr
Elevation: -330 to 350 feet
Mean annual precipitation: 0 to 4 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Rositas, wet, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rositas, Wet

Setting

Landform: Dunes, flood plains, basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock and/or eolian deposits derived from igneous and sedimentary rock

Typical profile

C1 - 0 to 9 inches: fine sand
C2 - 9 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (7.09 to 14.17 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

PC ORIGINAL PKG

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: No

Minor Components

Carsitas

Percent of map unit: 4 percent
Landform: Washes
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD019CA - Coarse Gravelly Wash
Hydric soil rating: Unranked

Vint, wet

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: No

Superstition

Percent of map unit: 4 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

Antho, wet

Percent of map unit: 3 percent
Landform: Fan piedmonts
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

142—Vint loamy very fine sand, wet

Map Unit Setting

National map unit symbol: 2mxlv
Elevation: -330 to 160 feet
Mean annual precipitation: 0 to 4 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Not prime farmland

PC ORIGINAL PKG

Map Unit Composition

Vint, wet, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vint, Wet

Setting

Landform: Flood plains, basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits over alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 10 inches: loamy very fine sand
C1 - 10 to 16 inches: loamy fine sand
C2 - 16 to 30 inches: loamy fine sand
C3 - 30 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (7.09 to 14.17 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Minor Components

Meloland, wet

Percent of map unit: 5 percent
Landform: Flood plains, basin floors
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

Indio, wet

Percent of map unit: 5 percent
Landform: Washes

PC ORIGINAL PKG

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

144—Vint and Indio very fine sandy loams undifferentiated group, 0 to 2 percent slopes, Wet

Map Unit Setting

National map unit symbol: 31hls
Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Vint, wet, and similar soils: 50 percent
Indio, wet, and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vint, Wet

Setting

Landform: Lakebeds
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits over alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 10 inches: very fine sandy loam
C1 - 10 to 16 inches: loamy fine sand
C2 - 16 to 30 inches: loamy fine sand
C3 - 30 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (7.09 to 14.17 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

PC ORIGINAL PKG

Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: R040XD200CA - Rarely Flooded Fans
Hydric soil rating: Unranked

Description of Indio, Wet

Setting

Landform: Lakebeds
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium

Typical profile

Ap - 0 to 12 inches: very fine sandy loam
C1 - 12 to 30 inches: silt loam
C2 - 30 to 44 inches: loamy very fine sand
C3 - 44 to 58 inches: silt loam
C4 - 58 to 72 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C/D
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: No

Minor Components

Meloland, wet

Percent of map unit: 5 percent
Landform: Lakebeds
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD007CA - Lacustrine Basin and Large RIver Floodplain
Hydric soil rating: Unranked

PC ORIGINAL PKG

Rositas

Percent of map unit: 5 percent
Landform: Dunes
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R040XD025CA - Sandsheet [2-4" p.z.]
Hydric soil rating: Unranked

145—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: Unranked

PC ORIGINAL PKG

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

PC ORIGINAL PKG

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

PC ORIGINAL PKG

Air Quality and Greenhouse Gas Emissions Technical Report

Big Rock 2 Cluster Solar & Storage Project

Imperial County, California
April 2025

PC ORIGINAL PKG

This page is intentionally blank.

PC ORIGINAL PKG

Contents

1 Introduction 1
2 Project Location 2
3 Project Description 3
3.1 Construction Activities 6
3.2 Operational Activities 6
4 Regulatory Setting 7
4.1 Regulations 7
4.1.1 Federal 7
4.1.2 State 12
4.1.3 Regional/Local 17
5 Environmental Setting 24
5.1 Climate, Meteorology, and Topography 24
5.2 Existing Air Quality 25
5.2.1 Regional Attainment Status 25
5.2.2 Local Ambient Air Quality 26
5.2.3 Valley Fever 27
5.2.4 Sensitive Receptors 28
5.2.5 Existing Operational Emissions 28
5.3 Global Climate Change 29
5.3.1 Existing Greenhouse Gas Emissions 29
6 Methodology 31
6.1 Air Quality 31
6.1.1 Construction 31
6.1.2 Operations 32
6.2 Greenhouse Gases 32
6.2.1 Construction 32
6.2.2 Operations 33
7 Thresholds of Significance 34
7.1 Air Quality 34
7.1.1 Greenhouse Gases 35
8 Project Impacts 37
8.1 Air Quality 37
8.1.1 Consistency with Air Quality Plans and Policies 37
8.1.2 Cumulatively Considered Non-Attainment Pollutants 43
8.1.3 Substantial Pollutant Concentrations 46
8.1.4 Other Emissions (Odors) 49
8.2 Greenhouse Gas Impacts 49
8.2.1 Construction Emissions 49
8.2.2 Operational Emissions 50
8.2.3 Conflict with State and Local Plans, Policies, or Regulations 50
9 References 53

PC ORIGINAL PKG

Tables

Table 1. National and California Ambient Air Quality Standards 8
Table 2. Imperial County Attainment Status 25
Table 3. Ambient Air Quality Monitoring Data 26
Table 4. State of California Greenhouse Gas Emissions 29
Table 5. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities 35
Table 6. Unmitigated and Mitigated Construction Daily Maximum Criteria Air Pollutant Emissions (lbs per day) 44
Table 7. Annual Construction GHG Emissions ($MTCO_2e$ per year) 50

Figures

Figure 1. Regional Location 4
Figure 2. Proposed Site Plan 5

Appendices

Appendix A. Pollutant-Specific Overview

Appendix B. Construction and Operational Emissions

PC ORIGINAL PKG

1 Introduction

The Air Quality and Greenhouse Gas Emissions Technical Report (Technical Report) assesses the construction and operation of the proposed Big Rock 2 Cluster Solar and Storage Project (Project), a utility-scale photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility. The report was prepared for 90FI 8me LLC (Applicant) and prepared in accordance with the requirements under the California Environmental Quality Act (CEQA).

PC ORIGINAL PKG

2 Project Location

The Project is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The Project would sit on approximately 1,849 acres of land. Figure 1 shows the regional location of the Project.

The Project area is relatively flat, consisting primarily of fields and unpaved roads. All of the Project parcels have been extensively cleared, plowed, and maintained for agricultural production. Current land use of the Project area includes cropland, dryland grain crops, and irrigated grain and hayfields, row crops, orchards, and pastureland.

The Project is adjacent and proximal to both agricultural and rural lands that have been rezoned for renewable energy (RE), specifically for PV solar and BESS projects that have been approved by Imperial County. Nearby land uses are predominantly agricultural and/or renewable energy generation, but also include commercial, transportation, military, and electric utility uses. Commercial land uses include the Rio Bend Golf Course (and associated Specific Plan Area) to the east of the Project. The Interstate 8 and Union Pacific Railroad transportation corridors are located to the north of the Project. To the south of the Project, utility land uses include the San Diego Gas and Electric (SDG&E) Imperial Valley Substation, as well as additional agricultural lands that have been designated for PV solar, and BESS renewable energy projects.

3 Project Description

The Project applicant is seeking approval of four Conditional Use Permits (CUPs) associated with the construction and operation of a utility-scale PV solar energy generation and BESS facility on approximately 1,849 acres of privately-owned land in the unincorporated area of Imperial County, California. The Project contemplates utilizing approximately 1,569 acres of land that has not previously been entitled for solar development, as well as 280 acres of land that was previously entitled under active CUPs known as Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres). The Laurel Cluster 2 North and Laurel Cluster 2 South will be re-entitled as part of the Project. The four CUP applications or individual site locations consists of the following:

- Big Rock 2 Cluster North: CUP 24-0006
- Big Rock 2 Cluster South: CUP 24-007
- Big Rock 2 Cluster East/Laurel Cluster South (herein referred to as Big Rock Cluster East): CUP 24-0008
- Big Rock 2 Cluster West: CUP 24-0009

The Project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads; 2) BESS; and, 3) gen-tie line that would connect the proposed on-site substation to the point of interconnection at the Imperial Irrigation District's (IID) existing Liebert Switchyard. The solar energy facility, BESS and gen-tie are collectively referred to as the "project." The Project's 230kV step-up substation would connect to the 230kV Liebert Switchyard/Sub-station via one of the proposed gen-tie line alternatives (Figure 2). The proposed gen-tie line alignment would extend approximately 0.62 miles from the southeast corner of the Big Rock 2 Cluster South site then heads east to the Liebert Switchyard. The alternative gen-tie line alignment would extend approximately 2.04 miles from the south-central portion of the Big Rock 2 Cluster North site then heads south to the Liebert Switchyard. Figure 2 depicts the proposed site plan.

Figure 1. Regional Location

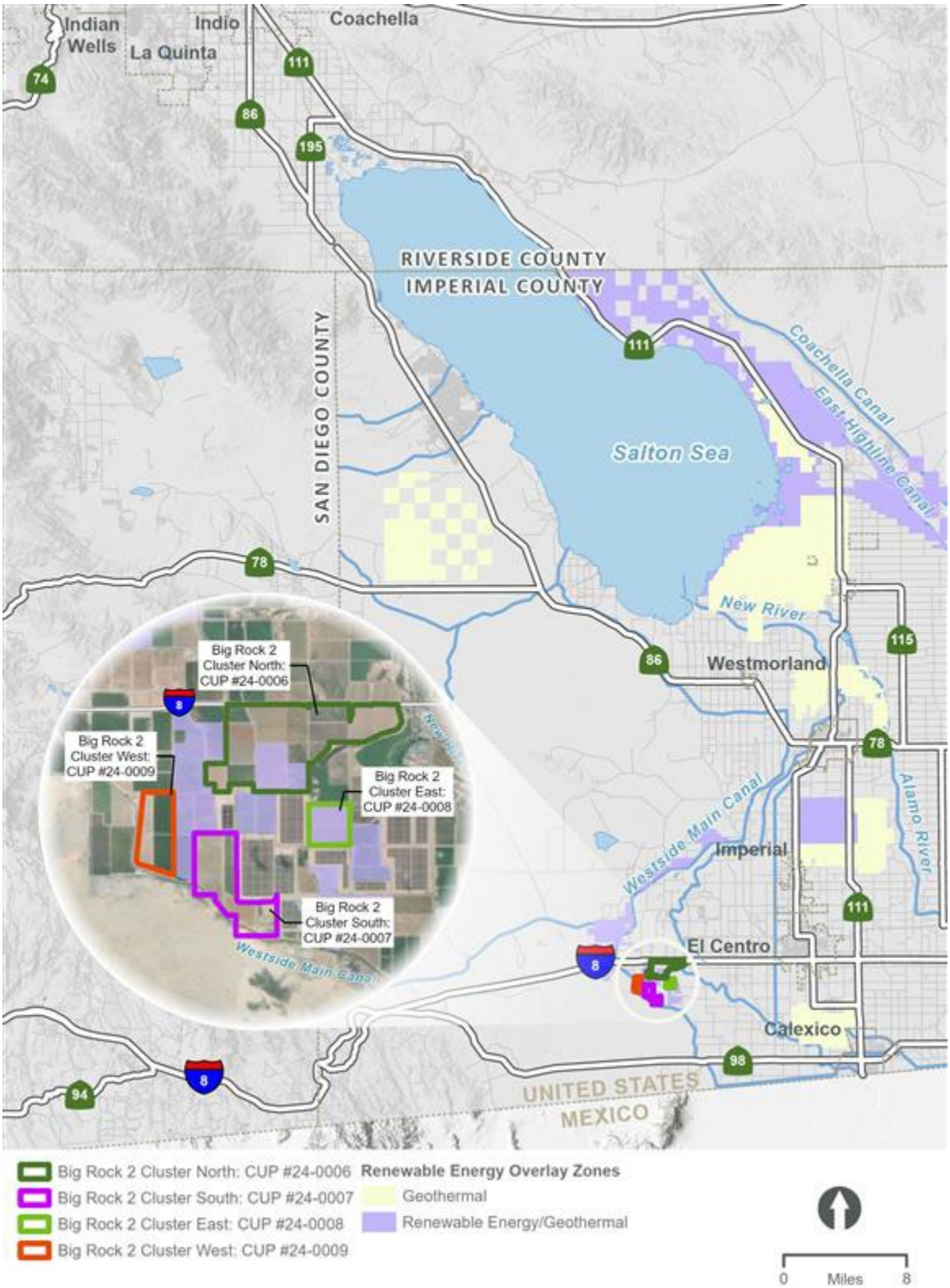
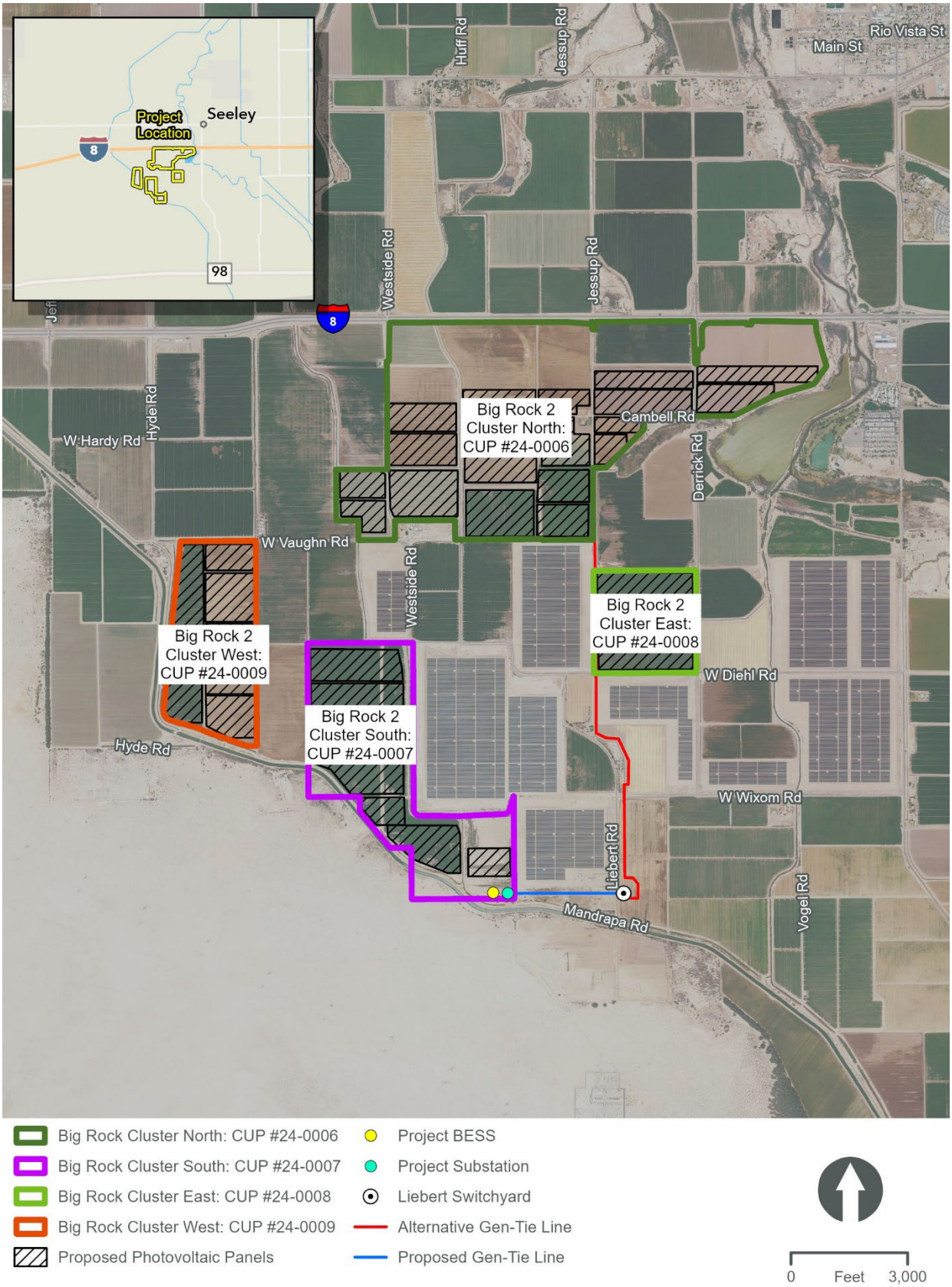


Figure 2. Proposed Site Plan



3.1 Construction Activities

For purposes of estimating Project emissions, and based on information provided by the applicant, it is assumed that construction of the Project would commence in April 2026 and would last approximately 24 months, ending in October 2027.

Construction is anticipated to occur 6 days a week, 8 hours a day. No weekend or nighttime construction would be required for the Project. Construction activities for construction phases are further described below.

- Phase 1 – Construction activities for Phase 1 of Project would site preparation, fencing and ingress/egress.
- Phase 2 – Construction activities for Phase 2 of the Project include civil improvements such as grading, roads, and earthwork activities.
- Phase 3 – Construction activities include PV panel and BESS construction.
- Phase 4 – Construction activities include testing and commissioning activities.
- Phase 5 – Construction activities include decommissioning and reclamation of the Project site.

Equipment used during construction would include but not limited to diesel-powered graders, loaders, scrapers, plate compactors, and forklifts. A full list of construction equipment is available in Appendix B. Soil would be balanced on site with minimal export proposed.

3.2 Operational Activities

Once constructed, maintenance of the PV solar and BESS facility would generally be limited to cleaning PV panels, monitoring, site security, and periodic maintenance. It is assumed the Project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects. The facility would operate 24/7 with potentially 4 to 10 full-time employees at any given time. Any required planned maintenance activities would generally consist of equipment inspection and replacement and would be scheduled to avoid peak load periods. Any unplanned maintenance would be responded to as needed, depending on the event. There are no expected stationary emission sources (i.e. emergency generators).

4 Regulatory Setting

4.1 Regulations

4.1.1 Federal

Clean Air Act and National Ambient Air Quality Standards

The Clean Air Act (CAA) is the primary federal law governing air quality. The CAA is regulated by the United States Environmental Protection Agency (USEPA), which sets standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS have been established for six criteria air pollutants that have been linked to potential health concerns: ozone (O_3), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2). Additionally, national standards exist for lead (Pb). The NAAQS are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Characteristics and possible health and environmental effects of each criteria air pollutant can be found in Appendix A. The federal regulatory schemes also cover TACs.

The CAA requires USEPA to designate areas as attainment, nonattainment, or maintenance (an area that was previously nonattainment and is currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table 1.

The CAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). USEPA is responsible for implementing the programs established under the CAA, programs such as establishing and reviewing the federal ambient air quality standards and judging the adequacy of SIPs. If a state contains areas that violate the national standards, the CAA requires the State to revise its SIP to incorporate additional control measures to reduce air pollution. USEPA has authorized states such as California with air programs that meet or exceed federal standards to implement many of the federal programs while retaining an oversight role.

Table 1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	
O_3	1 hour	-	Same as Primary Standard	0.09 ppm
	8 hour	0.07 ppm		0.07 ppm
PM_{10}	24 hour	150 µg/m^3	Same as Primary Standard	50 µg/m^3
	Annual	-		20 µg/m^3
$PM_{2.5}$	24 hour	35 µg/m^3	Same as Primary Standard	-
	Annual Arithmetic Mean	12 µg/m^3	15 µg/m^3	12 µg/m^3
CO	1 hour	35 ppm	-	20 ppm
	8 hour	9 ppm	-	9 ppm
	8 hour (Lake Tahoe)	-	-	6 ppm
NO_2	1 hour	100 ppb	-	0.18 ppm
	Annual Arithmetic Mean	0.053 ppm	Same as Primary Standard	0.03 ppm
SO_2	1 hour	75 ppb	-	0.25 ppm
	3 hour	-	0.5 ppm	-
	24 hour	0.14 ppm	-	0.04 ppm
	Annual Arithmetic Mean	0.03 ppm	-	-
Pb	30-day Average	-	-	1.5 µg/m^3
	Calendar Quarter	1.5 µg/m^3	Same as Primary Standard	-
	Rolling 3-month Average	0.15 µg/m^3		-

PC ORIGINAL PKG

Table 1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	National Standards[1]		California Standards[2]
		Primary[3]	Secondary[4]	
Visibility Reducing Particles	8 hour	No National Standards		-[5]
Sulfates	24 hour	No National Standards		25 µg/m^3
Hydrogen Sulfide	1 hour	No National Standards		0.03 ppm
Vinyl Chloride	24 hour	No National Standards		0.01 ppm

Source: CARB 2016
Notes:
[1] National standards (other than O3, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the USEPA for further clarification and current national policies.
[2] California standards for O3, CO (except 8-hour Lake Tahoe), SO2 (1 and 24 hour), NO2, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
[3] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
[4] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
[5] In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.
O3 = ozone; PM10 = particles of 10 micrometers and smaller; PM2.5 = particles of 2.5 micrometers and smaller; CO = carbon monoxide; NO2 = nitrogen dioxide; SO2 = sulfur dioxide; Pb = lead; ppm = parts per million; µg/m3 = micrograms per cubic meter; ppb = parts per billion

Emission Standards for Non-Road Diesel Engines

The USEPA has adopted multiple tiers of emission standards for non-road (or off-road) diesel engines. The non-road standards cover mobile non-road diesel engines of all sizes used in a wide range of construction, agricultural and industrial equipment. The first federal standards, Tier 1, were adopted in 1994. Tier 2 standards were adopted in 2001, Tier 3 in 2006, and final Tier 4 standards in 2014. The federal emission standards for non-road diesel engines are established in advancing tiers that progressively become more stringent (i.e., the higher the tier, the lower the emissions). Currently, the most stringent is Tier 4. The Tier 4 emissions standards have more stringent NO_X, particulate matter, and hydrocarbon limits than the lower tiers. The CO emission limits for Tier 4 standards remain unchanged from the Tier 2 and Tier 3 standards.

PC ORIGINAL PKG

On-Road Diesel Fuel Rule

On December 20, 2022, USEPA adopted the *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards* (USEPA 2024a) that set stronger emissions standards to lower emissions of NO_X, CO, and $PM_{2.5}$ from heavy-duty vehicles and engines starting in model year 2027. Under this rule, NO_X emissions from heavy-duty vehicles would be reduced by 44 percent in 2040 and by 48 percent in 2045. $PM_{2.5}$ emissions from heavy-duty vehicles are estimated to decrease by 7 percent in 2040 and by 8 percent in 2045. Emissions of CO from heavy-duty vehicles are estimated to decrease by 16 percent in 2040 and by 18 percent in 2045 (USEPA 2024a).

Endangerment Finding for Greenhouse Gases

On April 2, 2007, in *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497, the U.S. Supreme Court found that GHGs are air pollutants covered by the CAA. The Supreme Court held that USEPA must determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. To regulate GHGs from passenger vehicles, the USEPA issued an endangerment finding on December 7, 2009. The finding identifies emissions of six key pollutants GHGs — CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 — that threaten the public health and welfare of current and future generations (USEPA 2024b).

Mandatory Reporting of Greenhouse Gases Rule

On September 22, 2009, the USEPA issued a final rule for the mandatory reporting of GHG data and other relevant information from large sources in the United States (Code of Federal Regulations Title 40, Part 98). This comprehensive, nationwide emissions data is intended to provide a better understanding of the sources of GHGs and guide development of policies and programs to reduce emissions. The mandatory reporting rule applies to direct GHG emitting sources; suppliers of fossil fuel, industrial gas, and other products that would result in GHG emissions if released, combusted, or oxidized; and facilities that inject carbon dioxide underground for geologic sequestration or other reasons. In general, facilities that emit 25,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) or more per year of GHGs are required to submit annual reports to the USEPA.

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy (CAFE) standards were first introduced by Congress in 1975 to help reduce the country's dependence on foreign oil. CAFE standards are regulated by Department of Transportation's National Highway Traffic and Safety Administration (NHTSA). NHTSA sets and enforces the CAFE standards, while the USEPA calculates average fuel economy levels for

manufacturers, and also sets related GHG standards. The regulations have become more stringent over time. The regulations at first applied only to passenger cars in 1978, then included light duty trucks up to 6,000 pounds in 1980, and finally increased to all vehicles up to 8,500 pounds the next year. Regulations varied during the 1980s for both cars and trucks before reaching a steady target for cars in 1990 through 2010, with trucks moderately increasing during the period from 20 to 21 miles per gallon (mpg) through 2005, then reaching 23.5 mpg by 2010.

On April 1, 2010, the USEPA and the NHTSA announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States. This rule required passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet fuel economy standards. In 2011, the USEPA and NHTSA issued a final rule for the first national standards to improve fuel efficiency of medium- and heavy-duty trucks and buses.

In 2020, the USEPA and NHTSA, issued the Safer Affordable Fuel Efficient (SAFE) Vehicles Rule which set new CAFE targets and tailpipe CO_2 emissions standards for passenger cars and lights trucks that increase 1.5 percent in stringency each year from model years 2021 through 2026. In 2021, President Biden signed an executive order (EO) directing the government to revise fuel economy standards, with the goal of further reducing emissions. NHTSA finalized the CAFE Standards for model years 2024-2026 (NHTSA 2023) in 2022. The final rule establishes standards that would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026 (NHTSA 2023). NHTSA projects the standards will cut greenhouse gases from the atmosphere, reduce air pollution, and reduce the country's dependence on oil (NHTSA 2023).

On July 28, 2023, NHTSA announced a proposal for new CAFE standards for passenger cars and light trucks built in model years 2027-2032, and new fuel efficiency standards for heavy-duty pickup trucks and vans built in model years 2030-2035. If finalized, the proposal would require an industry fleet-wide average of approximately 58 miles per gallon for passenger cars and light trucks in MY 2032, by increasing fuel economy by 2 percent year over year for passenger cars and by 4 percent year over year for light trucks. For heavy-duty pickup trucks and vans, the proposal would increase fuel efficiency by 10 percent year over year (NHTSA 2023).

Executive Order 13990

EO 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis was signed by President Biden on January 20, 2021. EO 13990 directs federal agencies to immediately review, and take action to address, federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of

color and low-income communities; reduce greenhouse gas emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment (White House 2021a).

Executive Order 14008

EO 14008: Tackling the Climate Crisis at Home and Abroad was signed by President Biden on January 27, 2021. EO 14008 establishes a "government-wide approach that reduces climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; delivers environmental justice; and spurs well-paying union jobs and economic growth, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure" (White House 2021b).

Executive Order 14057

EO 14057: Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability was signed on December 8, 2021, and requires agencies to (White House 2021c):

- Achieve 100 percent carbon pollution-free electricity by 2030, including 50 percent on a 24/7 basis.
- Reach 100 percent zero-emission vehicle acquisition by 2035, including 100 percent light-duty acquisitions by 2027.
- Achieve net-zero building emissions by 2045, including a 50 percent reduction by 2032.
- Reduce Scope 1 and 2 greenhouse gas emissions by 65 percent from 2008 levels by 2030.
- Establish targets to reduce energy and potable water use intensity by 2030.
- Reduce procurement emissions to net-zero by 2050.
- Have climate resilient infrastructure and operations.
- Advance environmental justice and equity-focused operations.
- Accelerate progress through domestic and international partnerships.

4.1.2 State

California Clean Air Act and California Ambient Air Quality Standards

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other

pollutants recognized by the state. In general, the California standards are more health protective (stringent) than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

The CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts (air districts) at the regional and local levels. CARB and local air districts bear responsibility for achieving California's air quality standards, which are to be achieved through air district-level air quality management plans that would be incorporated into the SIP. In California, USEPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. CARB is responsible for establishing state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The act also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures.

Executive Orders

Executive Order S-3-05

In June 2005, Governor Schwarzenegger issued Executive Order (EO) S-3-05, which established the following GHG emissions reduction targets: 1) reduce GHG emissions to 2000 levels by 2010, 2) reduce GHG emissions to 1990 levels by 2020, and 3) reduce GHG emissions to 80 percent below 1990 levels by 2050.

Executive Order B-30-15

On April 20, 2015, Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. California's emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius, the warming threshold at which there will likely be major climate disruptions such as super droughts and rising sea levels.

Executive Order B-55-18

EO B-55-18, signed on September 10, 2018, established a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The EO requires the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bills

Assembly Bill 32

In September 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. California met its 2020 reduction goal in 2018.

Assembly Bill 1279

In September 2022, Governor Newsom signed into law the California Climate Crisis Act, also known as AB 1279. AB 1279 requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide anthropogenic GHG emissions by 85 percent compared to 1990 levels and directs the CARB to work with relevant state agencies to achieve these goals.

Senate Bills

Senate Bill 32

SB 32 was signed into law on September 8, 2016. SB 32 expands upon AB 32 to reduce GHG emissions. SB 32 sets into law the mandated GHG emissions target of 40 percent below 1990 levels by 2030 written into EO B-30-15.

Senate Bill 375

SB 375, also known as the Sustainable Communities and Climate Protection Act, provides for a new planning process that coordinates land use planning, regional transportation plans (RTPs), and funding priorities, originally in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires RTPs to incorporate a “sustainable communities strategy” (SCS). The goal of the SCS is to reduce regional VMT through land use planning and consequent transportation patterns. SCS measures include transportation demand management, transportation system management, and pricing.

Senate Bill 535 and Assembly Bill 1550

SB 535 requires the California Environmental Protection Agency to identify disadvantaged communities based on geographic, socioeconomic, public health, and environmental hazard criteria. It also requires that the investment plan developed and submitted to the Legislature pursuant to AB 1550 allocate no less than 25% of available proceeds from the carbon auctions held under AB 32 to projects that will benefit these disadvantaged communities. At least 10% of the available funds from these auctions must be directly invested in such communities.

Climate Change Scoping Plans

In December 2008, the CARB adopted the *Climate Change Scoping Plan* (2008 Scoping Plan) to achieve the goals outlined in AB 32. According to the 2008 Scoping Plan, California will implement strategies to achieve a reduction of approximately 118 million $MTCO_2e$, or approximately 22 percent from the State's projected 2020 emission level of 545 million $MTCO_2e$ under a business-as-usual scenario 10 percent, from 2008 emissions (CARB 2008).

The *First Update to the Climate Change Scoping Plan* (2014 Scoping Plan) built upon the 2008 Scoping Plan with new strategies and recommendations. The 2014 Scoping Plan contained the main strategies California will implement to achieve a reduction of 80 million $MTCO_2e$ emissions, or approximately 16 percent, from the state's projected 2020 emission level of 507 million $MTCO_2e$ under the business-as-usual scenario defined in the 2014 Scoping Plan (CARB 2014). Several strategies to reduce GHG emissions were included: Low Carbon Fuel Standard, Pavley Rule, Advanced Clean Cars program, Renewable Portfolio Standard, and SCS.

In 2016, the Legislature passed SB 32, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With the passage of SB 32, the Legislature passed companion legislation AB 197, which provided additional direction for developing the Scoping Plan. The CARB adopted *California's 2017 Climate Change Scoping Plan* (2017 Scoping Plan) in November 2017. The 2017 Scoping Plan represents a second update to the scoping plan to reflect the 2030 target as codified by SB 32. According to the 2017 Scoping Plan, the 2030 target of 260 million $MTCO_2e$ requires the reduction of 129 million $MTCO_2e$, or approximately 33.2 percent , from the state's projected 2030 business-as-usual scenario emissions level of 389 million $MTCO_2e$ (CARB 2017).

The *2022 Scoping for Achieving Carbon Neutrality* (2022 Scoping Plan) (CARB 2022) was adopted by CARB in November 2022. The 2022 Scoping Plan lays out a path for California to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in

short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

Advanced Clean Cars Program

In January 2012, the CARB approved a new emissions control program for model years 2017 through 2025 (CARB 2024a). The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero emission vehicles into a single packet of standards called Advanced Clean Cars. The Advanced Clean Cars Program includes the Zero Emission Vehicle Program, which is designed to achieve California's long-term emission reduction goals by requiring manufacturers to offer for sale specific numbers of zero-emission vehicles, which include battery electric, fuel cell, and plug-in hybrid electric vehicles.

Advanced Clean Fleets Regulation

CARB adopted the Advanced Clean Fleets (ACF) regulation in April 2023. ACF is part of CARB's overall strategy to accelerate a large-scale transition to zero-emissions medium- and heavy-duty vehicles (CARB 2024b). This regulation works in conjunction with the Advanced Clean Trucks regulation, described below, which helps ensure that zero-emissions vehicles (ZEV) are available for sale (CARB 2024b). ACF is critical to achieving both health-protective ambient air quality standards and the State's climate goals and is expected to save $26.5 billion in statewide health benefits and provide a net cost savings of $48 billion to fleets (CARB 2024b).

Advanced Clean Trucks Regulation

CARB adopted the Advanced Clean Trucks (ACT) Regulation in August 2021. The ACT Regulation aims to accelerate a large-scale transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8 (CARB 2021). The regulation has two components including a manufacturer sales requirement, and a reporting requirement (CARB 2021):

- **Zero-emission truck sales:** Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and fleet reporting:** Large employers including retailers, manufacturers, brokers, and others are required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, are required to report about their existing fleet operations. This

information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Mobile Source Strategy

CARB developed the Mobile Source Strategy to provide an integrated action plan that establishes a unified planning perspective and common vision for transforming the mobile sector. The Mobile-Source Strategy supports multiple planning efforts, including SIPs, the Scoping Plan, and the Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The Mobile-Source Strategy outlines CARB's approach to reducing emissions from mobile sources. The strategy includes actions to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth. The Mobile-Source Strategy is updated every 5 years. The latest update is the *2020 Mobile Source Strategy*. The *2020 Mobile Source Strategy* was heard by the Board on October 28, 2021, and will be forwarded to the appropriate policy and fiscal committees of the California Legislature as required by California SB 44 (CARB 2023a).

Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS) mandates a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In September 2018, the LCFS regulation was amended to increase the statewide goal to a 20% reduction in the carbon intensity of California's transportation fuels by at least 2030. Note that although the LCFS regulation was amended and extended to ensure compliance with the 2030 Scoping Plan, CARB ultimately adopted a more stringent target (20 percent reduction in carbon intensity by 2030) than assumed in the 2030 Scoping Plan (18 percent reduction in carbon intensity by 2030). Therefore, future updates to the Scoping Plan are likely to include the more stringent version of the LCFS that was adopted by CARB. The majority of the emissions benefits due to the LCFS come from the production cycle (upstream emissions) of the fuel rather than the combustion cycle (tailpipe).

4.1.3 Regional/Local

Imperial County Air Pollution Control District

The Project is located in Imperial County within the Salton Sea Air Basin (Basin). The Imperial County portion of the Basin is under the jurisdiction of the Imperial County Air Pollution Control District (ICAPCD). The SSAB encompasses the entirety of Imperial County and the southeast portion of Riverside County and is generally an arid desert region, with a significant land area located below sea level.

The Basin contains relatively few major emissions sources, but may experience emissions transported from Mexicali, Mexico and from significant vehicular traffic, particularly near the two international ports of entry: Calexico West and Calexico East. Emissions sources within the Basin consist of geothermal power generation, food processing, plaster and wallboard (gypsum) manufacturing, and other light industrial facilities.

The ICAPCD is the agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. ICAPCD is responsible for regulating stationary sources of air emissions in Imperial County. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by ICAPCD. ICAPCD is responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. Monitoring of ambient air quality in Imperial County began in 1976. Since that time, monitoring has been performed by ICAPCD, CARB, and by private industry. There are six monitoring sites in Imperial County from Niland to Calexico. The ICAPCD has developed the following plans to achieve attainment for air quality ambient standards.

- **2009 Imperial County Plan for PM_{10}.** Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. As a result, ICAPCD was required to develop a PM_{10} Attainment Plan. The final plan was adopted by ICAPCD on August 11, 2009 (ICAPCD 2009).
- **2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area.** U.S. EPA designated Imperial County as nonattainment for the 2006 24-hr $PM_{2.5}$ standard, effective December 14, 2009. The 2013 $PM_{2.5}$ SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but-for" transport of international emissions from Mexicali, Mexico. The City of Calexico, California shares a border with the City of Mexicali. Effective July 1, 2014, the City of Calexico was designated nonattainment, while the rest of the SSAB was designated attainment (ICAPCD 2014).
- **2017 Imperial County Plan for 2008 8-hour Ozone Standard.** Because of Imperial County's "moderate" nonattainment status for 2008 federal 8-hour O_3 standards, ICAPCD was required to develop an 8-hour Attainment Plan for Ozone (ICAPCD 2017). The plan includes control measures which are an integral part of how the ICAPCD currently controls the ROG and NO_X emissions within the O_3 nonattainment areas. The overall strategy includes programs and control measures which represent the implementation of Reasonable Available Control Technology (RACT) (40 CFR 51.912) and the assurance that stationary sources maintain a net decrease in emissions. The information in the 2009 RACT SIP were evaluated and were determined to still be applicable in 2017 based on the updates within the ICAPCD's rule book.

- **2018 Imperial County Plan for PM_{10}.** Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. The 2018 SIP maintained previously adopted fugitive dust control measures (Regulation VIII) that were approved in the Imperial County portion of the California SIP in 2013 (see above) (ICAPCD 2018a).
- **2018 Imperial County Plan for $PM_{2.5}$.** U.S. EPA designated Imperial County as nonattainment for the 2018 24-hr $PM_{2.5}$ standard. The 2018 $PM_{2.5}$ SIP concluded that the majority of the $PM_{2.5}$ emissions resulted from transport in nearby Mexico. Specifically, the SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but for" transport of international emissions from Mexicali, Mexico. In accordance with the CCAA, the $PM_{2.5}$ SIP satisfies the attainment demonstration requirement satisfying the provisions of the CCAA (ICAPCD 2018b).

In addition to the above plans, the ICAPCD is working cooperatively with counterparts from Mexico to implement emissions reductions strategies and projects for air quality improvements at the border. The two countries strive to achieve these goals through local input from states, county governments, and citizens. Within the Mexicali and Imperial Valley area, the Air Quality Task Force has been organized to address those issues unique to the border region known as the Mexicali/Imperial air shed. The Air Quality Task Force membership includes representatives from federal, State, and local governments from both sides of the border, as well as representatives from academia, environmental organizations, and the public. This group was created to promote regional efforts to improve the air quality monitoring network, emissions inventories, and air pollution transport modeling development, as well as the creation of programs and strategies to improve air quality.

ICAPCD Rules and Regulations

ICAPCD has the authority to adopt and enforce regulations dealing with controls for specific types of sources, emissions or hazardous air pollutants, and New Source Review. The ICAPCD Rules and Regulations are part of the SIP and are separately enforceable by the EPA.

- **Rule 106 – Abatement.** The Board may, after notice and a hearing, issue, or provide for the issuance by the Hearing Board, of an order for abatement whenever the District finds that any person is in violation of the rules and regulations limiting the discharge of air contaminants into the atmosphere.
- **Rule 107 – Land Use.** The purpose of this rule is to provide ICAPCD the duty to review and advise the appropriate planning authorities within the District on all new construction or changes in land use which the Air Pollution Control Officer believes could become a source of air pollution problems.

- **Rule 201 – Permits Required.** The construction, installation, modification, replacement, and operation of any equipment which may emit or control Air Contaminants require ICAPCD permits.
- **Rule 207 – New and Modified Stationary Source Review**. Establishes preconstruction review requirements for new and modified stationary sources to ensure the operations of equipment does not interfere with attainment or maintenance of ambient air quality standards.
- **Rule 208 – Permit to Operate.** The ICAPCD would inspect and evaluate the facility to ensure the facility has been constructed or installed and will operate to comply with the provisions of the Authority to Construct permit and comply with all applicable laws, rules, standards, and guidelines.
- **Rule 310 – Operational Development Fee.** The purpose of this rule is to provide ICAPCD with a sound method for mitigating the emissions produced from the operation of new commercial and residential development projects throughout the County of Imperial and incorporated cities. All project proponents have the option to either provide off-site mitigation, pay the operational development fee, or do a combination of both. This rule will assist ICAPCD in attaining the state and federal ambient air quality standards for PM_{10} and O_3.
- **Rule 401 – Opacity of Emissions.** Sets limits for release or discharge of emissions into the atmosphere, other than uncombined water vapor, that are dark or darker in shade as designated as No.1 on the Ringelmann Chart[1] or obscure an observer's view to a degree equal to or greater than smoke does as compared to No.1 on the Ringelmann Chart, for a period or aggregated period of more than three minutes in any hour.
- **Rule 403 – General Limitations on the Discharge of Air Contaminants.** Rule 403 sets forth limitations on emissions of pollutants, including particulate matter, from individual sources.
- **Rule 407 – Nuisance.** Rule 407 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 801 – Construction and Earthmoving Activities.** Rule 801 aims to reduce the amount of PM_{10} entrained in the ambient air as a result of emissions generated from construction and other earthmoving activities by requiring actions to prevent, reduce, or mitigate PM_{10} emissions. This rule applies to any construction and other earthmoving activities, including,

[1] The Ringelmann scale is a scale for measuring the apparent density or opacity of smoke.

but not limited to, land clearing, excavation related to construction, land leveling, grading, cut and fill grading, erection or demolition of any structure, cutting and filling, trenching, loading or unloading of bulk materials, demolishing, drilling, adding to or removing bulk of materials from open storage piles, weed abatement through disking, back filling, travel on-site and travel on access roads to and from the site.

- **Regulation VIII – Fugitive Dust Rules.** Regulation VIII sets forth rules regarding the control of fugitive dust, including fugitive dust from construction activities. The regulation requires implementation of fugitive dust control measures to reduce emissions from earthmoving, unpaved roads, handling of bulk materials, and control of track-out/carry-out dust from active construction sites. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:
    - Phasing of work in order to minimize disturbed surface area
    - Application of water or chemical stabilizers to disturbed soils
    - Construction and maintenance of wind barriers
    - Use of a track-out control device or wash down system at access points to paved roads.

Compliance with Regulation VIII is mandatory for all construction sites, regardless of size; however, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the Air District is required 10 days prior to the commencement of any construction activity. Furthermore, any use of engine(s) and/or generator(s) of 50 horsepower or greater may require a permit through ICAPCD.

Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region.

On September 3, 2020, the SCAG Regional Council adopted the 2020-2045 RTP/SCS, which is an update to the previous 2016-2040 RTP/SCS, and contains regional development and growth factors (SCAG 2020). The RTP/SCS is based on projections that originate with local jurisdictions. SCAG is required to adopt an SCS along with its RTP pursuant to Senate Bill (SB) 375 (Chapter 728, Statutes of 2008), which required the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB was required, in consultation with the state's MPOs, to set

regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. The 2020-2045 RTP/SCS includes the latest SB 375 Regional Plan climate targets, which required SCAG to achieve an 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions relative to a 2005 baseline.

Although the RTP/SCS is not focused specifically on air quality emissions, the growth projections established in the 2020-2045 RTP/SCS affect air quality through optimized land use planning and the consequential reduction of emissions from passenger and light-duty vehicles. SCAG's SCS is "built on a foundation of contributions from communities, cities, counties and other local agencies" and "based on local general plans as well as input from local governments." SCAG's 2020-2045 RTP/SCS provides specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles (SCAG 2020).

Imperial County General Plan

The Imperial County General Plan serves as the overall guiding policy for the County. The Conservation and Open Space Element includes objectives for helping the County achieve the goal of improving and maintaining the quality of air in the region (Imperial County 2016). The Imperial County General Plan does not contain any goals, objectives, policies or programs that directly pertain to GHGs at the project-level. The following summarizes the goals and policies with respect to air quality:

- **Goal 7:** The County shall actively seek to improve the quality of air in the region.
    - *Objective 7.1:* Ensure that all project and facilities comply with current Federal, State, and local requirements for attainment of air quality objectives.
    - *Objective 7.2:* Develop management strategies to mitigate fugitive dust. Cooperate with all Federal, State and local agencies in the effort to attain air quality objectives.
    - *Objective 7.3:* Work cooperatively with the EPA and CARB in evaluating air quality monitoring in Imperial County.
    - *Objective 7.4:* Enforce and monitor environmental mitigation measures relating to air quality.

- *Objective 7.5:* Coordinate efforts with Imperial County Transportation Commission (ICTC) and other appropriate agencies to reduce fugitive dust from unpaved streets.
- *Objective 7.6:* Explore and assess strategies to reduce greenhouse gas emissions in the County.

Imperial Valley Regional Climate Action Plan

The Imperial County Transportation Commission is currently developing a Regional Climate Action Plan (RCAP), which is a strategy for how the region will work toward reducing its GHG emissions in accordance with statewide targets (ICTC 2021). The Imperial County Transportation Commission is committed to a collaborative and inclusive process and is conducting extensive outreach about the strategies that are to be included within the RCAP. The RCAP encompasses all of Imperial Valley, including Imperial County, and the seven incorporated cities: Calipatria, Calexico, Brawley, El Centro, Holtville, Imperial, and Westmorland. The RCAP is intended to facilitate the reduction of GHG emissions throughout Imperial County in a way that is practical, efficient, and beneficial to the community and enhances Imperial County's desirable characteristics and qualities. The foundation for developing emission reduction and climate adaptation measures will be based on the County's existing work, as detailed in the region's extensive plans and programs. The RCAP has not been finalized or adopted nor has it been qualified in accordance with CEQA Guidelines Section 15183.5 but is included for disclosure purposes.

PC ORIGINAL PKG

5 Environmental Setting

5.1 Climate, Meteorology, and Topography

The climate of Imperial County is governed by the large-scale sinking and warming of air in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The high-pressure ridge blocks out most mid-latitude storms, except in the winter, when it is weakest and located farthest south. The coastal mountains prevent the intrusion of any cool, damp air found in California coastal areas. Because of the barrier and weakened storms, Imperial County experiences clear skies, extremely hot summers, mild winters, and little rainfall. The sun shines, on the average, more in Imperial County than anywhere else in the United States (ICAPCD 2017a).

The lack of clouds and atmospheric moisture creates strong diurnal and seasonal temperature variations ranging from an average summer maximum of 108 degrees Fahrenheit (° F) down to a winter morning minimum of 38° F. The most pleasant weather occurs from about mid-October to early May when daily highs are in the 70s and 80s with very infrequent cloudiness or rainfall. Imperial County experiences rainfall on an average of only four times per year (>0.10 inches in 24 hours). The local area usually has three days of rain in winter and one thunderstorm day in August. The annual rainfall in this region is less than three inches per year.

Humidity is low throughout the year, ranging from an average of 28 percent in summer to 52 percent in winter. The large daily oscillation of temperature produces a corresponding large variation in the relative humidity. Nocturnal humidity rises to 50 to 60 percent but drops to about 10 percent during the day.

The wind in Imperial County follows two general patterns. Wind statistics indicate prevailing winds are from the west-northwest through southwest; a secondary flow maximum from the southeast is also evident. The prevailing winds from the west and northwest occur seasonally from fall through spring and are known to be from the Los Angeles area. Occasionally, Imperial County experiences periods of extremely high wind speeds. Wind speeds can exceed 31 miles per hour (mph), and this occurs most frequently during the months of April and May. However, speeds of less than 6.8 mph account for more than one-half of the observed wind measurements (ICAPCD 2017a).

5.2 Existing Air Quality

5.2.1 Regional Attainment Status

The CAA requires the USEPA to designate areas within the country as either "attainment" or "nonattainment" for each criteria pollutant based on whether the NAAQS have been achieved. Similarly, the CCAA requires the CARB to designate areas within California as either "attainment" or "nonattainment" for each criteria pollutant based on whether the CAAQS have been achieved. If a pollutant concentration is lower than the standard, the area is classified as "attainment" for that pollutant. If a pollutant exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable". The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards.

Table 2 depicts the current attainment status of Imperial County for each criteria air pollutant with respect to the NAAQS and CAAQS.

Table 2. Imperial County Attainment Status

Criteria Air Pollutant	Designation	
	Federal Standards	State Standards
O_3	Nonattainment	Nonattainment
PM_{10}	Attainment	Attainment
$PM_{2.5}$	Nonattainment	Attainment
CO	Unclassified/Attainment	Attainment
NO_2	Unclassified/Attainment	Attainment
SO_2	Unclassified/Attainment	Attainment
Sulfates	No Federal Standard	Attainment

Table 2. Imperial County Attainment Status

Criteria Air Pollutant	Designation	
	Federal Standards	State Standards
Hydrogen Sulfide	No Federal Standard	Unclassified
Lead	Unclassified/Attainment	Attainment

Source: CARB 2024b
Notes:
O_3 = ozone; PM_{10} = particles of 10 micrometers and smaller; $PM_{2.5}$ = particles of 2.5 micrometers and smaller; CO = carbon monoxide; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; Pb = lead

As presented in Table 2, Imperial County is designated as a nonattainment area for O_3 and $PM_{2.5}$ under NAAQS and a nonattainment area for O_3 under CAAQS.

5.2.2 Local Ambient Air Quality

There are a number of ambient air monitoring stations throughout the Salton Sea Air Basin. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. Table 3 presents the most recent ambient air quality data from 2019 to 2023 from the El Centro monitoring station.

Table 3. Ambient Air Quality Monitoring Data

	Year				
	2019	2020	2021	2022	2023
O_3					
Maximum 1-hour concentration (ppm)	0.080	0.097	0.096	0.113	0.100
Maximum 8-hour concentration (ppm)	0.071	0.077	0.084	0.079	0.091
Number of days standard exceeded					
National 1-hour standard	0	1	1	2	5
State 8-hour standard	1	2	7	10	15
NAAQS 8-hour (>0.07 ppm)	1	2	6	10	15
PM_{10}					

Table 3. Ambient Air Quality Monitoring Data

	Year				
	2019	2020	2021	2022	2023
National maximum 24-hour concentration (µg/m^3)	123.9	197.5	194.5	554.6	231.6
State maximum 24-hour concentration (µg/m^3)	130.0	197.7	186.9	553.6	224.0
National annual average concentration (µg/m^3)	34.9	41.5	41.8	44.7	36.7
State annual average concentration (µg/m^3)	35.6	41.5	41.6	45.5	36.7
Number of days standard exceeded					
National 24-hour standard	0	2	1	2	3
State 24-hour standard	54	92	89	99	65
$PM_{2.5}$					
National maximum 24-hour concentration (µg/m^3)	21.4	28.5	19.1	30.6	42.0
State maximum 24-hour concentration (µg/m^3)	21.4	28.5	19.1	30.6	42.0
National annual average concentration (µg/m^3)	7.9	9.8	8.4	8.9	7.8
State annual average concentration (µg/m^3)	7.9	9.8	8.3	8.9	*
Number of days standard exceeded					
NAAQS 24-hour standard	1	5	2	5	3

Source: CARB 2024
Notes:
O_3 = ozone; PM_{10} = particles of 10 micrometers and smaller; $PM_{2.5}$ = particles of 2.5 micrometers and smaller; µg/m^3 = micrograms per cubic meter; ppb = parts per billion; NAAQS = national ambient air quality standards; CAAQS = California Ambient air quality standards. * Insufficient data available to determine the value.

5.2.3 Valley Fever

Valley Fever (also called *coccidioidomycosis* or “cocci”) is a fungal lung infection that is caused by a fungus that lives in the soil. This fungus, Coccidioides, has been found in the southwestern United States and can be breathed in when soil is disturbed, and the fungus is spread through the air. People can contract Valley Fever when working or living in areas with soil disturbance such as during construction activities for grading or soil movement. Valley Fever causes flu-like symptoms including

PC ORIGINAL PKG

fatigue, cough, fever, shortness of breath, headache, night sweats, muscle aches, or rash, but can also present no symptoms in some people. Because of these common symptoms, people may delay treatment and let the infection take its course without medical attention. Valley fever can be serious and even fatal. Recently in California, there have been more than 1,000 people hospitalized with Valley fever each year, of which about 1 in 10 have died in the hospital (CDPH, 2024).

Valley fever is contracted by breathing in dust from outdoor air that contains spores of the Coccidioides fungus that grows in the soil. Like seeds from a plant, a fungus grows and spreads from tiny spores that are too small to see. When soil or dirt is stirred up by strong winds or while digging, dust containing these fungus spores can get into the air. Anyone who lives, works, or travels in an area where the Valley fever fungus grows can breathe in these fungus spores from outdoor dust without knowing it and become infected (CDPH, 2024).

5.2.4 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive Receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or California Air Resources Board may determine (CARB 2024c).

The nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. Other nearby sensitive receptors include the following:

- Residence located near the northeastern corner of the Big Rock 2 Cluster West site (north of West Vaughn Road)
- Residence located near the northeastern corner of the Big Rock 2 Cluster East site (west of Derrick Road)
- Residence located at the southwest corner of the Vogel Road/W Wixom Road intersection

5.2.5 Existing Operational Emissions

As previously discussed, the Project site is currently vacant. Thus, there are no existing site emissions and all project-related emissions are assumed to be new.

5.3 Global Climate Change

5.3.1 Existing Greenhouse Gas Emissions

CARB compiles GHG inventories for the State of California. The most updated inventory is referred to as the 2023 edition, which reports the State's GHG emissions inventory from calendar year 2021. Based on the 2021 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 381.3 $MMTCO_2e$ including emissions resulting from imported electrical power (CARB 2021c). According to CARB, as of 2016, statewide GHG emissions dropped below the 2020 GHG Limit (431 $MMTCO_2e$) and have remained below the limit since that time, due in part to the state's GHG reduction programs (such as the Renewables Portfolio Standard, Low Carbon Fuel Standard (LCFS), vehicle efficiency standards, and declining caps under the Cap and Trade Program).Table 4 identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2021 (i.e., the most recent year in which data are available from CARB). As shown in Table 4, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 38 percent in 2021.

Table 4. State of California Greenhouse Gas Emissions

Category	Total 1990 Emissions using IPCC SAR ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2021 Emissions using IPCC AR4 ($MMTCO_2e$)	Percent of Total 2021 Emissions
Transportation	150.7	35%	145.6	38%
Electric Power	110.6	26%	62.4	16%
Commercial	14.4	3%	12.2	4%
Residential	29.7	7%	24.8	7%
Industrial	103.0	24%	73.9	19%
Recycling and Waste [a]	–	–	8.4	2%
High-GWP/Non-Specified [b]	1.3	<1%	21.3	6%
Agriculture/Forestry	23.6	6%	30.9	8%
Forestry Sinks [c]	-6.7		--	--

Table 4. State of California Greenhouse Gas Emissions

Category	Total 1990 Emissions using IPCC SAR ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2021 Emissions using IPCC AR4 ($MMTCO_2e$)	Percent of Total 2021 Emissions
Net Total (IPCC AR4) [d]	**431**	**100%**	**381.3**	**100%**

Sources: CARB 1990
Notes:
[a] Included in other categories for the 1990 emissions inventory.
[b] High-GWP gases are not specifically called out in the 1990 emissions inventory.
[c] Revised methodology under development (not reported for 2021).
[d] CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

As discussed previously, the Project Site is currently undeveloped and vacant. Existing GHG emissions generated from the Project Site are assumed to be zero.

6 Methodology

Air quality and GHG impacts associated with construction of the Project were assessed and quantified using industry standard and accepted software tools, techniques, and emission factors. A summary of the methodology for both air quality and GHG are provided below. Assumptions and emission calculations are included in Appendix B.

6.1 Air Quality

6.1.1 Construction

For purposes of estimating project emissions, and based on information provided by the applicant, it is assumed that construction of the Project would commence in April 2026 and is anticipated ending in October 2027. The Project is assumed to have a 30-year lifespan and at the end of operation will be decommissioned. However, the EMFAC and OFFROAD models in CalEEMod only have emission factors through 2050. As such, the year 2050 was assumed for estimating emissions from the decommissioning phase.

Earthmoving activities are expected to include the construction of the access roads, O&M building, substation, water storage tank(s), solar panel foundation supports, BESS(s), transmission poles and conductor stringing, and any storm water protection or storage (detention) facilities. The Project is not anticipated to require paving, removing, or significant alteration of existing agricultural soil(s). Rather, solar panels would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the Project's life. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas to control dust and increase the reflectivity of the ground surface. However, the analysis conservatively assumes all 1,849 acres will be graded.

Regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e. assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. Assuming an early date for construction activities is conservative because emission factors decrease in future years due to improvements in engine technology and the retirement of older, dirtier equipment and vehicles from the fleet. pursuant to state regulations that require vehicle fleet operators to phase-in less-polluting trucks.

All worker, vendor, and hauling trips would occur on public roadways (i.e., not within the project construction boundary). However, some driving on unpaved roads could occur to unload materials and installation of PV arrays. Therefore, an input value of 85% paved roads is utilized in the emissions

model to account for some unpaved road usage. Vehicle speed would also be restricted to 15 miles per hour on both paved and unpaved roads.

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2022, which incorporates CARB's EMFAC2021 model. For the purposes of the air quality analysis, it has been assumed that the contractor would implement dust control measures during construction pursuant to ICAPCD Regulation VIII. The applicant provided the number of construction workers and vendor trips as well as the trip lengths. Modeling assumptions, data and results are provided in Appendix B.

6.1.2 Operations

Once constructed, periodic maintenance of the PV solar and BESS facility would generally be limited to cleaning PV panels, monitoring, and site security. Since the Project would share O&M, substation, and/or transmission facilities with other nearby PV solar and BESS projects, it is assumed the Project would share personnel, thereby reducing the Project's on-site staff to below the anticipated 4 to 10 full-time employees.

There are no expected sources of stationary emission sources (i.e. emergency generators). During operation of the Project, minimal amounts of emissions could be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and emissions will be analyzed qualitatively.

6.2 Greenhouse Gases

6.2.1 Construction

Construction-related GHG emissions were estimated using CalEEMod outputs of CO_2, CH_4, and CO_2e. The output values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the same construction phasing assumptions used in the criteria pollutant analysis (see Section 6.1 Air Quality) to generate GHG emissions values for each construction year. Since construction emissions are a one-time occurrence for the Project, construction GHG emissions are amortized over a 30-year Project lifetime and added to the operational emissions on an annual basis.

6.2.2 Operations

Once constructed, periodic maintenance of the PV solar and BESS facility would generally be limited to cleaning PV panels, monitoring, and site security. Since the Project would share O&M, substation, and/or transmission facilities with other nearby PV solar and BESS projects, it is assumed the Project would share personnel, thereby reducing the Project's on-site staff to below the anticipated 4 to 10 full-time employees.

There are no expected sources of stationary emission sources (i.e. emergency generators). During operation of the Project, minimal amounts of emissions could be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and emissions will be analyzed qualitatively.

PC ORIGINAL PKG

7 Thresholds of Significance

7.1 Air Quality

Based on the California Environmental Quality Act (CEQA) Guidelines Appendix G, Project impacts related to air quality are considered significant if any of the following occur:

- Conflict with or obstruct implementation of the applicable air quality plan
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

ICAPCD amended the *Air Quality Handbook: Guidelines for the Implementation of CEQA* on December 12, 2017 (ICAPCD 2017b). ICAPCD established significance thresholds based on the state CEQA thresholds. The handbook was used to determine the proper level of analysis for the Project.

CONSTRUCTION

For construction projects, the *Air Quality Handbook* indicates that the significance threshold for NO_x is 100 pounds per day and for ROG is 75 pounds per day. As discussed in the ICAPCD's *Air Quality Handbook*, the approach to evaluating construction emissions should be qualitative rather than quantitative. In any case, regardless of the size of the Project, the standard mitigation measures for construction equipment and fugitive PM_{10} must be implemented at all construction sites. The implementation of discretionary mitigation measures, as listed in Section 7.1 of the ICAPCD's *Air Quality Handbook*, apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. The mitigation measures found in Section 7.1 of the ICAPCD's handbook are intended as a guide of feasible mitigation measures and are not intended to be an all-inclusive comprehensive list of all mitigation measures. Table 5 presents the construction emission thresholds that are identified by ICAPCD.

Table 5. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities

Pollutant	Thresholds
PM_{10}	150 pounds per day
ROG	75 pounds per day
NO_X	100 pounds per day
CO	550 pounds per day

Source: ICAPCD 2017b
Notes:
CO = carbon monoxide; NO_x = nitrogen oxide; PM_{10} = particulate matter less than 10 microns in diameter; ROG = reactive organic gas

7.1.1 Greenhouse Gases

Based on CEQA Guidelines Appendix G, Project impacts related to GHG emissions are considered significant if any of the following occur:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Although the County has taken steps toward development of a Draft Regional Climate Action Plan, the County has not formally adopted a Climate Action Plan or other GHG reduction plan that addresses community-wide emissions to date. Additionally, the ICAPCD has not adopted a quantitative threshold for determining significance of GHG emissions for projects.

To evaluate whether a project may generate a quantity of GHG emissions with the potential to have a significant impact on the environment, local air districts have developed a number of bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. If Project emissions are equal to or below the significance threshold, with or without mitigation, the Project's GHG emissions would be less than significant. The CEQA and Climate Change paper (AEP 2016) provides a common platform of information and tools to support local governments and was prepared as a resource, not as a guidance document. CEQA Guidelines Section 15064.4 expressly provides that a "lead agency shall have discretion to determine, in the context of a particular project," whether to "quantify

greenhouse gas emissions resulting from a project" and/or "rely on a qualitative analysis or performance based standards." Updates to CEQA Guidelines Section 15064.4 that took effect in December 2018 further state that a lead agency should "focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change" and that the analysis should "reasonably reflect evolving scientific knowledge and state regulatory schemes." Consistent with recent County projects, the County has relied upon the South Coast Air Quality Management District (SCAQMD) quantitative thresholds, as discussed below.

In December 2008, the SCAQMD adopted a 10,000 $MTCO_2e$ per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards applicable to this Project, the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is the most relevant GHG significance threshold and is used as a benchmark for the Project. It should be noted that the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold (SCAQMD 2008).

A project is considered to have a significant impact and cumulatively considerable impact if it exceeds SCAQMD's threshold of 10,000 $MTCO_2e$ per year.

8 Project Impacts

8.1 Air Quality

8.1.1 Consistency with Air Quality Plans and Policies

Threshold AQ-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

A potentially significant impact to air quality would occur if the Project would conflict with or obstruct implementation of the region's SIP. As previously described, the Project region is classified as nonattainment for federal O_3 and $PM_{2.5}$ standards. The region's SIP is made up of the following ICAPCD plans; 2009 Imperial County Plan for PM_{10}, 2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area, 2017 Imperial County Plan for 2008 8-hour Ozone Standard, 2018 Imperial County Plan for PM_{10}, and 2018 Imperial County Plan for $PM_{2.5}$. These air quality attainment plans are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls describing how the state will attain ambient air quality standards. These SIP plans and associated control measures are based on information derived from projected growth in Imperial County in order to project future emissions and then determine strategies and regulatory controls for the reduction of emissions. Growth projections are based on the general plans developed by Imperial County and the incorporated cities in the county.

The basis for the air quality plans is the SCAG population growth and regional vehicle miles traveled projections, which are based in part on the land uses established by local General Plans. As such, projects that propose development that is consistent with the local land use plans would be consistent with growth projections and air quality plans emissions estimates. If a project would result in development that is less dense than anticipated by the growth projections, the project would be considered consistent with the air quality plans. In the event a project would result in development that results in greater than anticipated growth projections, the project would result in air pollutant emissions that may not have been accounted for in the air quality plans, and thus may obstruct or conflict with the air quality plans. As described below, ICAPCD has implemented plans for meeting state and federal standards of nonattainment pollutants.

The 2017 Imperial County Reasonably Available Control Technology State Implementation Plan (RACT SIP) relies primarily on the land use and population projections provided by SCAG and the CARB on-road emissions forecast as a basis for vehicle emission forecasting. The RACT SIP relied on growth projections in SCAG's 2016–2040 Regional Transportation Plan (RTP)/Sustainable

Communities Strategy (SCS) (SCAG 2016). In 2012, SCAG estimated that unincorporated Imperial County had 16,400 jobs and in 2040 would have 32,300 jobs for an additional 15,900 jobs or 567 jobs per year.

As the Project does not contain a residential component, the Project would not result in an increase in the regional population. While the Project would contribute to energy supply, which is one factor of population growth, the Project is a solar energy project and would not significantly increase employment or growth within the region. According to the Project applicant, there would be approximately 4 to 10 full-time jobs created by the Project. The Project would not exceed the projected annual employment growth in the area. Therefore, the Project is within the growth assumptions that underlie the emissions forecasts in the RACT SIP. In addition, the Project and cumulative projects combined would remain consistent with the growth projections. As a result, the Project would not conflict with or obstruct implementation of the air quality management plan, and impacts would be less than significant.

A project is deemed to not conflict with applicable air quality plan if it is consistent with the existing land use plan that was used to generate the growth forecast and does not increase dwelling unit density, vehicle trips, and vehicle miles traveled due to zoning changes, specific plans and general plan amendments. The Project does not include residential or commercial development. As stated above, the Project would include 4 to 10 employees for periodic maintenance.

Construction

Construction of the Project would generate emissions of VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ that could result in short-term impacts on ambient air quality in the study area. Sources of construction emissions include heavy-duty construction equipment (such as graders, trenchers, and loaders), worker, vendor, and haul truck vehicle emissions, and fugitive dust from material movement. Construction emissions for the Project were estimated for each construction phase and are discussed further below, under Threshold AQ-2, and shown in Table 6. As shown below in Table 6, the Project's construction emissions would exceed the ICAPCD significance threshold for PM_{10}. This potential impact is considered significant. However, implementation of Mitigation Measures AQ-1 through AQ-5 would reduce emissions. As previously discussed above, the Project is not anticipated to significantly alter existing soils. Rather solar panels, which would occupy approximately 61 percent of the project site, would be installed atop the flat lots, leaving the farming soil relatively undisturbed and available for crop cultivation at the end of the project's life. All 1,849 acres were assumed to be graded with 15 percent of roads unpaved. Due to this conservative assumption, the ICAPCD threshold for PM_{10} would be exceeded. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. The proposed project must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust.

Therefore, implementation of the Regulation VIII fugitive dust control measures (Mitigation Measure AQ-1) is required for the project.

Mitigation Measure AQ-2 would require all off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, meet, at a minimum, the Tier 4 Final California Emission Standards for Off-Road Compression-Ignition Engines as specified in C.C.R., Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any off-road engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NOx and particulate matter emissions that are equivalent to Tier 4 engine. Implementation of Mitigation Measure AQ-2 would be implemented to reduce PM_{10} emissions, but as shown in Table 6, would also have the co-benefit of reducing NOx emissions during construction. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NOx analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds.

Further, implementation of Mitigation Measure AQ-3 would require additional dust suppression methods (such as water or chemical stabilization) on all unpaved roads associated with construction activities, Mitigation Measure AQ-4 requires development and implementation of a dust suppression management plan prior to any earthmoving activity, and Mitigation Measure AQ-5 limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Accordingly, as shown in Table 6, with implementation of Mitigation Measures AQ-1 through AQ-5, PM_{10} emissions would not exceed the ICAPCD significance threshold. Therefore, this impact would be reduced to a level less than significant.

As described above, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections and comparing assumed emissions in the AQMP to proposed emissions. Because the Project complies with local land use plans and population projections and would not exceed ICAPCD's regional mass daily emissions thresholds, construction of the Project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts would be less than significant with mitigation.

Operations

It is assumed the Project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects.

The facility would operate 24/7 with potentially 4 to 10 full-time employees at any given time. During long-term operations of the Project, minimal amounts of criteria air pollutants would be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles. However, these events are expected to be occasional and result in minimal emissions. Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes.

Although no significant air quality impact would occur during operation, the Project would be required to comply with Regulation VIII as detailed in Mitigation Measure AQ-2 that would further reduce fugitive dust emissions associated with the Project. In addition, implementation of Mitigation Measure AQ-5 would limit the speed of all vehicles operating onsite on paved and unpaved roads to 15 miles per hour or less and Mitigation Measure AQ-6 would ensure an Operational Dust Control Plan is implemented.

Additionally, the Project does not include residential or commercial development, would employ 4 to 10 full-time employees but would not induce unplanned population or employment growth. Therefore, the Project would not conflict with or obstruct the implementation of the applicable air quality plan.

Mitigation Measures

AQ-1 **Construction Equipment**. All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-road Compression-Ignition Engines as specified in C.C.R., Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. In the event a Tier 4 Final engine is not available for any offroad engine larger than 100 horsepower, that engine shall be equipped with retrofit controls that would provide NO_X and particulate matter emissions that are equivalent to Tier 4 engine. A list of the construction equipment, including all off-road equipment utilized at the project site by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_X analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment

use does not exceed the significance thresholds. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-2 **Fugitive Dust Control.** Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the ICAPCD CEQA Handbook's required additional standard and enhanced mitigation measures listed below shall be implemented prior to and during construction. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process.

ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control

- All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover.
- All on-site and off-site unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.
- The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering.

ICAPCD "Discretionary" Measures for Fugitive Dust (PM_{10}) Control

- Water exposed soil only in those areas where active grading and vehicle movement occurs with adequate frequency to control dust.
- Replace ground cover in disturbed areas as quickly as possible.
- Automatic sprinkler system installed on all soil piles.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.
- Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.
- Implement a shuttle service to and from retail services and food establishments during lunch hours.

Standard Mitigation Measures for Construction Combustion Equipment

- Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Enhanced Mitigation Measures for Construction Equipment

To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures:

- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

AQ-3 **Dust Suppression.** The Project applicant shall employ a method of dust suppression such as water or chemical stabilization) approved by ICAPCD. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. This will be conducted monthly at a rate of 0.1 gallon/square yard of chemical dust suppressant. The Project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire

Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-4 **Dust Suppression Management Plan.** Prior to any earthmoving activity, the Project applicant shall submit an Enhanced Dust Control Plan and obtain ICAPCD and Imperial County Planning and Development Services Department (ICPDS) approval.

AQ-5 **Speed Limit.** During construction and operation of the Project, the Project applicant shall limit the speed of all vehicles operating onsite on paved and unpaved roads to 15 miles per hour or less.

AQ-6 **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval.

ICAPCD Rule 301 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the Project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the Project.

8.1.2 Cumulatively Considered Non-Attainment Pollutants

Threshold AQ-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state air quality standards?

Construction

Construction-related activities are temporary, short-term sources of emissions. Construction emissions are estimated using the methods described in Section 6, Methodology, and are presented as an estimate of daily construction emissions (pounds per day) in Table 6. As discussed above in Threshold AQ-1 and summarized in Table 6, with implementation of Mitigation Measures AQ-1 through AQ-5, the Project's daily mitigated construction emissions would not exceed the ICAPCD's thresholds. Therefore, construction impacts associated with the cumulative considerable net increase of any criteria air pollutant emissions would be less than significant with mitigation.

Table 6. Unmitigated and Mitigated Construction Daily Maximum Criteria Air Pollutant Emissions
(lbs per day)

Construction Phase	Pounds/Day					
Unmitigated Daily Construction Criteria Air Pollutant Emissions	**VOC**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	5.6	36.8	59.6	0.1	71.5	9.0
Phase 2: Civil Improvements - Grading/Roads/Earthwork (2026)	7.3	47.9	71.5	0.1	80.9	10.3
Phase 3: PV Panel & BESS Construction (2026)	11.4	51.6	160.2	0.1	79.3	10.8
Phase 3: PV Panel & BESS Construction (2027)	9.3	50.0	114.2	0.1	79.1	10.7
Phase 4: Testing & Commissioning (2027)	0.4	1.9	5.7	0.0	67.1	6.9
Phase 5: Decommissioning (2050)a	3.5	18.8	57.2	0.1	78.1	9.7
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	12.9	84.7	131.1	0.2	152.4	19.3
Maximum	**12.9**	**84.7**	**160.2**	**0.2**	**152.4**	**19.3**
ICAPCD Thresholds	75	100	550	N/A	150	N/A
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**Yes**	**N/A**
Mitigated Daily Construction Criteria Air Pollutant Emissions	**VOC**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	1.9	7.8	74.3	0.1	69.1	7.4
Phase 2: Civil Improvements - Grading/Roads/Earthwork (2026)	3.7	18.8	89.1	0.1	78.7	8.8
Phase 3: PV Panel & BESS Construction (2026)	8.5	24.9	166.1	0.1	77.7	9.8
Phase 3: PV Panel & BESS Construction (2027)	6.5	25.0	119.9	0.1	77.6	9.8
Phase 4: Testing & Commissioning (2027)	0.4	1.8	5.6	0.0	66.2	6.8
Phase 5: Decommissioning (2050)[a]	2.7	13.7	63.9	0.1	77.4	9.6
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	5.7	26.7	163.4	0.2	147.8	16.2
Maximum	**8.5**	**26.7**	**166.1**	**0.2**	**147.8**	**16.2**

PC ORIGINAL PKG

Table 6. Unmitigated and Mitigated Construction Daily Maximum Criteria Air Pollutant Emissions
(lbs per day)

Construction Phase	Pounds/Day					
Unmitigated Daily Construction Criteria Air Pollutant Emissions	**VOC**	**NOx**	**CO**	**SO_2**	**PM 10**	**PM 2.5**
ICAPCD Thresholds	75	100	550	N/A	150	N/A
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**N/A**

Notes:
a Decommissioning would occur at the end of operations. It was included with conservatively included with construction since similar equipment would be used.
CO = carbon monoxide, NO_X = oxides of nitrogen, PM_{10} = coarse particulate matter, $PM_{2.5}$ = fine particulate matter, SO_X = oxides of sulfur, VOC = volatile organic compounds , ICAPCD = Imperial County Air Pollution Control District

Operational

As previously discussed, it is assumed the Project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects or with any future nearby proposed renewable energy projects. During long-term operations of the Project, minimal amounts of criteria air pollutants would be generated from periodic vehicle trips for maintenance, inspections, and routine cleaning. However, these events are expected to be occasional and result in minimal emissions.

Although no significant air quality impact would occur during operation, the Project would be required to comply with Regulation VIII as detailed in Mitigation Measure AQ-2 that would further reduce fugitive dust emissions associated with the Project. In addition, implementation of Mitigation Measure AQ-5 would limit the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less and Mitigation Measure AQ-6 would ensure an Operational Dust Control Plan is implemented. Therefore, operational impacts associated with the cumulative considerable net increase of any criteria air pollutant emissions would be less than significant.

Mitigation Measures

Implement the following mitigation measures:

AQ-1 Construction Equipment

AQ -2 Fugitive Dust Control

AQ -3 Dust Suppression

AQ-4 Dust Suppression Management Plan

PC ORIGINAL PKG

AQ-5 Speed Limit

AQ-6 Operational Dust Control Plan

8.1.3 Substantial Pollutant Concentrations

Threshold AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, older adults, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (CARB 2024c). The nearest sensitive receptor is a residence located within the central portion of the Big Rock 2 Cluster North Site, in the southwest corner of the Jessup Road/W Campbell Road intersection. All other sensitive receptors are located further and would experience less air quality impacts.

Toxic Air Contaminants

Concentrations of TACs are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

Intermittent construction activities associated with the Project would result in short-term emissions of diesel particulate matter, which the State has identified as a TAC. During construction, the exhaust of off-road heavy-duty diesel equipment would emit DPM during general construction activities, such as grading, building construction[2], and paving.

Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to OEHHA, health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 24 months), the Project and Project-related offsite improvements would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities. The Project would be consistent with the applicable ICAPCD rules and regulations intended to reduce emissions from construction equipment and activities. The Project

[2] Conservatively includes construction of O&M building.

would comply with regulatory control measures including the CARB Air Toxics Control Measure (ATCM) that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that requires fleets to retire, replace, or repower of older, dirtier engines with newer emission-controlled models. Compliance with these would minimize emissions of TACs during construction. Although sensitive receptors, residential uses, are located within the Project site, construction is relatively short-term, anticipated at 24 months and would result in an overall low level of DPM concentrations in the Project site (Table 6). Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions at the Project site and Project-related offsite improvements.

The Project would also comply with best practices to limit exposure to Valley Fever. During excavation, grading, and other earth-moving activities, construction workers and nearby sensitive receptors have the potential to be exposed to Valley Fever. As this risk cannot be eliminated entirely, Valley Fever risk from construction-related dust from the Project will be partially mitigated by implementation of fugitive dust control measures within ICAPCD Regulation VIII.

Although there are sensitive receptors located within the Project site, compliance with ICAPCD Regulation VIII and the limited duration of construction activities would minimize Valley Fever exposures and impacts would be less than significant.

Operations

CARB recommends that health risk assessments be conducted for substantial sources of operational DPM emissions (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions. The Project would not include any truck stop or warehouse distribution uses, and, as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Project operations would not be considered a substantial source of diesel particulates. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes, which the Project is not.

With respect to the use of consumer products and architectural coatings, the Project's land uses would not include installation of industrial-sized paint booths, emergency generators, or require extensive use of commercial or household cleaning products. Therefore, operational impacts from TACs would be less than significant.

Carbon Monoxide Hotspots

Construction

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels affecting sensitive receptors.

Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

Title 40 of the Code of Federal Regulations, Section 93.123(c)(5), Procedures for Determining Localized CO, PM_{10}, and $PM_{2.5}$ Concentrations (Hot-Spot Analysis), states that "CO, PM_{10}, and $PM_{2.5}$ hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site." Project construction would involve on-road vehicle trips from trucks and workers during construction. Construction activities would last approximately 24 months and would not require a project-level construction hotspot analysis.

Operations

Motor vehicles are a primary source of pollutants within the Project vicinity. Such hot spots are defined as locations where the ambient CO concentrations exceed the State or federal ambient air quality standards. CO is produced in greatest quantities from vehicle combustion and is usually concentrated at or near ground level because it does not readily disperse into the atmosphere. As a result, potential air quality impacts to sensitive receptors are assessed through an analysis of localized CO concentrations.

As previously mentioned, minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, since only limited vehicle trips are anticipated the Project would not result in the creation of a CO hotspot and would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hotspot. The Project's impacts would be less than significant.

8.1.4 Other Emissions (Odors)

Threshold AQ-4: Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of these land uses. Therefore, impacts associated with odors during operations would be less than significant.

During construction, odors would come predominantly from construction equipment, which would cease immediately after construction is complete. Furthermore, the Project would be required to comply with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. As discussed, construction- related odors would be short-term and cease upon Project completion. Therefore, impacts associated odors during construction would be less than significant.

The Project would not create any new sources of odor during operation. Therefore, odors associated with Project operations would be less than significant.

8.2 Greenhouse Gas Impacts

8.2.1 Construction Emissions

Threshold GHG-1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As explained above, the Project's GHG emissions during construction were calculated for each year of construction activity. The Project's estimated GHG emissions generated during construction by year are presented in Table 7. Although construction-related GHGs are one-time emissions, any assessment of project emissions should include construction emissions. AEP recommends that a project's construction-related GHG emissions be amortized over the project's 30-year lifetime in order to include these emissions as part of the project's annualized lifetime total emissions, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. As indicated in Table 7, Project construction emissions during the approximate 24-month construction period would generate an estimated 3,357 $MTCO_2e$, or approximately 112 $MTCO_2e$ annually amortized over a 30-year period. A complete listing of the equipment by phase,

emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets that are provided in Appendix B.

Table 7. Annual Construction GHG Emissions ($MTCO_2e$ per year)

Year/Description	GHG Emissions
2026	2,666
2027	691
2050	2,016
Project Total	3,357
Amortized Construction Emissions	**112**

Source: Appendix B
Note:
Totals may not add up due to rounding.

8.2.2 Operational Emissions

During operation of the Project, minimal amounts of emissions could be generated from maintenance operations, including routine cleaning and from periodic visits from service vehicles.

As previously mentioned, it is assumed the Project would share O&M, substation, and/or transmission facilities with other adjacent PV solar and BESS projects that have been approved and entitled by Imperial County, or with any future nearby proposed renewable energy projects. Additionally, there are no expected sources of stationary emission sources (i.e. emergency generators). Therefore, minimal additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes and operational GHG emissions would be less than significant.

As previously noted, the ICAPCD has not established quantitative significance thresholds for evaluating GHG emissions but rather has relied upon the SCAQMD quantitative thresholds. As shown in Table 7, the estimated total GHG emissions for the Project would not exceed the SCAQMD threshold of 10,000 MT CO_2e per year. Projects below this significance criterion would have a minimal contribution to global emission and are considered to have less than significant impacts. Therefore, construction and operational GHG impacts associated with the Project would be less than significant.

8.2.3 Conflict with State and Local Plans, Policies, or Regulations

Threshold GHG-2: Would the Project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The Project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Project is provided above. As shown in Table 7, the Project's GHG emissions would not exceed the significance threshold of 10,000 MT CO_2e per year.

2022 Scoping Plan Update

The 2022 Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions.

Many of the measures and programs included in the 2022 Scoping Plan would result in the reduction of Project-related GHG emissions, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (low-carbon fuel standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy). Although the Project would introduce GHGs into the environment, once construction is complete, the Project would be a producer of renewable energy, which generates substantially less GHG emissions compared with the more common types of fossil-fueled energy generation facilities. It is anticipated the Project would generate up to a combined 500 MW of alternating current (AC) on a daily basis and up to 500 MW of battery storage. The contribution of renewable resource energy production to meet the goals of the Renewable Portfolio Standard (Scoping Plan Measure E-3) and would result in a net cumulative reduction of GHG emissions, a key environmental benefit (Scoping Plan Measure E-3, Renewable Portfolio Standard, of the Climate Change Scoping Plan requires that all investor-owned utility companies generate 60 percent of their energy demand from renewable sources by year 2030). Therefore, the short-term minor generation of GHG emissions during construction, which is necessary to create a new, low-GHG-emitting power-generating facility, as well as the negligible amount generated during ongoing maintenance operations, would be more than offset by GHG emission reductions associated with solar-generated energy during operation. As such, the Project is consistent with measures in the 2022 Scoping Plan.

2020-2045 RTP/SCS

At the regional level, the 2020–2045 RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs. Typically, a project would be consistent with the RTP/SCS if the project does not exceed the underlying growth assumptions within the RTP/SCS. As previously discussed, the Project would include 4 to 10 new employees and would be consistent with the growth projections for the air plan. Therefore, the Project would not conflict with implementation of the strategies identified in the 2020 RTP/SCS to reduce GHG emissions.

Imperial Valley Regional Climate Action Plan

As previously mentioned, the RCAP has not been adopted nor been qualified in accordance with CEQA Guidelines. However, the Project would be consistent with Strategy E-2: Increase Renewable and Zero-Carbon Energy Generation, and Strategy E-3: Develop Clean Energy Jobs within the RCAP, as it is a solar project and would generate 4 to 10 new jobs. Therefore, the Project would not conflict with the RCAP.

Given the Project's consistency analysis with applicable GHG plans, policies and regulations adopted for the purpose of reducing GHG emissions and emissions below the significance threshold, impacts would be less than significant.

PC ORIGINAL PKG

9 References

California Air Resources Board (CARB).1990. Greenhouse Gas Emissions Level and 2020 Emissions Limit, 2007; California Air Resources Board, California Greenhouse Gas Inventory for 2000-2021– by Category as Defined in the 2008 Scoping Plan, https: ww2.arb.ca.gov/sites/default/files/2023-12/ghg_inventory_scopingplan_sum_2000-21.pdf. Accessed May 2024.

——— 2008. *Climate Change Scoping Plan.* December 2008. Accessed October 2024. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.

——— 2014. *First Update to the Climate Change Scoping Plan*. May 2014. Accessed October 2024. https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

——— 2017. *California's 2017 Climate Change Scoping Plan*. November 2017. Accessed October 2024. https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf.

——— 2021a. "Governor Newsom's Zero-Emission by 2035 Executive Order (N-79-20)." Accessed: October 2024. https://ww2.arb.ca.gov/resources/fact-sheets/governor-newsoms-zero-emission-2035-executive-order-n-79-20.

——— 2021b. "Advanced Clean Trucks Fact Sheet." Accessed October 2024. https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.

——— 2021c. California Greenhouse Gas Emissions for 2000–2021 – by Category as Defined in the 2008 Scoping Plan, July 28, 2021. https: ww2.arb.ca.gov/sites/default/files/2023-12/ghg_inventory_scopingplan_sum_2000-21.pdf. Accessed May 2024.

——— 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Accessed October 2024. https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

——— 2023a. "2020 Mobile Source Strategy." Accessed: October 2024. https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy.

——— 2024a. Advanced Clean Cars Program. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed October 2024.

——— 2024b. Ambient Air Quality Standards Designation Tool. 2024. https://ww2.arb.ca.gov/capp/cst/tch/ambient-air-quality-standards-designation-tool. Accessed October 2024.

——— 2024c. Sensitive Receptor Assessment, 2024b. https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment. Accessed October 2024.

——— 2024d. "Summary: Diesel Particulate Matter Health Impacts." Accessed October 2024. https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts.

PC ORIGINAL PKG

California Department of Public Health, Valley Fever Basics, 2024. Valley Fever Basics (ca.gov) . Accessed October 2024.

Imperial County (Imperial 2016). 2016. Imperial County General Plan - Conservation and Open Space Element. https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf. Accessed October 2024.

Imperial County Transportation Commission (ICTC). June 2021.Imperial County Regional Climate Action Plan. https://www.imperialctc.org/assets/documents/transportation-plans-and-studies/ICTC-Regional-Climate-Action-Plan_FINAL.pdf. Accessed October 2024.

Imperial County Air Pollution Control District (ICAPCD). 2009 Imperial County State Implementation Plan for Particulate Matter Less than 10 Microns in Aerodynamic Diameter. April 11, 2009. https://apcd.imperialcounty.org/wp-content/uploads/2020/08/Final-IC-2009-PM10-SIP-document.pdf. Accessed October 2024.

——— 2014. Imperial County 2013 State Implementation Plan for the 2006 24-Hour PM2.5 Moderate Nonattainment Area. December 2, 2014. https://apcd.imperialcounty.org/wp-content/uploads/2020/01/Req_PM25SIP.pdf.

——— 2017a. 2017 Imperial County Plan for 2008 8-hour Ozone Standard. September 12, 2017. https://apcd.imperialcounty.org/wp-content/uploads/2020/01/OzoneSIP.pdf. Accessed October 2024.

——— 2017b. CEQA Air Quality Handbook. Guidelines for the Implementation of the California Environmental Quality Act of 1970. Amended by Imperial County Air Pollution Control District. https://apcd.imperialcounty.org/wp-content/uploads/2020/01/CEQAHandbk.pdf. Accessed October 2024.

——— 2018a. 2018 Annual Imperial County Plan for Particulate Matter Less Than 10 Microns in Aerodynamic Diameter State Implementation Plan. October 23, 2018. https://apcd.imperialcounty.org/wp-content/uploads/2020/01/2018PM10PlanBoardPacket.pdf. Accessed October 2024.

——— 2018b. 2018 Annual Particulate Matter Less Than 2.5 Microns in Aerodynamic Diameter State Implementation Plan. April 2018. https://apcd.imperialcounty.org/wp-content/uploads/2020/01/2018-IC-PM25SIP.pdf. Accessed October 2024.

Intergovernmental Panel on Climate Change (IPCC), 2014. Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp. https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf. Accessed October 2024.

National Highway Traffic Safety Administration (NHTSA). 2023. “Corporate Average Fuel Economy.” Accessed May 2024. https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy.

Office of NEPA Policy and Compliance. 2023. “CEQ Interim Guidance on Greenhouse Gas Emission and Climate Change (January 9, 2023).” Accessed October 2024.

PC ORIGINAL PKG

https://www.energy.gov/nepa/articles/ceq-interim-guidance-greenhouse-gas-emissions-and-climate-change-january-9-2023.

Southern California Association of Governments (SCAG), Final 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy RTP/SCS, 2020. http:// scag.ca.gov/read-plan-adopted-final-connect-socal-2020. Accessed October 2024.

State of California. 2019. *Executive Order N-19-19.* Accessed May 2024. https://www.gov.ca.gov/wp-content/uploads/2019/09/9.20.19-Climate-EO-N-19-19.pdf.

United States Environmental Protection Agency (USEPA). 2024a. Final Rule and Related Materials for Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards. https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-and-related-materials-control-air-pollution. Accessed November 2024.

——— 2024b. "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act." https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a. March 20, 2024. Accessed November 2024.

——— 2024c. "Health Effects of Ozone Pollution." April 9, 2024. Accessed October 2024. https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

——— 2024d. "Ecosystem Effects of Ozone Pollution." October 21, 2024. Accessed October 2024. https://www.epa.gov/ground-level-ozone-pollution/ecosystem-effects-ozone-pollution.

——— 2024e. "Health and Environmental Effects of Particulate Matter (PM)." July 16, 2024. Accessed October 2024. https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm.

——— 2024f. "Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution." June 21, 2024. Accessed October 2024. https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#What%20is%20CO.

——— 2024g. "Basic Information about NO2." July 16, 2024. Accessed October 2024. https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2.

——— 2024h. "Sulfur Dioxide Basics." January 31, 2024. Accessed October 2024. https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#what%20is%20so2.

——— 2024i. "Basic Information about Lead Air Pollution." June 13, 2024. Accessed October 2024. https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution#how.

——— 2024j. "Overview of Greenhouse Gases." April 11, 2024. Accessed October 2024. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act | US EPA https://www.epa.gov/ghgemissions/overview-greenhouse-gases.

White House. 2021a. "Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." Accessed October 2024. https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

——— 2021b. "Executive Order on Tackling the Climate Crisis at Home and Abroad." January 2021. Accessed October 2024. https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

——— 2021c. "Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability." December 2021. Accessed May 2024.

https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/.

PC ORIGINAL PKG

Appendix A. Pollutant-Specific Overview

PC ORIGINAL PKG

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards to protect public health and welfare. There are six criteria air pollutants: Ozone (O_3); Particulate Matter, which consists of particulate matter 10 micrometers and smaller (PM_{10}) and particulate matter 2.5 micrometers and smaller ($PM_{2.5}$); Carbon Monoxide (CO); Nitrogen Dioxide (NO_2); Sulfur Dioxide (SO_2); and Lead (Pb).

Principal characteristics and possible health and environmental effects of each criteria air pollutant are described below.

Ozone

O_3, also known as “smog”, is not emitted directly into the atmosphere. Instead, it is a secondary pollutant that is formed when volatile organic compounds (VOCs) or reactive organic gases (ROGs) and nitrogen oxides (NO_X) (both byproducts of the internal combustion engine exhaust) undergo chemical reactions in the presence of sunlight. ROG and NO_X are known as O_3 precursors.

O_3 poses a higher risk to those already suffering from respiratory diseases (e.g., asthma), children, older adults, and people who are active outdoors. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from O_3 exposure (United Stated Environmental Protection Agency [USEPA] 2023a).

Long-term exposure to O_3 is linked to aggravation of asthma and is likely to be one of many causes of asthma development. Elevated concentrations of O_3 can result in deaths from respiratory causes (USEPA 2024c).

O_3 can also affect sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas. In particular, O_3 can harm sensitive vegetation during the growing season. Exposure to O_3 can result in reduced photosynthesis, stunted growth, increased risk of diseases, and leaf discoloration (USEPA 2024d).

Particulate Matter

Particulate matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Particulate matter includes PM_{10}, which are inhalable coarse particles with a diameter of 10 micrometers or less, and $PM_{2.5}$, which are inhalable fine particles with a diameter of 2.5 micrometers or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Particulate matter may also form in the atmosphere as a result of complex reactions of chemicals such as sulfur dioxide and nitrogen oxides, which are pollutants emitted from power plants, industries and automobiles.

PC ORIGINAL PKG

Particles less than 2.5 micrometers in diameter pose the greatest risk to health because these particles can get deep into the lungs and may even enter the bloodstream. People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution exposure. Health effects of exposure to particulate matter include (USEPA 2024e): premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

In addition to human health effects, particulate matter can also cause environmental effects such as visibility impairment, environmental damage, and aesthetic damage. $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the U.S., including many national parks and wilderness areas. Particles can be carried over long distances by wind and then settle on ground or water. Effects of this settling include making lakes and streams acidic, changing the nutrient balance in coastal waters and large river basins, depleting the nutrients in soil, damaging sensitive forests and farm crops, affecting the diversity of ecosystems, and contributing to acid rain effects. Particulate matter can also stain and damage stone and other materials, including culturally important objects such as statues and monuments (USEPA 2024e).Carbon Monoxide

CO is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections.

Breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain. This condition is especially critical for people with cardiovascular or chronic lung diseases. At very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness, and death (USEPA 2024f).

Nitrogen Dioxide

NO_2 is a major component of the group of highly reactive gases known as oxides of nitrogen or NO_X, which is an O_3 precursor. NO_2 primarily gets in the air from the burning of fuel. NO_2 forms from emissions from cars, trucks and buses, power plants, and off-road equipment.

Breathing air with a high concentration of NO_2 can irritate airways in the human respiratory system. Short-term exposure to NO_2 can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with

PC ORIGINAL PKG

asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2 (USEPA 2024g).

NO_2 and other NO_X interact with water, oxygen, and other chemicals in the atmosphere to form acid rain, which can harm sensitive ecosystems such as lakes and forests. NO_X can make the air hazy and affect visibility. NO_X also contributes to nutrient pollution in coastal waters (USEPA 2024g).

Sulfur Dioxide

SO_2 is the component of greatest concern for the group of gaseous sulfur oxides (SO_X). The largest source of SO_2 in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities. Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content.

Short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult. These effects of SO_2 are of particular concern to people with asthma, particularly children. SO_2 emissions can contribute to particulate matter pollution that can penetrate deeply into the lungs and contribute to health effects. SO_X can harm trees and plants by damaging foliage and decreasing growth. SO_2 and other SO_X can contribute to acid rain that is harmful for sensitive ecosystems. SO_2 and other SO_X can react with other compounds in the atmosphere to form fine particles that reduce visibility (haze) (USEPA 2024h).

Lead

Major sources of Pb in the air are ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of Pb are usually found near lead smelters.

Depending on the level of exposure, Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Pb exposure also affects the oxygen carrying capacity of the blood. Infants and young children are especially sensitive to Pb exposures, which may contribute to behavioral problems, learning deficits and lowered IQ. Elevated levels of Pb in the environment can result in decreased growth and reproduction in plants and animals, and neurological effects in vertebrates (USEPA 2024i).

Mobile Source Air Toxics

Toxic air contaminants (TACs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Examples of TACs include benzene, which is found in gasoline; perchloroethylene, which is emitted from some dry-cleaning facilities; and methylene chloride, which is used as a solvent and paint

PC ORIGINAL PKG

stripper by a number of industries. Examples of other TACs include dioxin, asbestos, toluene, and metals such as cadmium, mercury, chromium, and lead compounds.

Diesel engines emit a complex mixture of pollutants, including very small carbon particles, or "soot" coated with numerous organic compounds, known as diesel particulate matter (DPM). DPM contains more than 40 cancer-causing substances, most of which are readily adsorbed onto the soot particles (CARB 2024d). In 1998, California identified DPM as a TAC based on its potential to cause cancer. People living and working in cities and industrial areas and near heavy truck or train traffic are most likely to be exposed to DPM. Exposure to DPM can contribute to a range of health problems. These include irritation to the eyes, throat and nose, heart and lung disease, and lung cancer. In addition to its health effects, DPM can contribute to haze that reduces visibility by obscuring outdoor views and decreasing the distance over which one can distinguish features across the landscape. DPM also plays an important role in climate change. A large proportion of DPM is composed of black carbon or soot, which is a potent contributor to global warming. Greenhouse Gas Emissions

Greenhouse gases (GHGs) are gases that warm the Earth by trapping heat in the atmosphere. The most important GHGs directly emitted by humans include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases.

Different GHGs can have different effects on the Earth's warming. The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, typically a 100-year time horizon, relative to the emissions of 1 ton of CO_2. (USEPA 2024j). Gases with a higher GWP absorb more energy, per ton emitted, than gases with a lower GWP, and thus contribute more to warming Earth. The major GHGs are described below.

Carbon Dioxide

CO_2 is the primary GHG emitted through human activities. CO_2 is naturally present in the atmosphere as part of the Earth's carbon cycle (the natural circulation of carbon among the atmosphere, oceans, soil, plants, and animals). Human activities are altering the carbon cycle – both by adding more CO_2 to the atmosphere and by influencing the ability of natural sinks, like forests and soils, to remove and store CO_2 from the atmosphere. While CO_2 emissions come from a variety of natural sources, human-related emissions are responsible for the increase that has occurred in the atmosphere since the industrial revolution. The main sources of CO_2 emissions in the U.S. are transportation, electricity, industry, and residential and commercial. The GWP of CO_2, by definition, is 1 (USEPA 2024j).

Methane

In 2021, CH_4 accounted for 12% of all U.S. GHG emissions from human activities (USEPA 2024j). Human activities emitting CH_4 include energy production, industrial processes, agriculture, land use,

PC ORIGINAL PKG

and waste management. CH_4 is emitted during the production, processing, storage, and transport of coal, natural gas, and oil. CH_4 is emitted from raising domestic livestock such as cattle, swine, sheep, and goats that produce CH_4 as part of their normal digestive process. In addition, CH_4 is generated when animal manure is stored or managed in holding tanks. CH_4 is also generated in landfills as municipal waste decomposes and in the treatment of wastewater. CH_4 is also emitted from a number of natural sources such as wetlands, reservoirs and ponds, termites, oceans, sediments, volcanoes, and wildfires. The GWP of CH_4 is 28 (USEPA 2024j).

Nitrous Oxide

In 2021, N_2O accounted for 6% of all U.S. GHG emissions from human activities (USEPA 2024j). N_2O is naturally present in the atmosphere as part of the Earth's nitrogen cycle (natural circulation of nitrogen among the atmosphere, plants, animals, and microorganisms that live in soil and water). Human activities such as agriculture, fuel combustion, wastewater management, and industrial processes are increasing the amount of N_2O in the atmosphere. N_2O is emitted during combustion of fuels. N_2O is so generated from treatment of domestic wastewater. The GWP of N_2O is 265 based on IPCC's Fifth Assessment Report (IPCC 2014).

Fluorinated Gases

Unlike many other GHGs, fluorinated gases have no significant natural sources and come almost entirely from human-related activities. They are emitted through their use as substitutes for O_3-depleting substances (e.g., as refrigerants) and through a variety of industrial processes such as aluminum and semiconductor manufacturing. Many fluorinated gases have very GWPs relative to other GHGs, so small atmospheric concentrations can nevertheless have large effects on global temperatures. Fluorinated gases can also have long atmospheric lifetimes—in some cases, lasting thousands of years. Like other long-lived greenhouse gases, most fluorinated gases are well-mixed in the atmosphere, spreading around the world after they are emitted. In general, fluorinated gases are the most potent and longest lasting type of greenhouse gases emitted by human activities. There are four main categories of fluorinated gases – hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The GWP of HFCs is up to 12,400, PFCs is up to 11,100, NF_3 is 16,100, and SF_6 is 23,500 based on IPCC's Fifth Assessment Report (IPCC 2014).

PC ORIGINAL PKG

Appendix B. Construction and Operational Emissions

PC ORIGINAL PKG

CalEEMod Input

Project Name:	Big Rock 2
Project Location:	Imperial County APCD
CEC Climate Zone:	19
Land Use Setting:	Rural
Operational Year:	2027
Utility Company	Imperial Irrigtion District/SoCal Gas

Land Use

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	SF
Commercial	General Office space	0.2	Acres	0.2	8,712.00
Parking Lot		0.8	Acre	0.8	34,848.00
Other Non-Asphalt Surfaces		1848	Acre	1848	80,498,880.00
		1849			

Construction Schedule

Construction Phase Name	Phase Type	Start Date	End Date	# Days/Week	# one-way worker trips/d	# one-way vendor trips/day	# Total haul trips	Worker Trip Length	Vendor Trip Length	Haul Trip Length
Phase 1: Site Preparation, Fencing, and Ingress/Egress	Site Preparation	4/8/2026	7/8/2026	6	148	32	0	16	15	0
Phase 2: Civil Improvements - Grading/Roads/Earthwork	Grading	4/8/2026	7/8/2026	6	232	32	2	16	15	30
Phase 3: PV Panel & BESS Construction	Building Construction	7/11/2026	3/1/2027	6	1000	32	0	16	15	0
Phase 4: Testing & Commissioning	Building Construction	4/5/2027	10/2/2027	6	58	32	0	16	15	0
Phase 5: Decommissioning	Building Construction	1/1/2050	11/23/2050	6	1000	32	0	16	15	0

Notes:

6	# of days per week.
Varies	daily construction workers

Trip lengths for worker and vendor provided by applicant.
2 max daily haul trucks for debris haul (civil).

PC ORIGINAL PKG

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1	Crawler Tractors	Diesel	Average	4	5	84	0.37
	Graders	Diesel	Average	4	6	148	0.41
	Off-Highway Trucks	Diesel	Average	4	7	376	0.38
	Plate Compactors	Diesel	Average	4	4	8	0.43
	Rubber Tired Loaders	Diesel	Average	4	8	150	0.36
	Scrapers	Diesel	Average	4	4	423	0.48
Phase 2	Graders	Diesel	Average	4	6	148	0.41
	Rubber Tired Loaders	Diesel	Average	1	7	84	0.37
	Scrapers	Diesel	Average	4	4	367	0.4
	Crawler Tractors	Diesel	Average	4	8	87	0.43
	Off-Highway Trucks	Diesel	Average	4	7	376	0.38
	Plate Compactors	Diesel	Average	4	4	8	0.43
Phase 3	Air Compressors	Diesel	Average	4	8	84	0.37
	Crawler Tractors	Diesel	Average	4	4	367	0.29
	Generator Sets	Diesel	Average	8	8	82	0.2
	Other Construction Equipment	Diesel	Average	4	2	82	0.42
	Rough Terrain Forklifts	Diesel	Average	8	5	96	0.4
	Rubber Tired Loaders	Diesel	Average	8	5	150	0.36
	Trenchers	Diesel	Average	8	5	40	0.5
	Other Construction Equipment	Diesel	Average	4	4	82	0.42
Phase 4	N/A						
Phase 5	Air Compressors	Diesel	Average	4	8	84	0.37
	Crawler Tractors	Diesel	Average	4	4	367	0.29
	Generator Sets	Diesel	Average	8	8	82	0.2
	Other Construction Equipment	Diesel	Average	4	2	82	0.42
	Rough Terrain Forklifts	Diesel	Average	8	5	96	0.4

PC ORIGINAL PKG

Daily Project Construction Criteria Air Pollutant Emissions

Construction Phase	Pounds/Day					
Unmitigated Daily Construction Criteria Air Pollutant Emissions	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	5.6	36.8	59.6	0.1	71.5	9.0
Phase 2: Civil Improvements - Grading/Roads/Earthwork (2026)	7.3	47.9	71.5	0.1	80.9	10.3
Phase 3: PV Panel & BESS Construction (2026)	11.4	51.6	160.2	0.1	79.3	10.8
Phase 3: PV Panel & BESS Construction (2027)	9.3	50.0	114.2	0.1	79.1	10.7
Phase 4: Testing & Commissioning (2027)	0.4	1.9	5.7	0.0	67.1	6.9
Phase 5: Decommissioning (2050)	3.5	18.8	57.2	0.1	78.1	9.7
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	12.9	84.7	131.1	0.2	152.4	19.3
Maximum	**12.9**	**84.7**	**160.2**	**0.2**	**152.4**	**19.3**
ICAPCD Thresholds	75	100	550	N/A	150	N/A
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**Yes**	**N/A**
Mitigated Daily Construction Criteria Air Pollutant Emissions	**Pounds/Day**					
Phase 1: Site Preparation, Fencing, and Ingress/Egress (2026)	1.9	7.8	74.3	0.1	69.1	7.4
Phase 2: Civil Improvements - Grading/Roads/Earthwork (2026)	3.7	18.8	89.1	0.1	78.7	8.8
Phase 3: PV Panel & BESS Construction (2026)	8.5	24.9	166.1	0.1	77.7	9.8
Phase 3: PV Panel & BESS Construction (2027)	6.5	25.0	119.9	0.1	77.6	9.8
Phase 4: Testing & Commissioning (2027)	0.4	1.8	5.6	0.0	66.2	6.8
Phase 5: Decommissioning (2050)	2.7	13.7	63.9	0.1	77.4	9.6
Overlapping Phases						
Phase 1 (2026) + Phase 2 (2026)	5.7	26.7	163.4	0.2	147.8	16.2
Maximum	**8.5**	**26.7**	**166.1**	**0.2**	**147.8**	**16.2**
ICAPCD Thresholds	75	100	550	N/A	150	N/A
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**N/A**

Notes:
CO = carbon monoxide, NO_X = oxides of nitrogen, PM_{10} = coarse particulate matter, $PM_{2.5}$ = fine particulate matter, SO_X = oxides of sulfur, VOC = volatile organic compounds, ICAPCD = Imperial County Air Pollution Control District

PC ORIGINAL PKG

Annual Construction GHG Emissions

Construction	Metric Tons			
	CO_2	CH_4	N_2O	CO_2e
2026	2722	0.1	0.1	2750
2027	709	0.0	0.0	720
2050	2005	0.0	0.0	2,016
Total Unmitigated	3431.59	0.1	0.1	3470
Total Amortized Over 30 Years				**116**
2026	2638	0.1	0.1	2666
2027	680	0.0	0.0	691
2050	2005	0.0	0.0	2,016
Total Mitigated	3318	0.132	0.11	3357
Total Amortized Over 30 Years				**112**

Notes:

CO_2 = carbon dioxide, CH_4 = methane, N_2O = nitrous oxide, CO_2e = carbon dioxide equivalent

PC ORIGINAL PKG

Big Rock 2026 v2 Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. Phase 1 (2026) - Unmitigated

3.2. Phase 1 (2026) - Mitigated

3.3. Phase 2 (2026) - Unmitigated

3.4. Phase 2 (2026) - Mitigated

3.5. Phase 3 (2026) - Unmitigated

3.6. Phase 3 (2026) - Mitigated

PC ORIGINAL PKG

3.7. Phase 3 (2027) - Unmitigated

3.8. Phase 3 (2027) - Mitigated

3.9. Phase 4 (2027) - Unmitigated

3.10. Phase 4 (2027) - Mitigated

3.11. Phase 5 (2050) - Unmitigated

3.12. Phase 5 (2050) - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

PC ORIGINAL PKG

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

PC ORIGINAL PKG

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Big Rock 2026 v2
Construction Start Date	4/8/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	4.80
Location	32.76641676498413, -115.72434681843731
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5605
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	3.20	1000sqft	0.20	3,200	0.00	0.00	—	—
Parking Lot	20.0	Space	0.80	0.00	0.00	0.00	—	—

PC ORIGINAL PKG

Other Non-Asphalt Surfaces	1.00	Acre	1,848	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-C	Water Unpaved Construction Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.1	12.9	84.7	160	0.24	4.06	148	152	3.74	15.5	19.3	—	30,685	30,685	1.15	0.80	46.6	30,976
Mit.	9.33	8.53	26.7	166	0.24	0.86	147	148	0.83	15.4	16.2	—	30,685	30,685	1.15	0.80	46.6	30,976
% Reduced	38%	34%	69%	-4%	—	79%	1%	3%	78%	1%	16%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.7	10.1	52.5	120	0.12	1.64	77.7	79.3	1.51	9.33	10.8	—	23,401	23,401	1.03	0.74	1.21	23,647
Mit.	8.04	7.22	25.8	126	0.11	0.61	77.1	77.7	0.58	9.27	9.84	—	22,155	22,155	0.98	0.73	1.21	22,397
% Reduced	31%	29%	51%	-5%	13%	63%	1%	2%	62%	1%	9%	—	5%	5%	5%	1%	—	5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.09	7.00	39.8	80.7	0.10	1.55	63.1	64.6	1.43	7.09	8.52	—	16,444	16,444	0.66	0.47	10.5	16,612

PC ORIGINAL PKG

Mit.	4.68	4.25	16.4	90.1	0.09	0.44	62.5	63.0	0.42	7.04	7.45	—	15,934	15,934	0.64	0.47	10.5	16,101
% Reduced	42%	39%	59%	-12%	7%	72%	1%	3%	71%	1%	13%	—	3%	3%	3%	1%	—	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.48	1.28	7.27	14.7	0.02	0.28	11.5	11.8	0.26	1.29	1.55	—	2,722	2,722	0.11	0.08	1.73	2,750
Mit.	0.85	0.78	2.99	16.4	0.02	0.08	11.4	11.5	0.08	1.28	1.36	—	2,638	2,638	0.11	0.08	1.73	2,666
% Reduced	42%	39%	59%	-12%	7%	72%	1%	3%	71%	1%	13%	—	3%	3%	3%	1%	—	3%

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	15.1	12.9	84.7	160	0.24	4.06	148	152	3.74	15.5	19.3	—	30,685	30,685	1.15	0.80	46.6	30,976
2027	0.43	0.38	1.75	5.61	0.01	0.02	66.5	66.5	0.02	6.78	6.80	—	2,180	2,180	0.05	0.23	5.47	2,254
2050	3.92	3.48	18.8	57.2	0.07	0.39	77.7	78.1	0.35	9.33	9.68	—	16,718	16,718	0.28	0.25	1.56	16,801
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.7	10.1	52.5	120	0.12	1.64	77.7	79.3	1.51	9.33	10.8	—	23,401	23,401	1.03	0.74	1.21	23,647
2027	10.7	9.27	50.0	114	0.12	1.44	77.7	79.1	1.33	9.33	10.7	—	23,182	23,182	1.03	0.74	1.09	23,428
2050	3.76	3.32	18.9	43.1	0.07	0.39	77.7	78.1	0.35	9.33	9.68	—	15,144	15,144	0.28	0.25	0.04	15,226
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.09	7.00	39.8	80.7	0.10	1.55	63.1	64.6	1.43	7.09	8.52	—	16,444	16,444	0.66	0.47	10.5	16,612
2027	1.77	1.54	7.80	19.6	0.02	0.21	38.9	39.1	0.20	4.16	4.36	—	4,283	4,283	0.16	0.20	3.58	4,350
2050	2.90	2.57	14.5	36.7	0.05	0.30	58.9	59.2	0.27	7.08	7.35	—	12,113	12,113	0.22	0.19	0.52	12,176
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

2026	1.48	1.28	7.27	14.7	0.02	0.28	11.5	11.8	0.26	1.29	1.55	—	2,722	2,722	0.11	0.08	1.73	2,750
2027	0.32	0.28	1.42	3.58	< 0.005	0.04	7.09	7.13	0.04	0.76	0.80	—	709	709	0.03	0.03	0.59	720
2050	0.53	0.47	2.64	6.70	0.01	0.05	10.7	10.8	0.05	1.29	1.34	—	2,005	2,005	0.04	0.03	0.09	2,016

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.33	8.53	26.7	166	0.24	0.86	147	148	0.83	15.4	16.2	—	30,685	30,685	1.15	0.80	46.6	30,976
2027	0.43	0.38	1.75	5.61	0.01	0.02	66.1	66.2	0.02	6.74	6.77	—	2,180	2,180	0.05	0.23	5.47	2,254
2050	2.91	2.72	13.7	63.9	0.07	0.34	77.0	77.4	0.31	9.27	9.58	—	16,718	16,718	0.28	0.25	1.56	16,801
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.04	7.22	25.8	126	0.11	0.61	77.1	77.7	0.58	9.27	9.84	—	22,155	22,155	0.98	0.73	1.21	22,397
2027	7.31	6.55	25.0	120	0.11	0.55	77.1	77.6	0.52	9.27	9.78	—	21,936	21,936	0.98	0.73	1.09	22,178
2050	2.75	2.56	13.8	49.8	0.07	0.34	77.0	77.4	0.31	9.27	9.58	—	15,144	15,144	0.28	0.25	0.04	15,226
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.68	4.25	16.4	90.1	0.09	0.44	62.5	63.0	0.42	7.04	7.45	—	15,934	15,934	0.64	0.47	10.5	16,101
2027	1.29	1.16	4.26	20.5	0.02	0.09	38.6	38.7	0.08	4.14	4.22	—	4,108	4,108	0.15	0.20	3.58	4,174
2050	2.13	1.99	10.5	41.9	0.05	0.26	58.4	58.7	0.24	7.04	7.28	—	12,113	12,113	0.22	0.19	0.52	12,176
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.85	0.78	2.99	16.4	0.02	0.08	11.4	11.5	0.08	1.28	1.36	—	2,638	2,638	0.11	0.08	1.73	2,666
2027	0.24	0.21	0.78	3.73	< 0.005	0.02	7.05	7.07	0.01	0.76	0.77	—	680	680	0.03	0.03	0.59	691
2050	0.39	0.36	1.92	7.64	0.01	0.05	10.7	10.7	0.04	1.28	1.33	—	2,005	2,005	0.04	0.03	0.09	2,016

PC ORIGINAL PKG

3. Construction Emissions Details

3.1. Phase 1 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.52	4.64	34.3	44.7	0.09	1.86	—	1.86	1.71	—	1.71	—	9,898	9,898	0.40	0.08	—	9,932
Dust From Material Movement	—	—	—	—	—	—	1.31	1.31	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.35	0.26	< 0.005	< 0.005	1.44	1.44	< 0.005	0.14	0.15	—	72.1	72.1	< 0.005	0.01	0.07	75.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	7.42	9.68	0.02	0.40	—	0.40	0.37	—	0.37	—	2,142	2,142	0.09	0.02	—	2,150
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.08	0.06	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	15.7	15.7	< 0.005	< 0.005	0.01	16.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Off-Roa Equipment	0.22	0.18	1.35	1.77	< 0.005	0.07	—	0.07	0.07	—	0.07	—	355	355	0.01	< 0.005	—	356
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	2.60	2.60	< 0.005	< 0.005	< 0.005	2.73
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.89	0.75	14.0	0.00	0.00	1.67	1.67	0.00	0.39	0.39	—	1,937	1,937	0.08	0.07	6.35	1,965
Vendor	0.06	0.05	1.41	0.57	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	3.65	1,497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.18	2.18	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	381	381	0.02	0.01	0.59	386
Vendor	0.01	0.01	0.33	0.12	< 0.005	< 0.005	13.9	13.9	< 0.005	1.40	1.41	—	311	311	< 0.005	0.04	0.34	324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.40	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.1	63.1	< 0.005	< 0.005	0.10	64.0
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	2.54	2.54	< 0.005	0.26	0.26	—	51.4	51.4	< 0.005	0.01	0.06	53.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Phase 1 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	1.00	5.34	59.5	0.09	0.21	—	0.21	0.20	—	0.20	—	9,898	9,898	0.40	0.08	—	9,932
Dust From Material Movement	—	—	—	—	—	—	1.31	1.31	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.35	0.26	< 0.005	< 0.005	0.65	0.65	< 0.005	0.07	0.07	—	72.1	72.1	< 0.005	0.01	0.07	75.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.22	1.15	12.9	0.02	0.04	—	0.04	0.04	—	0.04	—	2,142	2,142	0.09	0.02	—	2,150
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.08	0.06	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	15.7	15.7	< 0.005	< 0.005	0.01	16.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.21	2.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	355	355	0.01	< 0.005	—	356
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—

PC ORIGINAL PKG

Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	2.60	2.60	< 0.005	< 0.005	< 0.005	2.73
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.89	0.75	14.0	0.00	0.00	1.67	1.67	0.00	0.39	0.39	—	1,937	1,937	0.08	0.07	6.35	1,965
Vendor	0.06	0.05	1.41	0.57	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	3.65	1,497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.18	2.18	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	381	381	0.02	0.01	0.59	386
Vendor	0.01	0.01	0.33	0.12	< 0.005	< 0.005	13.9	13.9	< 0.005	1.40	1.41	—	311	311	< 0.005	0.04	0.34	324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.40	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.1	63.1	< 0.005	< 0.005	0.10	64.0
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	2.54	2.54	< 0.005	0.26	0.26	—	51.4	51.4	< 0.005	0.01	0.06	53.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Phase 2 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Off-Road Equipment	6.95	5.83	44.8	48.7	0.12	2.15	—	2.15	1.98	—	1.98	—	12,616	12,616	0.51	0.10	—	12,659
Dust From Material Movement	—	—	—	—	—	—	1.52	1.52	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.28	0.21	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	57.7	57.7	< 0.005	0.01	0.06	60.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	9.69	10.5	0.03	0.47	—	0.47	0.43	—	0.43	—	2,731	2,731	0.11	0.02	—	2,740
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.05	< 0.005	< 0.005	0.25	0.25	< 0.005	0.02	0.02	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	1.77	1.92	< 0.005	0.08	—	0.08	0.08	—	0.08	—	452	452	0.02	< 0.005	—	454
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.18
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.49	1.39	1.17	22.0	0.00	0.00	2.62	2.62	0.00	0.61	0.61	—	3,037	3,037	0.12	0.10	9.95	3,081
Vendor	0.06	0.05	1.41	0.57	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	3.65	1,497
Hauling	0.01	< 0.005	0.21	0.04	< 0.005	< 0.005	8.16	8.16	< 0.005	0.82	0.83	—	198	198	< 0.005	0.03	0.42	207
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.29	3.41	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	597	597	0.03	0.02	0.93	606
Vendor	0.01	0.01	0.33	0.12	< 0.005	< 0.005	13.9	13.9	< 0.005	1.40	1.41	—	311	311	< 0.005	0.04	0.34	324
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	1.74	1.74	< 0.005	0.18	0.18	—	42.8	42.8	< 0.005	0.01	0.04	44.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.62	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.9	98.9	< 0.005	< 0.005	0.15	100
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	2.54	2.54	< 0.005	0.26	0.26	—	51.4	51.4	< 0.005	0.01	0.06	53.6
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	7.08	7.08	< 0.005	< 0.005	0.01	7.42

3.4. Phase 2 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.26	15.7	66.3	0.12	0.61	—	0.61	0.58	—	0.58	—	12,616	12,616	0.51	0.10	—	12,659

PC ORIGINAL PKG

Dust From Material Movement	—	—	—	—	—	—	1.52	1.52	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.28	0.21	< 0.005	< 0.005	0.52	0.52	< 0.005	0.05	0.05	—	57.7	57.7	< 0.005	0.01	0.06	60.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.49	3.41	14.3	0.03	0.13	—	0.13	0.13	—	0.13	—	2,731	2,731	0.11	0.02	—	2,740
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.05	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.62	2.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	452	452	0.02	< 0.005	—	454
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.18
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.49	1.39	1.17	22.0	0.00	0.00	2.62	2.62	0.00	0.61	0.61	—	3,037	3,037	0.12	0.10	9.95	3,081

PC ORIGINAL PKG

Vendor	0.06	0.05	1.41	0.57	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	3.65	1,497
Hauling	0.01	< 0.005	0.21	0.04	< 0.005	< 0.005	8.16	8.16	< 0.005	0.82	0.83	—	198	198	< 0.005	0.03	0.42	207
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.29	3.41	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	597	597	0.03	0.02	0.93	606
Vendor	0.01	0.01	0.33	0.12	< 0.005	< 0.005	13.9	13.9	< 0.005	1.40	1.41	—	311	311	< 0.005	0.04	0.34	324
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	1.74	1.74	< 0.005	0.18	0.18	—	42.8	42.8	< 0.005	0.01	0.04	44.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.62	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.9	98.9	< 0.005	< 0.005	0.15	100
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	2.54	2.54	< 0.005	0.26	0.26	—	51.4	51.4	< 0.005	0.01	0.06	53.6
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	7.08	7.08	< 0.005	< 0.005	0.01	7.42

3.5. Phase 3 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.42	5.36	44.8	64.6	0.11	1.62	—	1.62	1.49	—	1.49	—	10,840	10,840	0.44	0.09	—	10,877
Onsite truck	0.02	0.01	0.28	0.21	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	57.7	57.7	< 0.005	0.01	0.06	60.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Off-Road	6.42	5.36	44.8	64.6	0.11	1.62	—	1.62	1.49	—	1.49	—	10,840	10,840	0.44	0.09	—	10,877
Onsite truck	0.02	0.01	0.30	0.22	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	58.6	58.6	< 0.005	0.01	< 0.005	61.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	2.19	18.3	26.4	0.04	0.66	—	0.66	0.61	—	0.61	—	4,429	4,429	0.18	0.04	—	4,445
Onsite truck	0.01	0.01	0.12	0.09	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	23.7	23.7	< 0.005	< 0.005	0.01	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.40	3.34	4.82	0.01	0.12	—	0.12	0.11	—	0.11	—	733	733	0.03	0.01	—	736
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	3.93	3.93	< 0.005	< 0.005	< 0.005	4.12
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.44	6.00	5.05	94.8	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	13,091	13,091	0.53	0.44	42.9	13,278
Vendor	0.06	0.05	1.41	0.57	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	3.65	1,497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.16	4.70	5.75	54.2	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	11,067	11,067	0.57	0.44	1.11	11,214
Vendor	0.06	0.04	1.56	0.58	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	0.09	1,495
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Worker	2.25	2.07	2.33	27.8	0.00	0.00	4.60	4.60	0.00	1.08	1.08	—	4,861	4,861	0.23	0.18	7.56	4,928
Vendor	0.02	0.02	0.63	0.24	< 0.005	0.01	26.3	26.3	0.01	2.65	2.66	—	586	586	0.01	0.08	0.64	611
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.43	5.07	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	805	805	0.04	0.03	1.25	816
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	4.80	4.80	< 0.005	0.48	0.48	—	97.1	97.1	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Phase 3 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.80	2.47	18.2	70.5	0.09	0.59	—	0.59	0.56	—	0.56	—	9,594	9,594	0.39	0.08	—	9,627
Onsite truck	0.02	0.01	0.28	0.21	< 0.005	< 0.005	0.52	0.52	< 0.005	0.05	0.05	—	57.7	57.7	< 0.005	0.01	0.06	60.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.80	2.47	18.2	70.5	0.09	0.59	—	0.59	0.56	—	0.56	—	9,594	9,594	0.39	0.08	—	9,627
Onsite truck	0.02	0.01	0.30	0.22	< 0.005	< 0.005	0.52	0.52	< 0.005	0.05	0.05	—	58.6	58.6	< 0.005	0.01	< 0.005	61.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Off-Road	1.15	1.01	7.44	28.8	0.04	0.24	—	0.24	0.23	—	0.23	—	3,920	3,920	0.16	0.03	—	3,934
Onsite truck	0.01	0.01	0.12	0.09	< 0.005	< 0.005	0.21	0.21	< 0.005	0.02	0.02	—	23.7	23.7	< 0.005	< 0.005	0.01	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.36	5.26	0.01	0.04	—	0.04	0.04	—	0.04	—	649	649	0.03	0.01	—	651
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	< 0.005	4.12
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.44	6.00	5.05	94.8	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	13,091	13,091	0.53	0.44	42.9	13,278
Vendor	0.06	0.05	1.41	0.57	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	3.65	1,497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.16	4.70	5.75	54.2	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	11,067	11,067	0.57	0.44	1.11	11,214
Vendor	0.06	0.04	1.56	0.58	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,435	1,435	0.02	0.20	0.09	1,495
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.25	2.07	2.33	27.8	0.00	0.00	4.60	4.60	0.00	1.08	1.08	—	4,861	4,861	0.23	0.18	7.56	4,928
Vendor	0.02	0.02	0.63	0.24	< 0.005	0.01	26.3	26.3	0.01	2.65	2.66	—	586	586	0.01	0.08	0.64	611
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.43	5.07	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	805	805	0.04	0.03	1.25	816
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	4.80	4.80	< 0.005	0.48	0.48	—	97.1	97.1	< 0.005	0.01	0.11	101

PC ORIGINAL PKG

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Phase 3 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.07	5.07	42.9	64.6	0.11	1.42	—	1.42	1.31	—	1.31	—	10,840	10,840	0.44	0.09	—	10,878
Onsite truck	0.02	0.01	0.30	0.22	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	57.4	57.4	< 0.005	0.01	< 0.005	60.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.71	6.04	9.11	0.02	0.20	—	0.20	0.18	—	0.18	—	1,527	1,527	0.06	0.01	—	1,533
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	8.01	8.01	< 0.005	< 0.005	< 0.005	8.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.10	1.66	< 0.005	0.04	—	0.04	0.03	—	0.03	—	253	253	0.01	< 0.005	—	254
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.39
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.59	4.14	5.36	48.8	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	10,879	10,879	0.57	0.44	1.01	11,025
Vendor	0.05	0.04	1.48	0.53	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,406	1,406	0.02	0.20	0.08	1,465
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.68	0.70	8.64	0.00	0.00	1.59	1.59	0.00	0.37	0.37	—	1,647	1,647	0.07	0.06	2.37	1,669
Vendor	0.01	0.01	0.21	0.07	< 0.005	< 0.005	9.07	9.07	< 0.005	0.91	0.92	—	198	198	< 0.005	0.03	0.19	207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.13	1.58	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	273	273	0.01	0.01	0.39	276
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	1.66	1.66	< 0.005	0.17	0.17	—	32.8	32.8	< 0.005	< 0.005	0.03	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Phase 3 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Off-Road Equipment	2.65	2.35	17.8	70.4	0.09	0.53	—	0.53	0.50	—	0.50	—	9,594	9,594	0.39	0.08	—	9,627
Onsite truck	0.02	0.01	0.30	0.22	< 0.005	< 0.005	0.52	0.52	< 0.005	0.05	0.05	—	57.4	57.4	< 0.005	0.01	< 0.005	60.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.33	2.51	9.92	0.01	0.07	—	0.07	0.07	—	0.07	—	1,352	1,352	0.05	0.01	—	1,356
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	8.01	8.01	< 0.005	< 0.005	< 0.005	8.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	1.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	224	224	0.01	< 0.005	—	225
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.39
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.59	4.14	5.36	48.8	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	10,879	10,879	0.57	0.44	1.01	11,025
Vendor	0.05	0.04	1.48	0.53	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,406	1,406	0.02	0.20	0.08	1,465
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.68	0.70	8.64	0.00	0.00	1.59	1.59	0.00	0.37	0.37	—	1,647	1,647	0.07	0.06	2.37	1,669
Vendor	0.01	0.01	0.21	0.07	< 0.005	< 0.005	9.07	9.07	< 0.005	0.91	0.92	—	198	198	< 0.005	0.03	0.19	207

PC ORIGINAL PKG

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.13	1.58	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	273	273	0.01	0.01	0.39	276
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	1.66	1.66	< 0.005	0.17	0.17	—	32.8	32.8	< 0.005	< 0.005	0.03	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Phase 4 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.14	0.10	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	28.3	28.3	< 0.005	< 0.005	0.03	29.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.15	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	28.7	28.7	< 0.005	< 0.005	< 0.005	30.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.05	< 0.005	< 0.005	0.24	0.24	< 0.005	0.02	0.02	—	12.2	12.2	< 0.005	< 0.005	< 0.005	12.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	2.01	2.01	< 0.005	< 0.005	< 0.005	2.11
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.33	0.27	4.99	0.00	0.00	0.66	0.66	0.00	0.15	0.15	—	746	746	0.03	0.03	2.26	757

PC ORIGINAL PKG

Vendor	0.06	0.05	1.34	0.52	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,405	1,405	0.02	0.20	3.18	1,467
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.31	2.83	0.00	0.00	0.66	0.66	0.00	0.15	0.15	—	631	631	0.03	0.03	0.06	639
Vendor	0.05	0.04	1.48	0.53	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,406	1,406	0.02	0.20	0.08	1,465
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	1.52	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	290	290	0.01	0.01	0.42	294
Vendor	0.03	0.02	0.62	0.23	< 0.005	0.01	27.5	27.5	0.01	2.77	2.78	—	601	601	0.01	0.08	0.59	627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	5.02	5.02	< 0.005	0.51	0.51	—	99.5	99.5	< 0.005	0.01	0.10	104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Phase 4 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.14	0.10	< 0.005	< 0.005	0.26	0.26	< 0.005	0.03	0.03	—	28.3	28.3	< 0.005	< 0.005	0.03	29.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Onsite truck	0.01	0.01	0.15	0.11	< 0.005	< 0.005	0.26	0.26	< 0.005	0.03	0.03	—	28.7	28.7	< 0.005	< 0.005	< 0.005	30.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.05	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	12.2	12.2	< 0.005	< 0.005	< 0.005	12.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.01	2.01	< 0.005	< 0.005	< 0.005	2.11
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.33	0.27	4.99	0.00	0.00	0.66	0.66	0.00	0.15	0.15	—	746	746	0.03	0.03	2.26	757
Vendor	0.06	0.05	1.34	0.52	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,405	1,405	0.02	0.20	3.18	1,467
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.31	2.83	0.00	0.00	0.66	0.66	0.00	0.15	0.15	—	631	631	0.03	0.03	0.06	639
Vendor	0.05	0.04	1.48	0.53	0.01	0.02	65.2	65.3	0.02	6.56	6.59	—	1,406	1,406	0.02	0.20	0.08	1,465
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	1.52	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	290	290	0.01	0.01	0.42	294
Vendor	0.03	0.02	0.62	0.23	< 0.005	0.01	27.5	27.5	0.01	2.77	2.78	—	601	601	0.01	0.08	0.59	627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	5.02	5.02	< 0.005	0.51	0.51	—	99.5	99.5	< 0.005	0.01	0.10	104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

PC ORIGINAL PKG

3.11. Phase 5 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.41	2.00	16.6	24.6	0.06	0.37	—	0.37	0.34	—	0.34	—	5,278	5,278	0.21	0.04	—	5,296
Onsite truck	0.02	0.02	0.26	0.23	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	48.2	48.2	< 0.005	0.01	< 0.005	50.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.41	2.00	16.6	24.6	0.06	0.37	—	0.37	0.34	—	0.34	—	5,278	5,278	0.21	0.04	—	5,296
Onsite truck	0.02	0.01	0.28	0.23	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	49.1	49.1	< 0.005	0.01	< 0.005	51.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.54	12.7	18.9	0.04	0.28	—	0.28	0.26	—	0.26	—	4,049	4,049	0.16	0.03	—	4,063
Onsite truck	0.01	0.01	0.21	0.18	< 0.005	< 0.005	0.87	0.88	< 0.005	0.09	0.09	—	37.2	37.2	< 0.005	0.01	< 0.005	39.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.32	3.45	0.01	0.05	—	0.05	0.05	—	0.05	—	670	670	0.03	0.01	—	673

PC ORIGINAL PKG

Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	6.17	6.17	< 0.005	< 0.005	< 0.005	6.46
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.46	1.43	1.08	32.0	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	10,472	10,472	0.07	0.07	1.56	10,495
Vendor	0.03	0.03	0.85	0.29	0.01	0.02	65.2	65.2	0.01	6.56	6.58	—	919	919	< 0.005	0.13	< 0.005	959
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.30	1.28	1.08	17.9	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	8,897	8,897	0.07	0.07	0.04	8,918
Vendor	0.03	0.03	0.94	0.31	0.01	0.02	65.2	65.2	0.01	6.56	6.58	—	920	920	< 0.005	0.13	< 0.005	960
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.01	1.00	0.81	17.4	0.00	0.00	8.65	8.65	0.00	2.03	2.03	—	7,321	7,321	0.05	0.05	0.51	7,338
Vendor	0.02	0.02	0.71	0.23	0.01	0.02	49.4	49.4	0.01	4.97	4.98	—	706	706	< 0.005	0.10	< 0.005	736
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.15	3.18	0.00	0.00	1.58	1.58	0.00	0.37	0.37	—	1,212	1,212	0.01	0.01	0.09	1,215
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	9.01	9.01	< 0.005	0.91	0.91	—	117	117	< 0.005	0.02	< 0.005	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Phase 5 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.24	11.5	31.3	0.06	0.32	—	0.32	0.30	—	0.30	—	5,278	5,278	0.21	0.04	—	5,296
Onsite truck	0.02	0.02	0.26	0.23	< 0.005	< 0.005	0.52	0.52	< 0.005	0.05	0.05	—	48.2	48.2	< 0.005	0.01	< 0.005	50.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.24	11.5	31.3	0.06	0.32	—	0.32	0.30	—	0.30	—	5,278	5,278	0.21	0.04	—	5,296
Onsite truck	0.02	0.01	0.28	0.23	< 0.005	< 0.005	0.52	0.52	< 0.005	0.05	0.05	—	49.1	49.1	< 0.005	0.01	< 0.005	51.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.95	8.82	24.0	0.04	0.25	—	0.25	0.23	—	0.23	—	4,049	4,049	0.16	0.03	—	4,063
Onsite truck	0.01	0.01	0.21	0.18	< 0.005	< 0.005	0.39	0.39	< 0.005	0.04	0.04	—	37.2	37.2	< 0.005	0.01	< 0.005	39.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.61	4.38	0.01	0.04	—	0.04	0.04	—	0.04	—	670	670	0.03	0.01	—	673
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	6.17	6.17	< 0.005	< 0.005	< 0.005	6.46
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PC ORIGINAL PKG

Worker	1.46	1.43	1.08	32.0	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	10,472	10,472	0.07	0.07	1.56	10,495
Vendor	0.03	0.03	0.85	0.29	0.01	0.02	65.2	65.2	0.01	6.56	6.58	—	919	919	< 0.005	0.13	< 0.005	959
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.30	1.28	1.08	17.9	0.00	0.00	11.3	11.3	0.00	2.65	2.65	—	8,897	8,897	0.07	0.07	0.04	8,918
Vendor	0.03	0.03	0.94	0.31	0.01	0.02	65.2	65.2	0.01	6.56	6.58	—	920	920	< 0.005	0.13	< 0.005	960
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.01	1.00	0.81	17.4	0.00	0.00	8.65	8.65	0.00	2.03	2.03	—	7,321	7,321	0.05	0.05	0.51	7,338
Vendor	0.02	0.02	0.71	0.23	0.01	0.02	49.4	49.4	0.01	4.97	4.98	—	706	706	< 0.005	0.10	< 0.005	736
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.15	3.18	0.00	0.00	1.58	1.58	0.00	0.37	0.37	—	1,212	1,212	0.01	0.01	0.09	1,215
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	9.01	9.01	< 0.005	0.91	0.91	—	117	117	< 0.005	0.02	< 0.005	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Phase 1	Site Preparation	04/08/2026	07/08/2026	6.00	79.0	Site Preparation, Fencing, and Ingress/Egress
Phase 2	Grading	04/08/2026	7/8/2026	6.00	79.0	Civil Improvements - Grading/Roads/Earthwork
Phase 3	Building Construction	07/11/2026	03/01/2027	6.00	200	PV Panel & BESS Construction
Phase 4	Building Construction	04/05/2027	10/2/2027	6.00	156	Testing & Commissioning

PC ORIGINAL PKG

Phase 5	Building Construction	01/01/2050	11/23/2050	6.00	280	Decommissioning

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1	Graders	Diesel	Average	4.00	6.00	148	0.41
Phase 1	Scrapers	Diesel	Average	4.00	4.00	84.0	0.37
Phase 1	Crawler Tractors	Diesel	Average	4.00	5.00	87.0	0.43
Phase 1	Plate Compactors	Diesel	Average	4.00	4.00	8.00	0.43
Phase 1	Off-Highway Trucks	Diesel	Average	4.00	7.00	376	0.38
Phase 1	Rubber Tired Loaders	Diesel	Average	4.00	8.00	150	0.36
Phase 2	Graders	Diesel	Average	4.00	6.00	148	0.41
Phase 2	Rubber Tired Loaders	Diesel	Average	1.00	7.00	150	0.36
Phase 2	Plate Compactors	Diesel	Average	4.00	4.00	84.0	0.37
Phase 2	Scrapers	Diesel	Average	4.00	4.00	423	0.48
Phase 2	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Phase 2	Off-Highway Trucks	Diesel	Average	4.00	7.00	376	0.38
Phase 3	Air Compressors	Diesel	Average	4.00	8.00	84.0	0.37
Phase 3	Crawler Tractors	Diesel	Average	4.00	4.00	367	0.29
Phase 3	Generator Sets	Diesel	Average	8.00	8.00	82.0	0.20
Phase 3	Other Construction Equipment	Diesel	Average	4.00	2.00	82.0	0.42
Phase 3	Rough Terrain Forklifts	Diesel	Average	8.00	5.00	96.0	0.40
Phase 3	Rubber Tired Loaders	Diesel	Average	8.00	5.00	150	0.36
Phase 3	Trenchers	Diesel	Average	8.00	5.00	40.0	0.50
Phase 3	Other Construction Equipment	Diesel	Average	4.00	4.00	82.0	0.42
Phase 5	Crawler Tractors	Diesel	Average	4.00	4.00	367	0.29

PC ORIGINAL PKG

Phase 5	Generator Sets	Diesel	Average	8.00	8.00	14.0	0.74
Phase 5	Other Construction Equipment	Diesel	Average	4.00	2.00	82.0	0.42
Phase 5	Air Compressors	Diesel	Average	4.00	8.00	37.0	0.48
Phase 5	Rough Terrain Forklifts	Diesel	Average	8.00	4.00	96.0	0.40

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1	Graders	Diesel	Tier 4 Final	4.00	6.00	148	0.41
Phase 1	Scrapers	Diesel	Tier 4 Final	4.00	4.00	84.0	0.37
Phase 1	Crawler Tractors	Diesel	Tier 4 Final	4.00	5.00	87.0	0.43
Phase 1	Plate Compactors	Diesel	Average	4.00	4.00	8.00	0.43
Phase 1	Off-Highway Trucks	Diesel	Tier 4 Final	4.00	7.00	376	0.38
Phase 1	Rubber Tired Loaders	Diesel	Tier 4 Final	4.00	8.00	150	0.36
Phase 2	Graders	Diesel	Tier 4 Final	4.00	6.00	148	0.41
Phase 2	Rubber Tired Loaders	Diesel	Tier 4 Final	1.00	7.00	150	0.36
Phase 2	Plate Compactors	Diesel	Average	4.00	4.00	84.0	0.37
Phase 2	Scrapers	Diesel	Average	2.00	4.00	423	0.48
Phase 2	Scrapers	Diesel	Tier 4 Final	2.00	4.00	423	0.48
Phase 2	Crawler Tractors	Diesel	Tier 4 Final	4.00	8.00	87.0	0.43
Phase 2	Off-Highway Trucks	Diesel	Tier 4 Final	4.00	7.00	376	0.38
Phase 3	Air Compressors	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Phase 3	Crawler Tractors	Diesel	Tier 4 Final	4.00	4.00	367	0.29
Phase 3	Generator Sets	Diesel	Average	8.00	8.00	82.0	0.20
Phase 3	Other Construction Equipment	Diesel	Tier 4 Final	4.00	2.00	82.0	0.42
Phase 3	Rough Terrain Forklifts	Diesel	Tier 4 Final	8.00	5.00	96.0	0.40
Phase 3	Rubber Tired Loaders	Diesel	Tier 4 Final	8.00	5.00	150	0.36
Phase 3	Trenchers	Diesel	Average	8.00	5.00	40.0	0.50

PC ORIGINAL PKG

Phase 3	Other Construction Equipment	Diesel	Tier 4 Final	4.00	4.00	82.0	0.42
Phase 5	Crawler Tractors	Diesel	Tier 4 Final	4.00	4.00	367	0.29
Phase 5	Generator Sets	Diesel	Average	8.00	8.00	14.0	0.74
Phase 5	Other Construction Equipment	Diesel	Tier 4 Final	4.00	2.00	82.0	0.42
Phase 5	Air Compressors	Diesel	Tier 4 Final	4.00	8.00	37.0	0.48
Phase 5	Rough Terrain Forklifts	Diesel	Tier 4 Final	8.00	4.00	96.0	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 3	—	—	—	—
Phase 3	Worker	1,000	16.0	LDA,LDT1,LDT2
Phase 3	Vendor	32.0	15.0	HHDT,MHDT
Phase 3	Hauling	0.00	0.00	HHDT
Phase 3	Onsite truck	16.0	0.50	HHDT
Phase 1	—	—	—	—
Phase 1	Worker	148	16.0	LDA,LDT1,LDT2
Phase 1	Vendor	32.0	15.0	HHDT,MHDT
Phase 1	Hauling	0.00	0.00	HHDT
Phase 1	Onsite truck	20.0	0.50	HHDT
Phase 2	—	—	—	—
Phase 2	Worker	232	16.0	LDA,LDT1,LDT2
Phase 2	Vendor	32.0	15.0	HHDT,MHDT
Phase 2	Hauling	2.00	30.0	HHDT
Phase 2	Onsite truck	16.0	0.50	HHDT
Phase 4	—	—	—	—

PC ORIGINAL PKG

Phase 4	Worker	58.0	16.0	LDA,LDT1,LDT2
Phase 4	Vendor	32.0	15.0	HHDT,MHDT
Phase 4	Hauling	0.00	0.00	HHDT
Phase 4	Onsite truck	8.00	0.50	HHDT
Phase 5	—	—	—	—
Phase 5	Worker	1,000	16.0	LDA,LDT1,LDT2
Phase 5	Vendor	32.0	15.0	HHDT,MHDT
Phase 5	Hauling	0.00	0.00	HHDT
Phase 5	Onsite truck	16.0	0.50	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 3	—	—	—	—
Phase 3	Worker	1,000	16.0	LDA,LDT1,LDT2
Phase 3	Vendor	32.0	15.0	HHDT,MHDT
Phase 3	Hauling	0.00	0.00	HHDT
Phase 3	Onsite truck	16.0	0.50	HHDT
Phase 1	—	—	—	—
Phase 1	Worker	148	16.0	LDA,LDT1,LDT2
Phase 1	Vendor	32.0	15.0	HHDT,MHDT
Phase 1	Hauling	0.00	0.00	HHDT
Phase 1	Onsite truck	20.0	0.50	HHDT
Phase 2	—	—	—	—
Phase 2	Worker	232	16.0	LDA,LDT1,LDT2
Phase 2	Vendor	32.0	15.0	HHDT,MHDT
Phase 2	Hauling	2.00	30.0	HHDT
Phase 2	Onsite truck	16.0	0.50	HHDT
Phase 4	—	—	—	—

PC ORIGINAL PKG

Phase 4	Worker	58.0	16.0	LDA,LDT1,LDT2
Phase 4	Vendor	32.0	15.0	HHDT,MHDT
Phase 4	Hauling	0.00	0.00	HHDT
Phase 4	Onsite truck	8.00	0.50	HHDT
Phase 5	—	—	—	—
Phase 5	Worker	1,000	16.0	LDA,LDT1,LDT2
Phase 5	Vendor	32.0	15.0	HHDT,MHDT
Phase 5	Hauling	0.00	0.00	HHDT
Phase 5	Onsite truck	16.0	0.50	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Apply dust suppressants to unpaved roads	84%	84%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Phase 1	0.00	0.00	375	0.00	—
Phase 2	0.00	0.00	435	0.00	—

PC ORIGINAL PKG

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	0.00	0%
Parking Lot	0.80	100%
Other Non-Asphalt Surfaces	1,848	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2050	0.00	457	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Used applicant provided construction schedule
Construction: Off-Road Equipment	Used information provided by the applicant.
Construction: Trips and VMT	Information provided by applicant.
Construction: Architectural Coatings	Used specs
Operations: Energy Use	Information from applicant
Operations: Water and Waste Water	Information from applicant.
Land Use	Information provided by applicant.

PC ORIGINAL PKG

Construction: Dust From Material Movement	Applicant to water area 3 times a day.
Construction: On-Road Fugitive Dust	Applied project design feature to apply dust suppressants and limit vehicle speeds on unpaved roads to 15 mph.

PC ORIGINAL PKG

Biological Resources Technical Report

Big Rock 2 Cluster Solar and Storage Project Imperial County, California

JULY 2025

Prepared for:

90FI 8ME LLC
250 Sutter Street, Suite 600
San Francisco, California 94108

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024

PC ORIGINAL PKG

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

Acronyms and Abbreviations v

Executive Summary vii

1 Introduction 1
- 1.1 Project Location 1
- 1.2 Project Description 1
- 1.3 Regulatory Setting 2
  - 1.3.1 Federal 2
  - 1.3.2 State 4
  - 1.3.3 Regional 7

2 Methods 9
- 2.1 Literature Review 9
- 2.2 Field Reconnaissance 9
  - 2.2.1 Vegetation Community and Land Cover Mapping 11
  - 2.2.2 Flora and Fauna 11
  - 2.2.3 Jurisdictional Aquatic Resources 12
  - 2.2.4 Survey Limitations 13

3 Results 15
- 3.1 Physical Site Characteristics 15
  - 3.1.1 Topography and Drainage 15
  - 3.1.2 Soils 15
- 3.2 Vegetation Communities and Land Cover Types 16
  - 3.2.1 General Agriculture 16
  - 3.2.2 Stream Channel 17
  - 3.2.3 Creosote Bush Scrub and Allscale Scrub Shrubland Alliances 17
  - 3.2.4 Urban/Developed 17
  - 3.2.5 Disturbed Habitat 17
  - 3.2.6 Sensitive Vegetation Communities 18
- 3.3 Flora 18
  - 3.3.1 Special-Status Plant Species 18
- 3.4 Fauna 18
  - 3.4.1 Special-Status Wildlife Species 19
  - 3.4.2 Wildlife Corridors and Habitat Linkages 22
- 3.5 Jurisdictional Aquatic Resources 23

4 Project Impacts 25

PC ORIGINAL PKG

4.1 Explanation of Findings of Significance 25
4.2 Definition of Impacts 25
4.2.1 Direct Permanent Impacts 25
4.2.2 Indirect Impacts 26
4.3 Impact Analysis 26
4.3.1 Impact BIO-1: Special-Status Species 26
4.3.2 Impact BIO-2: Sensitive Vegetation Communities 31
4.3.3 Impact BIO-3: State or Federally Protected Wetlands 31
4.3.4 Impact BIO-4: Wildlife Corridors and Habitat Linkages 31
4.3.5 Impact BIO-5: Local Policies or Ordinances 32
4.3.6 Impact BIO-6: Habitat Conservation Plans 34
5 Project Mitigation 35
6 References 39

TABLES

1 Schedule of Surveys 9
2 Land Covers Within the Project Site 16
3 Bat Species Detected During Acoustic Surveys 22
4 Aquatic Resource Summary for the Project Site 24
5 Direct Impacts to Vegetation Communities and Land Covers within the Project Site 26
6 Imperial County General Plan Conservation of Biological Resources Goals and Objectives 32
7 Imperial County General Plan Consistency Analysis 32

FIGURES

1 Project Location 43
2 Soils 45
3-1 Biological Resources 47
3-2 Biological Resources 49
4 Bat Survey Locations 51
5-1 Aquatic Resources Delineation 53
5-2 Aquatic Resources Delineation 55
5-3 Aquatic Resources Delineation 57
5-4 Aquatic Resources Delineation 59
5-5 Aquatic Resources Delineation 61
5-6 Aquatic Resources Delineation 63
5-7 Aquatic Resources Delineation 65
5-8 Aquatic Resources Delineation 67

PC ORIGINAL PKG

5-9 Aquatic Resources Delineation 69
5-10 Aquatic Resources Delineation 71
6-1 Impacts 73
6-2 Impacts 75

APPENDICES

A Site Photos
B Plant Compendium
C Assessment of Special-Status Plant Species Potentially Occurring on the Project Site
D Wildlife Compendium
E Assessment of Special-Status Wildlife Species Potentially Occurring on the Project Site
F Aquatic Resources Delineation Report

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BESS	battery energy storage system
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
FESA	federal Endangered Species Act
GIS	geographic information system
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
O&M	operations and maintenance
OHWM	ordinary high-water mark
Project	Big Rock 2 Solar and Storage Project
PV	photovoltaic
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Executive Summary

The proposed Big Rock 2 Cluster Solar and Storage Project (Project) would consist of a solar photovoltaic energy-generating facility with associated infrastructure. The proposed Project would encompass 1,849 acres located approximately 23 miles southeast of the Salton Sea.

In April and June 2023, Dudek biologists conducted a general biological reconnaissance survey, including vegetation mapping and a habitat assessment for special-status species, as well as an aquatic resources delineation throughout the Project site.

The Project site contains five land covers and vegetation communities: general agriculture, stream channel, creosote bush scrub and allscale scrub shrub alliances, urban/developed, and disturbed habitat. Based on the aquatic resources delineation, approximately 24.79 acres of non-wetland waters may be regulated by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife (CDFW). The Project would avoid all impacts to aquatic resources to the extent possible by design. All general agriculture is assumed to be permanently impacted.

During spring and summer 2023 and 2024, focused surveys for burrowing owl (*Athene cunicularia*) found approximately 89 burrowing owls at 40 locations throughout the Project site. A commitment to avoidance, minimization, or mitigation is included in Mitigation Measure (MM) BIO-1 of this report. Implementation of MM-BIO-2 and MM-BIO-3 would avoid and minimize indirect impacts to burrowing owls. During burrowing owl surveys, one northern harrier (*Circus hudsonius*) was recorded foraging within the Project site. The Project site is not within this species' known breeding area. Therefore, this species has no potential to nest (Cornell Lab of Ornithology 2023).

In 2025, Dudek conducted a focused raptor and nesting bird survey as well as a bat roost assessment, bat emergence survey, and acoustic surveys for bats in support of the Project. No active raptor nests were detected during the focused raptor and nesting bird survey in April 2025. In addition, the Project site was determined to provide little to no suitable roosting habitat for bats, and the bat emergence surveys resulted in no detections of emerging bats. The acoustic surveys resulted in the detection of 8 bat species, all of which are common species found in desert habitats. A total of 834 bat passes were recorded indicating that a few individuals of each of the detected species are likely foraging throughout the Project site, but none are roosting within the Project site.

No other special-status plant or wildlife species were recorded within the Project site, and none have a moderate or high potential to occur. California black rail (*Laterallus jamaicensis coturniculus*) and Yuma Ridgeway's rail (*Rallus obsoletus yumanensis*) have a low potential to forage and no potential to nest within irrigation canals throughout the Project site. Colorado Desert fringe-toed lizard (*Uma notata*), western yellow bat (*Dasypterus xanthinus*), western mastiff bat (*Eumops perotis californicus*), Colorado Valley woodrat (*Neotoma albigula venusta*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), and American badger (*Taxidea taxus*) have a low potential to occur within desert scrub communities in the Project site. LeConte's thrasher (*Toxostoma lecontei*) has a low potential to nest and forage within these desert scrub communities. No U.S. Fish and Wildlife–designated critical habitat for a federally listed plant or wildlife species occurs within 1 mile of the Project site. The Project site is not within any wildlife corridors or habitat blocks.

MM-BIO-6 would identify sensitive bird species through a pre-construction nesting bird survey, and implementation of MM-BIO-3, MM-BIO-4, and MM-BIO-5 would avoid and minimize indirect impacts to these species.

PC ORIGINAL PKG

Implementation of the proposed Project would not result in any significant impacts to sensitive vegetation communities, state or federally protected wetlands, or wildlife corridors/habitat linkage, nor would it conflict with any local policies, ordinances, or adopted Habitat Conservation Plans. With implementation of the aforementioned mitigation measures, all potential impacts from the proposed Project on biological resources would be reduced to less than significant.

PC ORIGINAL PKG

1 Introduction

This Biological Resources Technical Report provides the following items: (1) describes the existing conditions of biological resources within the Big Rock 2 Cluster Solar and Storage Project (Project) site in terms of vegetation, jurisdictional aquatic resources, flora, wildlife, and wildlife habitats; (2) discusses potential impacts to biological resources that would result from implementation of the proposed Project and describe those impacts in terms of biological significance in view of federal, state, and local laws, regulations, and policies; and (3) recommends mitigation measures for potential impacts to special-status biological resources.

1.1 Project Location

The Project site is in unincorporated Imperial County, California (Figure 1, Project Location), south of Interstate 8 and west of El Centro, California. The Project site comprises approximately 1,849 acres of agricultural and undeveloped lands and associated roads, catchments, and irrigation ditches.

The Project site is composed of the following 24 Accessor's Parcel Numbers: 051-290-019, 051-300-016, 051-290-018, 051-320-007, 051-350-004, 051-270-041, 051-270-028, 051-320-006, 051-320-005, 051-280-054, 051-270-036, 051-300-037, 051-300-035, 051-330-003, 051-350-006, 051-350-008, 051-350-007, 051-270-020, 051-300-011, 051-300-026, 051-300-032, 051-300-036, 051-310-027, and 051-310-028. The geographic center of the Project site roughly corresponds with 32.75669 and -115.73002 (decimal degrees). Elevations within the Project site range from 10 to 60 feet below sea level.

1.2 Project Description

The applicant proposes to develop a solar photovoltaic (PV) energy facility and a battery energy storage system (BESS) on site. The Project would have up to a 500-megawatt (MW) solar PV power capacity, and the associated BESS would have up to a 500-(MW) power capacity. Power generated by the Project would be collected using up to 66-kilovolt (kV) collector lines that would run overhead and/or underground to a dedicated Project substation. A 230-kilovolt overhead generation tie (gen-tie) line would link the Project substation to the planned Liebert Substation, which would be connected via an overhead 230-kilovolt gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation. The Project is considering two gen-tie line alternatives.

The Project may involve construction of an operations and maintenance (O&M) building, and/or it may be remotely operated. Any unused O&M building, substation, and/or transmission facility areas noted on the site plan may be used for solar energy generation or an energy storage system. It is expected that the Project would require an operational staff of up to 15 full-time employees for as-needed repairs. It is possible that the proposed Project could share O&M, substation, and/or transmission facilities with other adjacent solar PV and BESS facilities that have been approved and entitled by the County of Imperial, or with any future proposed renewable energy projects nearby. In such a scenario, the projects would share personnel, thereby potentially reducing the proposed Project's on-site staff.

After the useful life of the Project, aboveground equipment would be removed, and the area would be restored to its pre-development condition to the maximum extent feasible.

PC ORIGINAL PKG

The applicant intends to secure Conditional Use Permits from the County of Imperial, as the lead agency, along with permits and approvals from other relevant agencies, as required by law for construction and operation of the proposed Project.

1.3 Regulatory Setting

1.3.1 Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most listed plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain listed marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species; FESA defines "take" as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The Migratory Bird Treaty Act protects more than 800 species of birds and prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). On January 7, 2021, USFWS published a final rule, effective December 3, 2021, defining the scope of the Migratory Bird Treaty Act to prohibit incidental take and applying enforcement discretion, consistent with judicial precedent and longstanding agency practice (USFWS 2021). Unintentional or accidental take is not prohibited. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853-3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

PC ORIGINAL PKG

Two species of eagles that are native to the United States, bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*), were granted additional protection within the United States under the Bald and Golden Eagle Protection Act (16 USC 668–668d) to prevent the species from becoming extinct.

Clean Water Act Section 404

The Clean Water Act (CWA) is the major federal legislation governing water quality, providing guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. CWA Section 401 requires an applicant for a federal license or permit that may result in a discharge of pollutants into waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The State Water Resources Control Board and Regional Water Quality Control Boards (RWQCBs) administer the 401-certification program in California. CWA Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. CWA Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found in 33 Code of Federal Regulations (CFR) Parts 320 to 332. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with USACE (40 CFR 230). The Section 404(b)(1) Guidelines allow the discharge of dredged or fill material into the aquatic ecosystem only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

The definition of waters of the United States establishes the geographic scope for authority under CWA Section 404; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes "waters of the United States" (provided in 33 CFR 328.3[a]) has changed multiple times over the past few decades, starting with the *United States v. Riverside Bayview Homes, Inc*. court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Clean Water Rule), 2018 (suspension of the Clean Water Rule), 2019 (formal repeal of the Clean Water Rule), 2020 (Navigable Waters Protection Rule), and 2021 (*Pasqua Tribe et al. v. United States Environmental Protection Agency* resulting in remand and vacatur of the Navigable Waters Protection Rule and a return to "the pre-2015 regulatory regime") have attempted to provide greater clarity to the term and its regulatory implementation. On December 30, 2022, the agencies announced the final Revised Definition of "Waters of the United States" rule (88 CFR 3004–3144). The rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, and upstream water resources that significantly affect those waters. The Revised Definition Rule represents a re-expansion of federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the 2020 Navigable Waters Protection Rule. The Revised Definition Rule also considers various subsequent court decisions, including two notable Supreme Court decisions.

There are two key changes that the Revised Definition Rule incorporates. Firstly, the Revised Definition Rule reinstates the "Significant Nexus" test. The "Significant Nexus" test refers to waters that either alone, or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas (86 FR 69372–69450). The "Significant Nexus" test attempts to establish a scientific connection between smaller water bodies, such as

PC ORIGINAL PKG

ephemeral or intermittent tributaries, and larger, more traditional navigable waters such as rivers. Significant nexus evaluations take into consideration hydrologic and ecologic factors, including volume, duration, and the frequency of surface water flow in the resource, and its proximity to a traditional navigable water, and the functions performed by the resource on adjacent wetlands. Second, the Revised Definition Rule adopts the "Relatively Permanent Standard" test. To meet the "Relatively Permanent Standard," water bodies must be relatively permanent, standing, or continuously flowing, and have a continuous surface connection to such waters.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in *Sackett v. EPA*, in which it rejected the U.S. Environmental Protection Agency's claim that "waters of the United States," as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes waters of the United States (i.e., a relatively permanent body of water connected to traditional interstate navigable waters) and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends, and the wetland begins. The Revised Definition Rule will need to be modified in light of this decision.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high-water mark (OHWM), which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

1.3.2 State

California Endangered Species Act

CDFW administers the California Endangered Species Act (CESA), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter.

PC ORIGINAL PKG

Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species." A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list."

CESA authorizes the taking of threatened, endangered, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, CESA allows CDFW to adopt a CESA incidental take authorization based on finding that the federal permit adequately protects the species and is consistent with state law through the Section 2080.1 consistency determination.

A CESA permit may not authorize the take of "fully protected" species that are protected in other provisions of the California Fish and Game Code, discussed further below.

California Fish and Game Code

Under the California Fish and Game Code, CDFW provides protection from "take" for a variety of species. Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law. Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey, or to take, possess, or destroy any nest or eggs of such birds. Birds of prey refer to species in the orders Falconiformes and Strigiformes. Nests of all other birds (except English sparrow [*Passer domesticus*] and European starling [*Sturnus vulgaris*]) are protected under Sections 3503 and 3513 of the California Fish and Game Code.

Under Sections 1600–1616 of the California Fish and Game Code, CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code. The limits of CDFW's jurisdiction are defined in the code as the "bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit" (Section 1601). In practice, CDFW usually delineates its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

California Department of Fish and Wildlife Streambed and Riparian Habitat

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Under California Fish and Game Code Section 1602, a notification to CDFW is required prior to beginning any project activity that may (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. CDFW requires a Lake and Streambed Alternation Agreement when one of the above project activities may substantially adversely affect fish and wildlife resources. Therefore, wetlands are not regulated by CDFW under California Fish and Game Code Section 1602 unless the wetlands are part of a river, stream, or lake.

PC ORIGINAL PKG

State and Regional Water Quality Control Boards

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the RWQCBs develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a "water of the state" (California Water Code Section 13260[a]). Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter–Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a CWA Section 401 Certification. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter–Cologne Act.

California Environmental Quality Act

CEQA (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) require identification of a project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15000 et seq.). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or…[t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

In Title 14 of the California Code of Regulations (CCR), Section 1.72, CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation."

In 14 CCR 1.56, CDFW's definition of "lake" includes natural lakes and human-built reservoirs. Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

CDFW recognizes that all plants with California Rare Plant Rank (CRPR) of 1A, 1B, or 2, and some with CRPR 3 of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants in California (CNPS 2023a) may meet the criteria for listing as threatened or endangered and should be considered under CEQA (CDFW 2023a).

PC ORIGINAL PKG

Some of the CRPR 3 and 4 plants meet the criteria for determination as "rare" or "endangered" as defined in Section 1901, Chapter 10 (Native Plant Protection Act), Division 2, of the California Fish and Game Code, as well as Section 2062 and Section 2067, Chapter 1.5 (CESA), Division 3. Therefore, consideration under CEQA for these CRPR 3 and 4 species is strongly recommended by CNPS (CNPS 2023a).

For purposes of this report, animals considered "rare" under CEQA include endangered or threatened species, Birds of Conservation Concern (USFWS 2021), California Species of Special Concern (CDFW 2023a), and fully protected species.

Section IV, Appendix G, Environmental Checklist Form, of the CEQA Guidelines (14 CCR 15000 et seq.) requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game [now CDFW] or the U.S. Fish and Wildlife Service."

1.3.3 Regional

County of Imperial General Plan

The County of Imperial General Plan Conservation and Open Space Element contains goals, objectives, policies, and programs applicable to biological resources (County of Imperial 2016). This report outlines findings regarding biological resources that can serve to evaluate the proposed Project's consistency with the General Plan, as required by State CEQA Guidelines Section 15125(d).

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Methods

Data regarding biological resources present on site were obtained through a review of pertinent literature and field reconnaissance, which are described below.

2.1 Literature Review

The following data sources were reviewed to assist with the biological resources analysis:

- CDFW California Natural Diversity Database (CNDDB) – RareFind, Version 5 and CNDDB in BIOS (CDFW 2023a)
- CNPS's Inventory of Rare and Endangered Plants (CNPS 2023a)
- U.S. Department of Agriculture's Web Soil Survey (USDA 2023a)
- USFWS Critical Habitat and Species Occurrence Data (USFWS 2023a)
- USFWS National Wetlands Inventory (USFWS 2023b)
- Bumble Bees of North America Occurrence Records Database (Richardson 2023)
- Aerial imagery (Google Earth 2023)

Endangered, rare, or threatened species, as defined in CEQA Guidelines Section 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status species" in this Biological Resources Technical Report and include (1) endangered or threatened species recognized in the context of FESA and CESA; (2) plant species with a CRPR of 1A, 1B, or 2 (CDFW 2023b; CNPS 2023a); (3) California Species of Special Concern, as designated by CDFW (CDFW 2023c); and (4) mammals and birds that are fully protected species, as described in California Fish and Game Code Sections 4700 and 3511 (CDFW 2023c). Additionally, this report addresses desert kit fox, as it is considered a "fur-bearing mammal," protected from take under the California Fish and Game Commission's Mammal Hunting Regulations (Subdivision 2, Chapter 5), which effectively protects the species from hunting pressure. Vegetation communities are considered sensitive natural communities or special-status vegetation communities if they have a conservation status of S1, S2, or S3 (CDFW 2023d).

2.2 Field Reconnaissance

Biological, aquatic resource, and burrowing owl (*Athene cunicularia*) surveys for the Project were conducted in 2023 and 2024 by Dudek biologists. Raptor and bat surveys were conducted in support of the Project in 2025. Table 1 lists the survey dates, times, surveying biologist, and weather conditions during the surveys.

Table 1. Schedule of Surveys

Date	Time	Biologist	Survey Type	Conditions
April 7, 2023	6:45 AM–2:30 PM	Kim Parsons	Burrowing Owl – Pass 1	62–88°F, 40–50% cloud cover (cc), 1–10 mile per hour (mph) winds
April 8, 2023	6:00 AM–2:00 PM	Kim Parsons	Burrowing Owl – Pass 1	61–85°F, 30% cc, 2–4 mph winds
April 13, 2023	6:30 AM–1:30 PM	Kim Parsons	Burrowing Owl – Pass 1	63–77°F, 40–80% cc, 8–9 mph winds

PC ORIGINAL PKG

Table 1. Schedule of Surveys

Date	Time	Biologist	Survey Type	Conditions
April 14, 2023	7:00 AM–11:00 AM	Kim Parsons, Sandra Nash	Burrowing Owl – Pass 1	57–77°F, 0–10% cc, 4–5 mph winds
April 21, 2023	10:30 AM–4:00 PM	Abby Bergsma	Aquatic Resource Delineation Survey	82–90°F, 0% cc, 2–4 mph winds
May 09, 2023	12:00 PM–3:45 PM	Shane Valiere	Burrowing Owl – Pass 2	87–88°F, 0% cc, 10–15 mph winds
May 10, 2023	9:50 AM–3:00 PM	Shane Valiere	Burrowing Owl – Pass 2	64–86°F, 0% cc, 12–15 mph winds
May 11, 2023	9:45 AM–12:20 PM	Shane Valiere	Burrowing Owl – Pass 2	78–84°F, 0% cc, 4 mph winds
June 14, 2023	7:00 AM–1:00 PM	Shane Valiere	Burrowing Owl – Pass 3	78–98°F, 0% cc, 3–5 mph winds
June 15, 2023	7:00 AM–1:00 PM	Shane Valiere	Burrowing Owl – Pass 3	80–99°F, 0% cc, 6 mph winds
June 16, 2023	7:00 AM–1:00 PM	Shane Valiere	Burrowing Owl – Pass 3	81–100°F, 0% cc, 3–5 mph winds
June 20, 2023	9:45 AM–12:45 PM	Dylan Ayers	Biological Reconnaissance Survey	87–88°F, 0–10% cc, 1–5 mph winds
July 06, 2023	7:00 AM–9:30 AM	Shane Valiere	Burrowing Owl – Pass 4	82–89°F, 0% cc, 2–4 mph winds
July 10, 2023	7:00 AM–12:30 PM	Shane Valiere	Burrowing Owl – Pass 4	84–99°F, 0% cc, 2–3 mph winds
July 12, 2023	7:00 AM–12:30 PM	Shane Valiere	Burrowing Owl – Pass 4	90–105°F, 0% cc, 2–4 2-4 mph winds
April 10, 2024	6:30 AM–10:00 AM	Scott Batchelder, Connor Kelleher	Burrowing Owl – Pass 1	49–82°F, 0% cc, 0–4 mph winds
May 10, 2024	6:15 AM–11:45 AM	Scott Batchelder	Burrowing Owl – Pass 2	61–87°F, 0% cc, 0 mph winds
June 6, 2024	5:45 AM–11:45 AM	Brody Olson, Emily Jones	Burrowing Owl – Pass 3	71–99°F, 0% cc, 5 mph winds
June 28, 2024	5:35 AM – 1:05 PM	Dilip Mahto, Emily Jones	Burrowing Owl – Pass 4	80–108°F, 0% cc, 1–4 mph winds
April 8, 2025	7:30 AM – 3:35 PM	Paul Lemons Jeff Priest	Raptor Survey	60–96°F, 10% cc, 0–5 mph winds
May 19, 2025	4:00 PM – 7:40 PM	Jacob Rogers, Sarah Greely	Bat Surveys	95-99°F, 0% cc, 0–3 mph winds

PC ORIGINAL PKG

2.2.1 Vegetation Community and Land Cover Mapping

Vegetation communities and land covers on the Project site were mapped in the field using an ArcGIS mobile application (Esri 2023). Once in ArcGIS, the acreage of each vegetation community and land cover present within the Project site was determined. The vegetation community and land cover mapping follows the Manual of California Vegetation Online (CNPS 2023b) and CDFW's Natural Community List (CDFW 2023d), where feasible, with modifications made to accommodate lack of conformity of the observed communities (e.g., agricultural and disturbed lands) using Oberbauer et al. 2008.

2.2.2 Flora and Fauna

All plant species encountered during the field survey were identified and recorded directly into a field notebook or digital application. Latin and common names for plant species follow either CNPS (CNPS 2023a), Jepson (Jepson Flora Project 2023), or the California Natural Community List (CDFW 2023d).

All wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly into a field notebook. Binoculars (10×42 magnification) were used to aid in the identification of wildlife. Latin and common names of animals follow Crother (2017) for reptiles and amphibians, the American Ornithological Society (AOS 2018) for birds, and Wilson and Reeder (2005) for mammals.

Focused Burrowing Owl Surveys

Breeding season focused burrowing owl surveys were conducted from April through July 2023. Additional breeding season focused burrowing owl surveys were conducted in 2024 for an additional 336 acres that were subsequently added to the Project boundary after the 2023 surveys occurred. See Table 1 for the schedule of surveys.

Surveys were conducted in suitable habitat on the Project site in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (Staff Report) (CDFG 2012). Per Appendix C of the Staff Report, one visit covering the entire Project site was conducted to identify habitat types potentially supporting burrowing owls prior to the initiation of surveys. In accordance with Appendix D of the Staff Report, the initial survey pass was conducted prior to April 15 and involved pedestrian transects of the suitable habitat within the proposed Project site. Subsequent surveys were conducted at least 3 weeks apart and focused on areas where suitable burrows or other shelter sites were identified in the initial survey.

Surveys were conducted in all portions of the Project site that were identified in the habitat assessment and fit the description of habitat outlined in the Staff Report (CDFG 2012). Surveys were conducted by walking straight-line transects spaced 7 to 20 meters (approximately 23 to 66 feet) apart, adjusting for vegetation height and density. All burrowing owl observations and potential burrows were documented.

Bat Roost Assessment and Emergence Survey

A bat roost assessment and emergence surveys were conducted within the Project site on May 19, 2025 to determine if suitable roosting habitat for bats exists and if roosting bats may be impacted during project implementation. Dudek's bat biologists conducted a daytime roost assessment of the project site, focusing on areas providing suitable habitat for roosting bats (i.e., manmade structures, bridges, rocky cliffs, palm trees with full skirts,

PC ORIGINAL PKG

dilapidated buildings, etc.). Biologists watched for indicators of bat activity such guano piles, staining of roosting surfaces and the presence of individual bats.

The roost assessment survey was conducted in the afternoon to aid in selecting bat emergence survey locations. The emergence surveys were conducted at sunset at two locations within the southeastern portion of the project site to determine the presence and/or absence of roosting bats emerging from these potential roost sites within the project site. Each of these locations included a partially skirted palm tree which provided the most suitable roosting habitat within the project site. The emergence surveys consisted of a visual survey as well as active acoustic monitoring during the emergence period (i.e., 30 minutes prior to sunset through last light). The acoustic monitoring were used for species identification and aided in determining relative species abundance. Results of roost assessment and emergence survey are provided below, in Section 3.4.1.

Acoustic Detector Surveys for Bats

Dudek biologists also deployed five (5) passive full-spectrum acoustic bat detectors (Wildlife Acoustics SM4Bat) in potentially suitable roost locations and flyways within the project site from May 19 to May 22, 2025, to identify species present and determine the relative level of bat activity within the Project site. The locations of deployed detectors were determined during a desktop review combined with the bat roost assessment survey. The detectors were deployed for a total of three (3) consecutive nights and recorded echolocation calls from 30 minutes prior to sunset to 30 minutes after sunrise, for a total of approximately 36 hours per detector of recording time, or 180 total hours of bat echolocation detection on the Project site. The data was analyzed offsite by Dudek bat biologists using Sonobat 4 software with automated call classification. Any incomplete or ambiguous calls were manually vetted by Dudek's senior bat biologist. The results of the acoustic call analysis are summarized in Section 3.4.1 of this report.

Raptor and Nesting Bird Survey

Dudek's biologists conducted a focused raptor and nesting bird survey of the entire Project site to identify any raptors or active nests present on site. Dudek's biologists focused on suitable nesting habitat and perch locations for hunting throughout the site, particularly for species such as red-tailed hawk (*Buteo jamaicensis*), prairie falcon (*Falco peregrinus*), and northern harrier (*Circus hudsonius*). Suitable nesting habitat for birds was identified by the presence of trees, shrubs, and structures that provide cover within eaves and rafters. Any active nests observed were mapped with a handheld GPS unit, and status of the nest assessed.

2.2.3 Jurisdictional Aquatic Resources

In April 2023, Dudek biologists conducted a formal jurisdictional waters delineation within the Project site. The Project site was surveyed where potential jurisdictional features were observed and was surveyed for the following types of features:

- Waters of the United States, including wetlands, under the jurisdiction of USACE, pursuant to Section 404 of the federal CWA
- Waters of the state under the jurisdiction of the California RWQCB, pursuant to Section 401 of the federal CWA and the Porter-Cologne Water Quality Control Act, as wetlands or drainages
- Streambeds under the jurisdiction of CDFW, pursuant to Section 1602 of the California Fish and Game Code

PC ORIGINAL PKG

Non-wetland waters of the United States were delineated based on the presence of an OHWM as determined using the methodology in A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008a). Wetland waters of the United States were delineated based on methodology described in the 1987 Corps of Engineers Wetland Delineation Manual (USACE 1987) and the USACE Regional Supplement (USACE 2008b).

Areas regulated by the RWQCB can also include isolated waters of the state that have evidence of surface water inundation pursuant to the state Porter-Cologne Water Quality Control Act. Isolated features are delineated at the OHWM, at the outer limits of hydrophytic vegetation, or at the outer rim of depressional features, if relevant. The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2021) also implements the three parameters criteria (i.e., hydric soils, hydrology, and hydrophytic vegetation) for delineating wetland waters of the state.

Streambeds are typically delineated from top-of-bank to top-of-bank or the extent of associated riparian vegetation beyond the top-of-bank. For shallow drainages and washes that do not support riparian vegetation, the top-of-bank measurement may be the same as the OHWM measurement.

2.2.4 Survey Limitations

Site visits were conducted during daylight hours. Complete inventories of biological resources present on a site often require numerous focused surveys at different times of day during different seasons. Some species, such as annual plants, are present in only spring or summer, and nocturnal animals are difficult to detect during the day. Other species may be present in such low numbers that they could be missed. Due to such timing and seasonal variations, survey results are not an absolute list of all species that the Project site may support.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

3 Results

3.1 Physical Site Characteristics

The physical characteristics and quantification of biological resources described herein pertain to the Project site composed of the 24 Assessor's Parcel Numbers listed in Section 1.1, Project Location. Current land use of the Project site includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, pastureland, irrigation ditches, and developed lands with rural infrastructure.

3.1.1 Topography and Drainage

The topography of the Project site is very flat, given its agricultural nature; various earthen and concrete irrigation ditches, with most major irrigation ditches running north to south across the Project site, are the only portions of the site with varying topographic relief. These irrigation ditches are under the ownership and management of the Imperial Irrigation District.

3.1.2 Soils

According to the U.S. Department of Agriculture's Web Soil Survey (USDA 2023a), water plus 16 soil types are mapped within the Project site: Badland; Glenbar complex; Holtville silty clay, wet; Imperial silty clay, wet; Imperial-Glenbar silty clay loams, wet, 0% to 2% slopes; Indio loam, wet; Indio-Vint complex; Meloland and Holtville loams, wet; Meloland fine sand; Meloland very fine sandy loam, wet; Niland fine sand; Rositas fine sand, 0% to 2% slopes; Rositas fine sand, wet, 0% to 2% slopes; Rositas sand, 0% to 2% slopes; Vint and Indio very fine sandy loams, wet; and Vint loamy very fine sand, wet (Figure 2, Soils).

- Holtville Series consists of very deep, well-drained soils formed in mixed and stratified alluvium. These soils have slow permeability, typically occur on floodplains, and are moderately alkaline in the A horizon (USDA 2023a). The Holtville series is the second-most-abundant soil type and comprises small patches throughout the Project site; however, these areas are currently dominated by agricultural uses.
- Imperial Series consists of very deep, calcareous soils with very slow permeability. This soil series typically occurs on floodplains and old lakebeds and is well and moderately well-drained (USDA 2023a). The Imperial series and Imperial-Glenbar association comprise the majority of the Project site; however, these areas are currently dominated by agricultural uses.
- Glenbar Series consists of very deep, well-drained soils formed in stratified stream alluvium. These soils have moderately slow permeability, typically occur in desert floodplains and lacustrine basins, and are moderately alkaline in the A horizon (USDA 2023a). The Imperial-Glenbar association comprises the majority of the Project site; however, these areas are currently dominated by agricultural uses.
- Indio Series consists of very deep, well-drained soils formed in alluvium. These soils are well to moderately drained, with moderate permeability, and occur on lacustrine basins and flood plains (USDA 2023a). The Indio loam series occurs mainly in the northern area of the Project site; however, these areas are currently dominated by agricultural uses.
- Meloland Series consists of naturally well-drained soils with very slow permeability. This soil series typically occurs on floodplains and old lakebeds and are slightly alkaline in the A horizon (USDA 2023a). The

PC ORIGINAL PKG

Meloland series comprises patches throughout the Project site; however, this area is currently dominated by agricultural uses.

- Rositas Series consists of very deep, somewhat excessively drained soils formed in sandy eolian material. These soils have rapid permeability and typically occur on dunes and sand sheets (USDA 2023a). The Rositas series comprises a fairly large area in the southern portion of the Project site; however, this area is currently dominated by agricultural uses.
- Vint Series consists of very deep, somewhat excessively drained soils formed in stratified stream alluvium. These soils have moderately rapid permeability, typically occur on floodplains, and are moderately alkaline in the A horizon (USDA 2023a). The Vint series comprises both large and small patches throughout the Project site; however, these areas are currently dominated by agricultural uses.
- Niland Series consists of well and moderately well drained soils formed in coarse mixed alluvium overlying fine alluvium. These soils have a range of permeability, depending on the sand and clay content, and typically occur on basin and floodplain edges (USDA 2023a). The Niland series comprises a very small area in the southwestern corner of the Project site.
- Badland Series are arid, clay-rich soils that have experienced excessive erosional forces due to wind and water. These soils typically have steep slopes with minimal vegetation and exhibit high drainage. Badlands comprise a very small area of the Project site; this area is currently dominated by agricultural uses.

None of these soil types are ranked as hydric in Imperial County, California (USDA 2023b).

3.2 Vegetation Communities and Land Cover Types

Five land cover types were identified within the Project site during the biological reconnaissance survey: general agriculture, stream channel, creosote bush scrub and allscale scrub shrubland, urban/developed, and disturbed habitat. These land cover types are described below, their acreages are presented in Table 2, and their spatial distributions are presented in Figures 3-1 and 3-2, Biological Resources. Appendix A provides representative photos of the Project site.

Table 2. Land Covers Within the Project Site

Vegetation Community or Land Cover Type	Total Project Site Acreage
General Agriculture	1,590.38
Stream Channel	5.80
Creosote Bush Scrub and Allscale Scrub Shrubland	80.97
Urban/Developed	5.81
Disturbed Habitat	165.86
Grand Total[1]	**1,848.82**

[1] Totals may not sum due to rounding.

3.2.1 General Agriculture

Agricultural lands are an anthropogenic habitat and are not described by CDFW (2023d) or by CNPS (CNPS 2023b). Within the Project site, agricultural lands consist of alfalfa (*Medicago sativa*), date palms (*Phoenix dactylifera*), Bermudagrass (*Cynodon dactylon*), and herbaceous vegetables, as well as several fallow fields. On-site farming

PC ORIGINAL PKG

practices include soil disking, plowing, herbicide application, and regular anthropogenic maintenance and disturbance associated with ongoing management actions. Compacted dirt roads and brow ditches are included within this land cover type.

3.2.2 Stream Channel

Although not recognized by the Manual of California Vegetation, Online Edition (CNPS 2023b), or the Natural Community List (CDFW 2023d), stream channel is described by Oberbauer et al. (2008) as areas that exhibit ephemeral or intermittent flow and are barren or sparsely vegetated as a result of the scouring effects of floods or other anthropogenic causes. Within the Project site, stream channel is characterized by irrigation ditches that convey flows throughout active agricultural lands. These areas include irrigation ditches that are unvegetated or vegetated with ruderal species such as giant reed (*Arundo donax*), nettleleaf goosefoot (*Chenopodium murale*), and asthmaweed (*Erigeron bonariensis*).

3.2.3 Creosote Bush Scrub and Allscale Scrub Shrubland Alliances

Desert scrub habitats generally consist of open areas with vegetative cover less than or equal to 50% populated with scattered shrubs and evergreen or deciduous species. Within the Project site, creosote bush scrub and allscale scrub shrubland alliances are present in undeveloped areas that are absent of agricultural crops. These areas are primarily found around the southern Project boundaries.

Creosote bush scrub shrubland alliance is dominated by creosote (*Larrea tridentata*), which serves as a canopy in most settings. Interspaces typically include saltbush (*Atriplex* spp.), goldenheads (*Acamptopappus* spp.), ragweed (*Ambrosia* spp.), woolly brickellbush (*Brickellia incana*), brittlebush (*Encelia farinose*), California jointfir (*Ephedra californica*), Nevada jointfir (*Ephedra nevadensis*), and Anderson wolfberry (*Lycium andersonii*). Emergent trees may be present at low cover, including honey mesquite (*Prosopis glandulosa*) or Joshua tree (*Yucca brevifolia*) (CNPS 2023b).

Allscale scrub shrubland alliance is dominated by allscale (*Atriplex polycarpa*). Interspaces typically include white bursage (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), four-winged saltbush (*Atriplex canescens*), red brome (*Bromus rubens*), smallseed sandmat (*Chamaesyce polycarpa*), bladderpod (*Cleome isomeris*), alkali goldenbush (*Isocoma acradenia*), and creosote. Emergent trees may be present at low cover, including honey mesquite (CNPS 2023b).

3.2.4 Urban/Developed

Urban/developed areas contain a mixture of constructed materials and vegetation. Within the Project site, urban/developed land takes the form of maintained roads for access to crops and irrigation canals, and two single-family homes in the center of two northern parcels.

3.2.5 Disturbed Habitat

Disturbed habitat are areas that have physical anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized vegetation association. The existing vegetation is typically composed of non-native ornamental or exotic species. There can also be impacts from animal uses, grading, or repeated clearing for fuel management that leave the land incapable of providing a suitable or sustainable habitat for native species to persist (Oberbauer et al. 2008).

PC ORIGINAL PKG

Within the Project site, disturbed habitat takes the form of areas along the fringes of agricultural fields and on the banks of irrigation canals that are largely devoid of vegetation.

3.2.6 Sensitive Vegetation Communities

No vegetation communities considered sensitive by CDFW (Rank S1, S2, or S3) were mapped within the Project site during the biological survey conducted by the Dudek biologist.

3.3 Flora

A total of 29 species of native or naturalized plants, 10 native (34%) and 19 non-native (66%), were recorded on the Project site (see Appendix B, Plant Compendium). The recorded native flora is likely limited due to the disturbed and agricultural setting of the site.

3.3.1 Special-Status Plant Species

For the purposes of this analysis, special-status species include those that are (1) listed, proposed for listing, or candidates for listing under FESA as threatened or endangered; (2) listed or candidates for listing under CESA as threatened or endangered; (3) a state fully protected species; (4) a CDFW Species of Special Concern; or (5) a species listed on the CNPS Inventory of Rare and Endangered Plants with a CRPR of 1B or 2B. Sensitive vegetation communities are those communities identified as high priority for inventory in CDFW's Natural Community List (CDFW 2023b), which is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009), by a state rarity ranking of S1, S2, or S3.

Dudek performed a review of literature, existing documentation, and geographic information system (GIS) data to evaluate the potential for special-status plant species to occur within the Project site. Each special-status species was evaluated and given a rating based on its potential to occur (i.e., not expected, low, moderate, or high), taking into consideration the relative location to known occurrences, vegetation communities, and elevation. Based on the results of the literature review and database searches, 19 special-status plant species were identified as occurring within the region. Due to the current conditions present on site, including the vegetation communities; soils; elevation ranges; previous known locations documented in the CNDDB, by CNPS, and/or by USFWS; and current disturbance levels, none have moderate or high potential to occur. Four of these species have a low potential to occur on the Project site, which is generally not suitable due to the predominantly agricultural landscape. These four species are Abrams' spurge (*Euphorbia abramsiana*), Baja California ipomopsis (*Ipomopsis effusa*), brown turbans (*Malperia tenuis*), and hairy stickleaf (*Mentzelia hirsutissima*). The complete results of this potential to occur evaluation for special-status plants are included as Appendix C of this document. No special-status plant species were recorded within the Project site. No USFWS designated critical habitat for a federally listed plant species occurs within 1 mile of the Project site (USFWS 2023a).

3.4 Fauna

A total of 16 wildlife species were recorded within the Project site (Appendix D, Wildlife Compendium), all of which were birds: red-winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), western meadowlark (*Sturnella neglecta*), American kestrel (*Falco sparverius*), western kingbird (*Tyrannus verticalis*), great

PC ORIGINAL PKG

egret (*Ardea alba*), snowy egret (*Egretta thula*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), burrowing owl (*Athene cunicularia*), great horned owl (*Bubo virginianus*), mourning dove (*Zenaida macroura*), Eurasian collared-dove (*Streptopelia decaocto*), greater roadrunner (*Geococcyx californianus*), northern harrier (*Circus hudsonius*), and cliff swallow (*Petrochelidon pyrrhonota*).

No active bird nests were observed within the Project site during the reconnaissance survey (conducted within the typical bird nesting season of February 1 through September 15) or the focused raptor and nesting bird survey conducted in April 2025; however, fallow fields, structures, and native vegetation within the Project site could support nesting birds.

No amphibian or aquatic species were observed; however, disturbance-tolerant species such as American bullfrog (*Lithobates catesbeianus*) could occur in the irrigation ditches. No reptile species were observed; however, common side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), and snakes occurring within the region could use the Project site.

3.4.1 Special-Status Wildlife Species

Dudek performed a review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the Project site. Each special-status species was evaluated and given a rating based on its potential to occur (i.e., not expected, low, moderate, high, or observed), taking into consideration the relative location to known occurrences, vegetation communities, and geographic range. Based on the results of the literature review and database searches, 25 special-status wildlife species were identified as occurring within the region.

One candidate for state-listing species, burrowing owl, and no federally-listed special-status species were observed within the Project site. Based on results of the literature review, database searches, and site conditions, one state-listed special-status species, California black rail (*Laterallus jamaicensis coturniculus*), was determined to have a low potential to occur within the irrigation ditches on the Project site. All other listed species are not expected to occur.

One non-listed special-status species, northern harrier was observed within the Project site. Additionally, one candidate for listing under CESA, Crotch's bumble bee (*Bombus crotchii*), has a low potential to occur on the Project site as a transient during foraging, but is not expected to nest. Twelve non-listed special-status species—Colorado Desert fringe-toed lizard (*Uma notata*), mountain plover (*Charadrius montanus*), California black rail, Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), LeConte's thrasher (*Toxostoma lecontei*), Colorado Valley woodrat (*Neotoma albigula venusta*), western yellow bat (*Dasypterus xanthinus*), western mastiff bat (*Eumops perotis californicus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), American badger (*Taxidea taxus*), and desert kit fox (*Vulpes macrotis arsipus*)—were determined to have a low potential to occur, nest, or roost within the Project site.

The complete results of this potential-to-occur evaluation for special-status wildlife species are included as Appendix E of this document.

PC ORIGINAL PKG

California Black Rail

California black rail is designated as state threatened and a fully protected species in California, and primarily occurs in California, Arizona, Baja California, and the Colorado River delta in Sonora. Suitable California black rail habitat generally includes salt marshes, freshwater marshes, and wet meadows. The species is typically identified in conjunction with common threesquare (*Schoenoplectus pungens*), arrowweed (*Pluchea sericea*), Fremont cottonwood (*Populus fremontii*), and seepwillow (*Baccharis salicifolia*). California black rails typically prey on small (less than 1 centimeter [0.39 inches]) invertebrates, chiefly insects, gleaned from marsh vegetation and mudflats; they also eat small seeds (Eddleman et al. 1994). No California black rails were detected on the Project site during the 2023 general biological survey. There are no CNDDB occurrences within the Project site, and no focused surveys were performed. The closest records are from approximately 2.7 miles north of the Project site in 2001 (CDFW 2023a). There is marginal suitable marsh habitat within some drainage canals that could potentially support foraging; however, the species is not expected to breed due to the limited suitable habitat on the Project site (Figures 3-1 and 3-2).

Burrowing Owl

Burrowing owl is a candidate for listing as endangered under CESA, as well as a California Species of Special Concern and Bird of Conservation Concern that inhabits much of California. Burrowing owls prefer open, dry, annual or perennial grasslands; deserts; and scrublands characterized by low-growing vegetation. They usually nest in old burrows of ground squirrels, badgers, or other small mammals, although they may dig their own burrows in soft soil. Within disturbed or developed areas, burrowing owls may also nest in burrow surrogates (e.g., rock cavities, pipes, culverts, debris piles). Prey consists mostly of insects, small mammals, reptiles, birds, and carrion.

During the four focused survey passes in 2023 and 2024 (see Table 1), approximately 89 burrowing owls were detected. Burrowing owls were observed at 40 burrows, and an additional 143 burrows were found to have suitable habitat for the species. Most detections were concentrated along roads within the northern and southern areas of the Project site (Figures 3-1 and 3-2). Additionally, burrowing owls were observed during raptor surveys in April 2025. Due to the close proximity and high density of burrowing owls and repeated observations in several areas, it is likely that some of the same individuals were documented across several survey passes, and that the number of burrowing owls that reside on site may be fewer. Furthermore, due to the close proximity of many burrows, it is likely that there are several well-established burrow systems/complexes on site that the owls regularly use.

Northern Harrier

Northern harrier is a California Species of Special Concern that inhabits much of California. Northern harriers use a wide variety of open habitats in California, including deserts, coastal sand dunes, pasturelands, croplands, dry plains, grasslands, estuaries, floodplains, and marshes (Smith et al. 2011). The species also forages over coastal sage scrub and other open scrub communities. Nesting areas are associated with marshes, pastures, grasslands, prairies, croplands, desert shrubsteppe, and riparian woodland (Smith et al. 2011). Undisturbed grasslands and wetlands that have dense vegetation have been documented to have higher nesting rates (USDA 2005). Winter habitats similarly include a variety of open habitats dominated by herbaceous cover. Northern harrier populations are most concentrated in areas with low vegetation and occur from sea level to 3,048 meters (10,000 feet) above mean sea level.

PC ORIGINAL PKG

During June 2023 burrowing owl surveys and April 2025 raptor surveys, Dudek biologists observed one northern harrier foraging in agricultural fields on the Project site. The Project site contains potentially suitable nesting habitat within fallow agricultural fields where human-caused disturbance is infrequent.

Nesting Birds

The vegetation communities and open landscape within the Project site provide potentially suitable habitat for commonly occurring nesting birds, including Anna's hummingbird (*Calypte anna*), Gambel's quail (*Callipepla gambelii*), and Abert's towhee (*Melozone aberti*). Although no nests were identified during the site visit, suitable nesting habitat exists within the Project site and surrounding areas. No active nests were identified during the April 2025 raptor and nesting bird survey.

Roosting Bats

The bat roost assessment determined that the project site is primarily comprised of active agriculture fields and provides little to no suitable roosting habitat for bats. The project site lacks manmade structures that may provide suitable roosting sites for species that are known to roost in crevices of buildings and structures including big free-tailed bat (*Nyctinomops macrotis*) and crevice-roosting bats like western mastiff bat (*Eumops perotis californicus*) that inhabit rocky canyons and cliff faces. Dudek biologists observed several manmade structures immediately adjacent to the Project site, but no structures within the Project site. One of the adjacent structures appeared to be a dilapidated hay shelter; however, this structure was not insulated and did not provide suitable areas where crevice roosting bats could roost. The other manmade structures located adjacent to the Project site were within private property and consisted of occupied houses, which the biologists did not have legal access to survey.

Additionally, no rocky canyons or cliff faces occur on the Project site that could provide suitable roosting habitat for natural crevice roosting special-status bats such as western mastiff bat. The site is relatively flat and comprised of active agricultural fields which do not provide suitable habitat for other special-status bats known to occur in the region such as pocketed free-tailed bat (*Nyctinomops femorosaccus*), and western yellow bat (*Dasypterus xanthinus*), which are both California Species of Special Concern. As such, the pocketed free-tailed bat has a low potential to forage within the Project site, but is not expected to roost due to the lack of primary habitat present on the site. Finally, western yellow bat was determined to have a low potential to occur within the Project site due to a small area of desert riparian located along the southern border of the Project site. During the roost assessment of the site, Dudek biologists noted the presence of partially skirted palm trees within the southern portion of the Project site, which may provide suitable roosting sites for western yellow bats. Therefore, the emergence surveys were conducted at two locations within the Project site where partially skirted palm trees were observed. The emergence surveys were negative, as no bats were detected visually nor acoustically emerging from either of the survey locations. The locations of the emergence surveys are depicted in Figure 4, and photos of the survey sites are included in Appendix A.

The echolocation data collected from the five detectors deployed along the boundaries of the Project site determined that eight different bat species are present within the Project site. None of the special-status bat species listed above were acoustically detected on the Project site. However, one special-status species, pallid bat (*Antrozous pallidus*), was detected at two locations (BR-03 and BR-05) in limited numbers (less than 10 recordings). Table 3 below lists the bat species identified during passive acoustic surveys on the Project site, with the total number of bat passes positively identified for each species. Each bat pass represents an individual call file attributed to the species and does not represent the number of individual bats present, as one bat may record

PC ORIGINAL PKG

multiple passes near the microphone. Instead, the number of bat passes represents the relative abundance and activity of the species on the Project site. A total of 834 total bat passes were recorded, which is a relatively low number, as active bat roosts can result in the detection of several thousands of bat passes per night for a single species. In addition, the lack of visual observations of bats during the roost assessment and emergence survey indicates that bats are likely not roosting on the Project site but instead are using portions of the site for foraging activities. The locations of the acoustic bat detectors are depicted in Figure 4.

Table 3. Bat Species Detected During Acoustic Surveys

Scientific Name	Common Name	Special Status	Number of Bat Passes
Antrozous pallidus	Pallid bat	SSC	9
Eptesicus fuscus	Big brown bat	-	17
Lasiurus cinereus	Hoary bat	-	4
Lasiurus noctivagans	Silver-haired bat	-	34
Myotis californicus	California myotis	-	7
Myotis yumanensis	Yuma myotis	-	15
Parastrellus hesperus	Canyon bat	-	483
Tadarida brasiliensis	Mexican free-tailed bat	-	265
		Total Bat Passes	834

After three nights of passive acoustic detection, the survey resulted in a total of 834 bat passes attributed to eight different bat species that are all common species except for pallid bat, which despite its SSC listing status is relatively common in desert environments. Canyon bat (*Parastrellus hesperus*) was the most abundant species detected on site which is a very common species, as well as Mexican free-tailed bat (*Tadarida brasiliensis*), which is the most common bat species in the western United States. The remaining bat species detected were in relatively low numbers (i.e. less than 50 passes), indicating only a few individuals of each species are actively foraging within the Project site. The total number of bat passes recorded indicates bats are likely foraging throughout the Project site but are not roosting on site, as active roosts can record several thousands of bat passes per night for a single species. The acoustic survey data corresponds to the roost assessment and emergence survey results of negative active roosts on site.

Critical Habitat

There is no USFWS designated critical habitat for federally listed wildlife species within 5 miles of the Project site (USFWS 2023a).

3.4.2 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal.

PC ORIGINAL PKG

On a regional level, the Imperial Valley is an important component of the Pacific Flyway, which is a major north/south passage for migratory birds. The Salton Sea is known to serve as a stopover for birds migrating along this flyway, with as many as 400 different bird species having been recorded. The Project site is situated approximately 23 miles southeast of the Salton Sea.

Because the Project site is primarily surrounded by, and includes extensive, active agriculture, the Project site has limited value as a potential wildlife corridor or habitat linkage for most wildlife species. The irrigation canals are not large enough to support large populations of birds, amphibians, or other wildlife species associated with water and riparian vegetation; however, it could provide stopover habitat for migratory species. The agriculture fields provide habitat for migratory birds that forage in open fields. As such, the Project site likely does not serve as an important wildlife corridor or habitat linkage for larger mammals or species that are limited to native habitats, but it does provide foraging or stopover habitat for migratory birds.

3.5 Jurisdictional Aquatic Resources

As stated in the Project's Aquatic Resources Delineation Report (Dudek 2024; Appendix F to this report), the Project site contains 24.79 acres of potentially jurisdictional non-wetland waters/ditches and their associated culverts of the United States and state regulated by USACE, RWQCB, and CDFW (Figures 5-1 through 5-10, Aquatic Resources Delineation). These non-wetland waters are characterized as Imperial Irrigation District irrigation canals that convey water throughout the Imperial Valley and are connected to a vast network of canals that source water from the Colorado River. Table 4 provides a detailed summary of aquatic resources delineated within the Project site.

Many smaller, likely non-jurisdictional concrete canals with gates exist within and along the boundaries of agricultural fields on the Project site. Although technically connected to potentially jurisdictional irrigation canals, they are constructed in uplands purely for the function of irrigating individual fields, and do not serve as critical conveyance pathways for regional irrigation like the larger, likely jurisdictional, irrigation canals.

When the field delineation occurred, surface water was present in all of the non-wetland waters/ditches mapped within the Project site; therefore, the waters onsite are likely considered relatively permanent waters. Based on site conditions observed in April 2023, the 24.74 acres of non-wetland waters/ditches and 0.05 acres of culverts connecting these non-wetland waters/ditches within the Project site contain surface water and include, or have a continuous surface connection to, the Fern Canal, Fig Canal, and the Westside Main Ditch. These have a continuous surface connection to the Salton Sea, a traditional navigable water (USACE 2023). Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters. Accordingly, all non-wetland waters mapped in the review area may be subject to USACE regulation.

All of the features described in Table 4 have also been identified as potential waters of the state. These features are subject to regulation by the RWQCB under the Porter-Cologne Water Quality Control Act and CDFW under California Fish and Game Code Section 1600.

PC ORIGINAL PKG

Table 4. Aquatic Resource Summary for the Project Site

Feature Name	Cowardin[1]	OHWM Indicators	Location	Acres/Linear Feet
Non-Wetland Waters (Below OHWM)				
Irrigation Ditch[2]	R4SBCx	BBS, occasional CVS and CVC	Throughout Project site (see Figures 5-1 through 5-10)	24.74/71,760
Culvert	N/A	N/A	Throughout review area (see Figures 5-1 through 5-10)	0.05/1,059
			Non-Wetland Waters Total	**24.79/72,819**

OHWM = ordinary high-water mark; R4SBCx = Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated; BBS = break in bank slope; CVS = change in vegetation species; CVC = change in vegetation cover

1 Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979).

2 Feature likely classified as seasonal "relatively permanent water" that flows for at least 3 months of the year, based on conditions observed during the delineation.

PC ORIGINAL PKG

4 Project Impacts

This chapter contains the evaluation of potential environmental impacts associated with the proposed Project related to biological resources. It identifies the standards of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed Project's impacts.

4.1 Explanation of Findings of Significance

The standards of significance used to evaluate the impacts of the proposed Project related to biological resources are based on Appendix G of the CEQA Guidelines, as listed below. A significant impact would occur if the proposed Project would:

Impact BIO-1. Result in a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Impact BIO-2. Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Impact BIO-3. Result in a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact BIO-4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Impact BIO-5. Result in conflicts with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.

Impact BIO-6. Result in conflicts with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.2 Definition of Impacts

4.2.1 Direct Permanent Impacts

Direct permanent impacts refer to the absolute and permanent physical loss of a biological resource due to clearing, grading, and/or construction/decommissioning, which can be determined in four ways: (1) permanent loss of vegetation communities, land covers, and general wildlife and their habitat; (2) permanent loss of or harm to individuals of special-status plant and/or wildlife species; (3) permanent loss of suitable habitat for special-status

PC ORIGINAL PKG

species; and (4) permanent loss of wildlife movement and habitat connectivity. For the purposes of this analysis, all agricultural land is considered permanently impacted and there would be no temporary impacts.

4.2.2 Indirect Impacts

Indirect impacts are reasonably foreseeable effects caused by a project's implementation on biological resources outside the direct construction disturbance zone that may occur during construction and/or decommissioning (i.e., short-term construction-related indirect impacts) or later in time as a result of operation (i.e., long-term, or operational, indirect impacts). Indirect impacts may affect areas within a defined project site, but outside the construction disturbance zone. Indirect impacts include short-term effects immediately related to construction activities and long-term or chronic effects related to the human occupation of developed areas (i.e., development-related long-term effects) that are adjacent to naturalized areas.

For the proposed Project, it is assumed that potential indirect impacts resulting from construction activities would include fugitive dust from earth-moving activities, leaks or spills from construction equipment, noise from construction activities, general human presence that may temporarily disrupt species and habitat vitality, and construction-related soil erosion and runoff that could affect downstream resources.

4.3 Impact Analysis

The acreage of direct impacts to vegetation communities and land covers is provided in Table 5. At this time, a final impact footprint has not been determined, and therefore this report assumes that all general agriculture, disturbed habitat, urban/developed, and Creosote Bush Scrub and Allscale Scrub Shrubland would be permanently impacted to provide the Project flexibility in its final design. Figures 6-1 and 6-2, Impacts, show the areas where impacts are anticipated to occur; this is subject to change based on final engineering design.

Table 5. Direct Impacts to Vegetation Communities and Land Covers within the Project Site

Vegetation Community or Land Cover Type	Total Project Site Acreage
General Agriculture	1,590.38
Stream Channel	0
Creosote Bush Scrub and Allscale Scrub Shrubland	80.97
Urban/Developed	5.81
Disturbed Habitat	165.86
Grand Total[1]	**1,843.03**

Note:
[1] Totals may not sum due to rounding.

4.3.1 Impact BIO-1: Special-Status Species

4.3.1.1 Special-Status Plants

No special-status plant species were identified within the Project site. There are small pockets of creosote bush scrub and allscale scrub shrubland, but, overall, the Project site lacks suitable habitat or site characteristics

PC ORIGINAL PKG

required for special-status plant species; thus, special-status plant species are either not expected to occur or have a low potential to occur within the Project site (see Appendix C). As such, there would be no anticipated direct and/or indirect impacts to special-status plant species.

4.3.1.2 Special-Status Wildlife

As described in Section 3.4.1, Special-Status Wildlife Species, burrowing owls and one northern harrier were observed on the Project site during biological surveys conducted in 2023, 2024 and 2025. Burrowing owl is a state candidate for listing as endangered, as well as a species of special concern under CDFW and a bird of conservation concern under USFWS, while northern harrier is a species of special concern under CDFW and a bird of conservation concern under USFWS. No special-status species have a high or moderate potential to occur. Six other special-status species—Colorado Desert fringe-toed lizard, Colorado Valley woodrat, Palm Springs pocket mouse, American badger, desert kit fox, and Crotch's bumble bee—have a low potential to occur on the Project site. Six special-status bird and bat species—mountain plover, California black rail, Yuma Ridgway's rail, western yellow bat, western mastiff bat, and pocketed free-tailed bat—have a low potential to forage on the Project site, but no potential to roost or nest. Only LeConte's thrasher has a low potential to forage and nest on the Project site. One special-status bat species, pallid bat, was detected in limited numbers on the Project site, suggesting the species forages on site but is not roosting.

4.3.1.3 Construction and Decommissioning Impacts

Construction

Implementation of Mitigation Measure (MM) BIO-1 through MM-BIO-4 would reduce impacts on burrowing owls to less than significant. Implementation of MM-BIO-5 and MM-BIO-6 would reduce impacts on migratory and non-migratory birds and nesting raptors to less than significant (see Chapter 5, Project Mitigation). The Project would not result in residual significant and unmitigable impacts related to biological resources.

Decommissioning/Restoration

Decommissioning activities would require construction vehicles to drive across the solar farm area, transmission line routes, and access roads, which could result in ground disturbance and transportation of invasive weeds. Mitigation measures required to reduce potential impacts on sensitive wildlife species (e.g., burrowing owls, nesting birds) would be applicable during the decommissioning phase of the Project. MM-BIO-1 through MM-BIO-6 would reduce decommissioning impacts to less than significant.

Burrowing Owl

Burrowing owls and active burrow sites were recorded on the Project site during the 2023 and 2024 burrowing owl surveys. Direct impacts to burrowing owls, including unintentional clearing or trampling of occupied habitat and/or destruction of burrowing owl dens, eggs, young, or adults, would be significant absent mitigation.

MM-BIO-1 (Burrowing Owl Mitigation) requires pre-construction clearance surveys to be conducted within 14 days prior to the start of ground disturbance by qualified and agency-approved biologists to determine the presence or absence of this species within the Project footprint. These surveys are necessary because burrowing owls may not use the same burrow every year. The identification of any active burrows would result in the establishment of

PC ORIGINAL PKG

appropriate buffers and avoidance/minimization of impacts to burrowing owls. MM-BIO-2 (Burrowing Owl Habitat Compensation) establishes compensation for unavoidable direct impacts to burrowing owls. MM-BIO-3 (Worker Awareness Program) establishes an education program to provide information on burrowing owl biology, regulations, protection measures, and reporting procedures. MM-BIO-4 (Speed Limit) requires evaluation and implementation of best measures to reduce burrowing owl mortality along access roads and establishment of a speed limit. Construction-related direct impacts to burrowing owls would be less than significant with incorporation of MM-BIO-1, MM-BIO-2, MM-BIO-3, and MM-BIO-4.

Potential short-term, indirect impacts to burrowing owls include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the Project site is active agricultural lands, burrowing owls present within the Project site are likely accustomed to increased human presence and noise and vibration. MM-BIO-1 establishes measures at active burrows, including passive relocation, shelter in place (using hay bales to shelter the burrow from construction activities), and abandoned burrow destruction.

California Black Rail and Yuma Ridgeway's Rail

California black rail and Yuma Ridgeway's rail were not recorded during the 2023 reconnaissance survey; however, marginally suitable habitat occurs in small quantities within the irrigation canals on the Project site. Focused surveys were not conducted within the Project site; therefore, habitat suitability is conservatively based on the presence of a small amount of aquatic vegetation within the irrigation canals. Direct impacts to California black rail or Yuma Ridgeway's rail, including destruction of nests, eggs, and/or young if one or both species nest on site, would be significant absent mitigation. However, the two species are not expected to breed in the canals due to the limited suitable habitat available.

Additionally, the Project would avoid all direct impacts to the irrigation canals throughout the Project site, and, therefore, potential construction-related direct impacts to California black rails and Yuma Ridgeway's rails, which are fully protected species, would be avoided. MM-BIO-5 (Migratory and Non-Migratory Bird Construction and Mitigation Measures) would require nesting bird pre-construction surveys to be completed if construction occurs during the nesting bird season (February 1 through September 15). These surveys would identify any California black rails and Yuma Ridgeway's rails within the Project site, establish appropriate buffers, and avoid impacts to California black rails and Yuma Ridgeway's rails. Construction-related direct impacts to California black rails and Yuma Ridgeway's rails would be less than significant with incorporation of MM-BIO-5.

Potential short-term, indirect impacts to California black rails and Yuma Ridgeway's rails include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the Project site is active agricultural lands, California black rails and Yuma Ridgeway's rails potentially present are likely accustomed to increased human presence and noise and vibration. MM-BIO-3 would help to ensure that no impacts would occur to California black rails and Yuma Ridgeway's rails. With implementation of these measures, potential short-term indirect impacts from construction/decommissioning activities would be less than significant.

PC ORIGINAL PKG

Northern Harrier

One northern harrier was recorded foraging during the June 2023 burrowing owl survey. Direct impacts to northern harriers, including destruction of nests, eggs, and/or young if they nest on site, would be significant absent mitigation.

MM-BIO-5 would require nesting bird pre-construction surveys if construction occurs during the nesting bird season (February 1 through September 15). These surveys would identify any northern harriers, which is protected in California, within the Project site, establish appropriate buffers, and avoid impacts to northern harriers. Construction-related direct impacts to northern harriers would be less than significant with incorporation of MM-BIO-5.

Potential short-term, indirect impacts to northern harriers include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the Project site is active agricultural lands, northern harriers potentially present within the Project site are likely accustomed to increased human presence and noise and vibration. MM-BIO-3 (Worker Environmental Awareness Program and Ongoing Training) would help to ensure that no impacts occur to northern harriers. With implementation of these measures, potential short-term indirect impacts from construction/decommissioning activities would be less than significant.

Nesting Birds

The Project site has the potential to support avian nests, which are protected under the Migratory Bird Treaty Act and the California Fish and Game Code (Section 3503), under which it is unlawful to “take, possess, or needlessly destroy” avian nests or eggs. Thus, potentially significant impacts could occur if vegetation clearing is undertaken during the breeding season (February 1 through September 15). Removal of habitat would occur outside of the breeding season. If vegetation removal cannot occur outside of the breeding season, MM-BIO-5 would be implemented to require a pre-construction nesting bird survey, thus addressing direct and indirect impacts to nesting birds. Construction-related direct impacts to nesting birds would be less than significant with incorporation of MM-BIO-5.

Potential short-term, indirect impacts to nesting birds include generation of fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Given that the existing condition of the Project site is active agricultural lands, nesting birds potentially present within the Project site are likely accustomed to increased human presence and noise and vibration. MM-BIO-3 would help to ensure that no impacts occur to nesting birds. With implementation of these measures, potential short-term indirect impacts from construction/decommissioning activities would be less than significant.

4.3.1.4 Operational Impacts

Potential impacts during Project operation could result from lighting, noise, dust, increased human activity, collision hazards, and altered hydrology generated from the solar and energy storage facilities.

PC ORIGINAL PKG

Lighting

All permanent lighting would be of low intensity and in compliance with local, applicable regulations. Lighting would be directed away from the public right-of-way and pointed inward toward the solar energy facility and may utilize directional hoods or shades as needed to reduce light from shining into the adjacent habitat and disturbing birds or exposing them to increased visibility by predators. In addition, any lighting not required daily for security purposes would have motion sensor or temporary use capabilities. As such, no significant impact under CEQA due to lighting is anticipated to occur to migratory birds because the vast majority of the light would be directed onto the facility, not onto adjacent habitat, and because the lights would not be on continuously. Thus, the lighting would not interfere substantially with the movement of migratory bird species or have a substantial effect on habitat.

Noise

The Project site is actively farmed and there are solar facilities operating adjacent to the Project site. No equipment or components are anticipated to produce noise that would exceed ambient noise in the vicinity. No significant impact under CEQA due to noise would occur to migratory birds because their movement and habitat would not be substantially affected.

Dust

Dust from vehicles during Project operation could impact suitable habitat for special-status species. The Project site is actively farmed and there are active agricultural fields and solar facilities operating adjacent to the Project site. No equipment or components are anticipated to produce dust that would exceed what currently exists in the vicinity. Furthermore, with implementation of MM-BIO-4 (Speed Limits), which requires reduced speed limits, potential operational impacts from dust would be reduced to less than significant.

Increased Human Activity

Increased human activity can deter wildlife from using habitat areas near the Project and increase the potential for vehicle collisions. With implementation of MM-BIO-3, which requires environmental education for new workers at the Project site, potential operation impacts from increased human activity would be minimized. With implementation of MM-BIO-3, potential impacts to special-status species from increased human activity would be reduced to less than significant.

Collision Hazards

The Project site is approximately 23 miles south of the Salton Sea, a major stopover location for migratory birds. The Project could potentially increase the risk of collisions due to sky reflection (or “pseudo-lake effect”). Although avian collisions with towers and structures have been well documented, there are few published papers that study the possibility that large areas of solar PV panels in the desert environment may mimic water bodies and inadvertently attract migrating or dispersing wetland bird species. There is currently insufficient research to assess the magnitude or likely risk associated with collisions with solar fields. The solar PV modules would be coated to be non-reflective and are designed to be highly absorptive of all light that strikes their glass surfaces. Based on the evidence available—non-reflective design of the solar panels, typical migration patterns, comparatively few documented deaths—glare and pseudo-lake effect are not expected to result in significant impacts to migrating or local avian species.

PC ORIGINAL PKG

Potential indirect impacts associated with increased human activities/collisions are a potentially significant impact. MM-BIO-3 provides for worker training for operational staff to minimize impacts associated with increased human activity. MM-BIO-4 imposes speed limits on site and limits allowed activities to reduce effects from increased human activity.

Implementation of MM-BIO-3 and MM-BIO-4 would reduce potential operational impacts to less than significant.

Altered Hydrology

The proposed Project would avoid all irrigation canals, and therefore is not expected to impact regional hydrology. Furthermore, hydrology in the region has been extensively modified to convey flows to agricultural farms. Operation of the proposed Project is not expected to alter the topography such that there would be downstream or offsite effects to hydrology.

4.3.2 Impact BIO-2: Sensitive Vegetation Communities

No special-status vegetation communities occur within the Project site. Thus, implementation of the proposed Project would not result in direct or indirect impacts to special-status vegetation communities. As such, no avoidance or compensatory mitigation measures are required.

4.3.3 Impact BIO-3: State or Federally Protected Wetlands

The Project site contains 21.1 acres of potentially jurisdictional non-wetland waters of the United States and state. While it is assumed that the solar field within the Project site would avoid all direct impacts to Imperial Irrigation District irrigation canals, the smaller canals along the boundaries of agricultural fields on the Project site may be impacted. The Project is expected to comply with the relevant laws that apply to potentially jurisdictional waters and notify the respective agencies of the impacts to determine the jurisdictional status and the need for permits to be acquired for impacts. If permits are required, it is expected that avoidance and minimization measures would be included in the conditions of the permits. All poles associated with the collector areas would be sited outside of non-wetland waters. Therefore, there would be no direct impacts to jurisdictional waters, and compensatory mitigation is not required.

Potential short-term, indirect impacts to jurisdictional waters could include generation of fugitive dust and the introduction of chemical pollutants. MM-BIO-3 (Worker Environmental Awareness Program and Ongoing Training) would further ensure no impacts to jurisdictional waters. With implementation of these measures, potential short-term indirect impacts from construction activities would be less than significant.

4.3.4 Impact BIO-4: Wildlife Corridors and Habitat Linkages

The Project is not likely to have direct or indirect impacts on movement of any native resident or migratory fish or wildlife species regionally or locally. The Project site is approximately 23 miles southeast of the Salton Sea and would not affect its use by migratory birds. Locally, the Project site is primarily surrounded by and includes extensive historical (NETR 2023) and present-day agricultural practices (see Figures 3-1 and 3-2). As such, the site has limited value as a potential wildlife corridor or habitat linkage for fish and wildlife species, and likely does not serve as an important wildlife corridor. Impacts to wildlife movement would be less than significant.

PC ORIGINAL PKG

4.3.5 Impact BIO-5: Local Policies or Ordinances

The Imperial County General Plan Conservation and Open Space Element establishes goals and objectives, and implementation programs and policies related to the protection of threatened and endangered plant and wildlife species, and cooperation with federal, state, and local agencies (County of Imperial 2016). The Project is consistent with the Imperial County General Plan biological resource policies (see Tables 6 and 7). Therefore, the Project would not conflict with local policies or ordinances protecting biological resources.

Table 6. Imperial County General Plan Conservation of Biological Resources Goals and Objectives

Objective 2.1	Designate critical habitats for federally and state-listed species.
Objective 2.2	Develop management programs, including preservation of habitat for flat-tailed horned lizard, desert pupfish, and burrowing owl.
Objective 2.3	Support investigation of long-term climate change effects on biological resources.
Objective 2.4	Use the CEQA and NEPA [National Environmental Policy Act] process to identify, conserve, and restore sensitive vegetation and wildlife resources.
Objective 2.5	Give conservation of sensitive species and habitat a high priority in County Park acquisition and development programs.
Objective 2.6	Attempt to identify, reduce, and eliminate all forms of pollution, including air, noise, soil, and water.

Source: County of Imperial 2016

Table 7. Imperial County General Plan Consistency Analysis

General Plan Policies and Programs*	Project Consistency	Analysis
Policy 1. Provide a framework for the conservation and enhancement of natural and created open space which provides habitat values.	Yes, with mitigation	Mitigation Measure (MM) BIO-1 through MM-BIO-6 would reduce impacts to special-status species, sensitive vegetation communities, and jurisdictional resources to less than significant. The proposed Project would be in compliance with federal and state laws.
1a. Identify Resource Areas to conserve and enhance native vegetation and wildlife. These areas include agency designated sensitive habitats with USFWS, BLM Areas of Critical Environmental Concern (ACECs), and CDFW. These designated lands are designed for the protection and perpetuation of rare, endangered, and threatened species and areas important for scientific study.	Yes	There would be no impacts to jurisdictional waters or native vegetation that are important resource areas for native plants and wildlife.
1b. Projects within or in the vicinity of a Resource Area should be designed to minimize adverse impacts on the biological resources it was created to protect.	Yes, with mitigation	MM-BIO-1 through MM-BIO-6 would reduce impacts to special-status species, sensitive vegetation communities, and

PC ORIGINAL PKG

Table 7. Imperial County General Plan Consistency Analysis

General Plan Policies and Programs*	Project Consistency	Analysis
		jurisdictional resources to less than significant. The proposed Project would be in compliance with federal and state laws.
1c. Accept donations of land which have high wildlife value. Where appropriate, Imperial County shall attempt to exchange donated lands of high wildlife value with other State, Federal, or other resource agencies equipped to protect and manage such lands for other lands more appropriate to County needs.	N/A	No land would be exchanged or donated as part of the proposed Project.
1d. Develop an environmental mitigation program that protects and restores Salton Sea wildlife habitats as offsets to biological disturbances identified through the CEQA review process for development projects. The program would allow the County and/or Salton Sea JPA to restore habitat through financing mechanisms including land banks and/or direct financial contributions from the developers to mitigate their impacts	N/A	There would be no impacts to jurisdictional waters.
1e. Conserve the native habitat of sensitive plants and animals through the dedication of open space easements, or other means that will ensure their long-term protection and survival. Such easements may preclude the erecting of any structures (temporary or permanent), vegetation removal, or any other activities. These dedicated open space easements would also serve to reduce potential indirect impacts to sensitive biological resources that may result from human activities associated with future developments	N/A	There would be no impacts to native vegetation that are important resource areas for native plants and wildlife.
1f. Areas designated for biological open space conservation shall include buffers, which provide important breeding and foraging habitats for native and migratory birds and animals. Such buffers shall serve to separate future development from adjacent native habitat areas to ensure the perpetual regeneration of these habitats	N/A	There would be no impacts to native vegetation that are important resource areas for native plants and wildlife.
1g. Protect riparian habitat and other types of wetlands from loss or modification by dedicating open space easements with adequate buffer zones, and by other means to avoid impacts from adjacent land uses. Road crossings or other disturbances of riparian habitat should be minimized and only allowed when alternatives have been considered and determined infeasible.	Yes	There would be no impacts to jurisdictional waters, riparian habitats, or wetlands.

PC ORIGINAL PKG

Table 7. Imperial County General Plan Consistency Analysis

General Plan Policies and Programs*	Project Consistency	Analysis
1h. Rock outcrops which serve as significant boulder habitat for sensitive biological resources should be considered within open space easements.	N/A	There are no rock outcrops within the Project site.
1i. Preserve existing California fan palms in natural settings and other individual specimen trees which contribute to the community character and provide wildlife habitat.	N/A	There are no California fan palms (*Washingtonia filifera*) within the Project site.
1j. Preserve and encourage the open space designation of wildlife corridors which are essential to the long-term viability of wildlife populations.	N/A	There would be no impacts to native vegetation that are important resource areas for native plants and wildlife.
1k. Integrate open space dedications in private developments with surrounding uses to maximize a functional open space/recreation and wildlife management system.	N/A	There would be no private development as part of the proposed Project.

* **Source:** County of Imperial 2016
N/A = not applicable

4.3.6 Impact BIO-6: Habitat Conservation Plans

No adopted Habitat Conservation Plan area overlaps with the Project site. Thus, implementation of the proposed Project would not result in direct or indirect impacts to any Habitat Conservation Plan. As such, no avoidance or compensatory mitigation measures are required.

PC ORIGINAL PKG

5 Project Mitigation

MM-BIO-1 Burrowing Owl Mitigation

Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The survey shall cover the Project site and a 500-foot buffer, where legally accessible. The Project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan (see below) to allow commencement of disturbance activities on site. A pre-construction survey shall be conducted within 14 days prior to the start of construction activities (see below).

Pre-Construction Survey and Avoidance Measures

Depending on the Project activity type and associated disturbance, an avoidance buffer distance of 50 meters (165 feet) to 100 meters (330 feet) during the non-breeding season (September through January) and 100 meters (330 feet) t0 250 meters (825 feet) during the breeding season (February through August) shall be maintained between active burrows and construction activities. A Qualified Biologist shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If construction is to begin during the breeding season, mitigation measures shall be implemented prior to February 1 to discourage nesting by burrowing owls within the Project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins so that owls can be properly relocated before nesting occurs.

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the Project footprint. A report shall be submitted by a qualified and agency-approved biologist. The Project footprint shall be clearly demarcated in the field by the Project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the protocols provided in the Burrowing Owl Survey Protocol and Mitigation

PC ORIGINAL PKG

Guidelines, prepared by the California Burrowing Owl Consortium, and following the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012).

Burrowing Owl Protection and Mitigation Plan

If active burrows are present within the Project footprint and avoidance is infeasible, the following mitigation measures shall be implemented. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the Project shall then be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.

As the Project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the Project applicant.

For the purposes of this mitigation measure, a "qualified biologist" is a biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW.

MM-BIO-2 Burrowing Owl Habitat Compensation. The California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation requires the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the Project site.

Mitigation shall include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

MM-BIO-3 Worker Awareness Program and Ongoing Training. Prior to Project initiation, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Wallet-sized cards summarizing this information

PC ORIGINAL PKG

shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:

- Biology and status of burrowing owl.
- California Department of Fish and Wildlife/U.S. Fish and Wildlife Service regulations.
- Protection measures designed to reduce potential impacts on the species.
- The function of flagging designated authorized work areas.
- Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field.

MM-BIO-4 Speed Limit. During construction, the designated biologist or biological monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads. A speed limit of 15 miles per hour shall be enforced on all access roads. In addition, all vehicles required for operations and maintenance must remain on designated access/maintenance roads.

MM-BIO-5 Migratory Birds and Other Sensitive Non-Migratory Bird Species. To reduce the potential indirect impact on migratory birds, bats, and raptors, an Avian and Bat Protection Plan (ABPP) shall be prepared following the U.S. Fish and Wildlife Service's guidelines and implemented by the Project applicant. This ABPP shall outline conservation measures for construction, operation, and maintenance activities that might reduce potential impacts on bird populations and shall be developed by the Project applicant in conjunction with the County of Imperial.

Construction conservation measures to be incorporated into the ABPP shall include the following:

- Minimizing disturbance to vegetation to the maximum extent practicable.
- Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the Project footprint. Pre-construction nesting surveys will identify any active migratory bird (and other sensitive non-migratory bird) nests. Direct impact on any active migratory bird nest shall be avoided.
- Minimizing wildfire potential.
- Minimizing activities that attract prey and predators.
- Controlling non-native plants.

Operations and maintenance conservation measures to be incorporated into the ABPP shall include the following:

- Incorporating the Avian Powerline Interaction Committee's 2012 guidelines for overhead utilities to minimize avian collisions with transmission facilities.
- Minimizing noise.
- Minimizing use of outdoor lighting.

MM-BIO-6 Raptor and Active Raptor Nest Avoidance. Raptors and active raptor nests are protected under California Fish and Game Code Sections 3503.5, 3503, 3513. To prevent direct and indirect noise impact on nesting raptors, such as red-tailed hawk, the following measures shall be implemented:

PC ORIGINAL PKG

- Initial grading and construction within the Project site shall take place outside the raptors' breeding season of February 1 through July 15.
- If construction occurs between February 1 and July 15, a qualified biologist shall conduct a pre-construction clearance survey for nesting raptors in suitable nesting habitat (e.g., tall trees and transmission towers) that occurs within 500 feet of the Project site. If any active raptor nest is located, the nest area shall be flagged, and a buffer zone delineated, flagged, or otherwise marked. No work activity shall occur within this buffer area until a qualified biologist determines that the fledglings are independent of the nest.

PC ORIGINAL PKG

6 References

AOS (American Ornithological Society). 2018. "Checklist of North and Middle American Birds." http://checklist.aou.org/taxa/.

CDFG (California Department of Fish and Game). 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resources Agency. March 7, 2012.

CDFW (California Department of Fish and Wildlife). 2023a. California Natural Diversity Database (CNDDB). RareFind, Version 5 and CNDDB in BIOS. (Commercial Subscription). Sacramento: CDFW, Biogeographic Data Branch. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

CDFW. 2023b. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Database. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline=1.

CDFW. 2023c. "Special Animals List." California Natural Diversity Database. CDFW, Biogeographic Data Branch. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1.

CDFW. 2023d. *California Natural Community List*. Sacramento, California: CDFW, Biogeographic Data Branch. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

CNPS (California Native Plant Society). 2023a. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.39). Sacramento: CNPS. http://www.rareplants.cnps.org.

CNPS. 2023b. *A Manual of California Vegetation*, Online Edition. California Native Plant Society, Sacramento, California. http://www.cnps.org/cnps/vegetation/.

Cornell Lab of Ornithology. 2023. "All About Birds." Accessed July 2023. https://www.allaboutbirds.org/news/.

County of Imperial. 2016. *Imperial County General Plan Conservation and Open Space Element*. Prepared by the Planning and Development Services Department. Adopted March 8, 2016. https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79/31. Prepared for U.S. Fish and Wildlife Service. December 1979. Reprinted 1992. http://www.fws.gov/wetlands/documents/classification-of-wetlands-and-deepwater-habitats-of-the-united-states.pdf.

Crother, B.I. 2017. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding*, edited by J.J. Moriarty. 8th ed. Society for the Study of Amphibians and Reptiles (SSAR); Herpetological Circular no. 43. September 2017. https://ssarherps.org/wp-content/uploads/2017/10/8th-Ed-2017-Scientific-and-Standard-English-Names.pdf.

Dudek. 2024. *Aquatic Resources Delineation Report for the Big Rock 2 Cluster Solar and Storage Project*. May 2024.

PC ORIGINAL PKG

Eddleman, W.R., R.E. Flores, and M. Legare 1994. "Black Rail (*Laterallus jamaicensis*)," version 2.0. A F. Poole, F.B. Gill, Editors. Cornell Lab of Ornithology: Ithaca, New York. Accessed from *The Birds of North America*. https://birdsna.org/SpeciesAccount/bna/species/blkrai/introduction.

Esri. 2023. Collector for ArcGIS. Version 21.0.4.

Google Earth. 2023. Google Earth, desktop application; Project site imagery. Accessed July 2023. https://www.google.com/earth/.

Jepson Flora Project. 2023. "Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California." Berkeley, California: University of California. http://ucjeps.berkeley.edu/interchange/.

NETR (National Environmental Title Research LLC). 2023. Historical Aerials Viewer. NETR Online. Accessed June 2023. https://www.historicaerials.com/viewer.

Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. Based on *Preliminary Descriptions of the Terrestrial Natural Communities of California*, Robert F. Holland, Ph.D., October 1986. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/014%202014-12-19_OberbauerTM2008.pdf.

Richardson, L.L. 2023. Bumble Bees of North America Occurrence Records Database. Accessed May 3, 2023. https://www.leifrichardson.org/bbna.html.

Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation.* Second edition. Sacramento: California Native Plant Society.

Smith, K.G., S.R. Wittenberg, R.B. Macwhirter, and K.L. Bildstein. 2011. "Northern Harrier (*Circus cyaneus*)." In *The Birds of North America*, Online, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. http://bna.birds.cornell.edu/bna/species/210.

SWRCB (State Water Resources Control Board). 2021. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019; revised April 6, 2021. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: Environmental Laboratory, U.S. Army Corps of Engineers Waterways Experiment Station. January 1987. http://www.fedcenter.gov/Bookmarks/index.cfm?id=6403&pge_id=1606.

USACE. 2008a. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*. ERDC/CRREL TR-08-12. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory.

PC ORIGINAL PKG

USACE. 2008b. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0). Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. http://el.erdc.usace.army.mil/elpubs/pdf/trel08-28.pdf.

USACE and EPA (U.S. Environmental Protection Agency). 2008. "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States." December 2, 2008. http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf.

USDA (U.S. Department of Agriculture) 2005. *Conservation Assessment for Northern Harrier (*Circus cyaneus*)*. Prepared by USDA Forest Service, Eastern Region. Accessed August 2023. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5182007.pdf.

USDA. 2023a. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed June 2023. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USDA. 2023b. "State Soil Data Access (SDA) Hydric Soils List." Accessed June 2023. https://www.nrcs.usda.gov/publications/query-by-state.html.

USFWS (U.S. Fish and Wildlife Service). 2021. "Regulations Governing Take of Migratory Birds; Revocation of Provisions." Last Updated January 7, 2021. Accessed July 2023. https://www.govinfo.gov/app/details/FR-2021-10-04/2021-21473/summary.

USFWS. 2023a. "Critical Habitat and Occurrence Data" [map]. USFWS Geospatial Services. https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

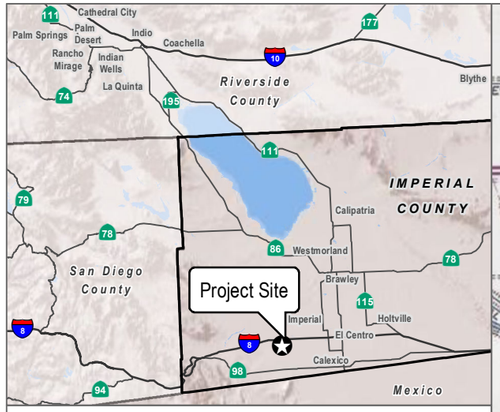
USFWS. 2023b. National Wetlands Inventory. https://www.fws.gov/wetlands/index.html.

Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



- Project Boundary
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles, Avantus 2023

DUDEK 0 1,000 2,000 Feet

FIGURE 1

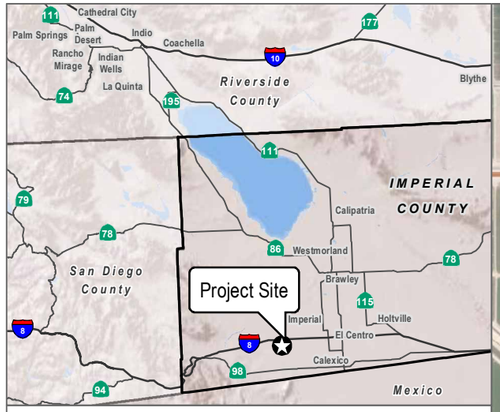
Project Location

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



- Project Boundary
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

Soils

- 102: BADLAND
- 107: GLENBAR COMPLEX
- 110: HOLTVILLE SILTY CLAY, WET
- 114: IMPERIAL SILTY CLAY, WET
- 115: IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES
- 118: INDIO LOAM, WET
- 119: INDIO-VINT COMPLEX
- 121: MELOLAND FINE SAND
- 122: MELOLAND VERY FINE SANDY LOAM, WET
- 123: MELOLAND AND HOLTVILLE LOAMS, WET
- 126: NILAND FINE SAND
- 130: ROSITAS SAND, 0 TO 2 PERCENT SLOPES
- 132: ROSITAS FINE SAND, 0 TO 2 PERCENT SLOPES
- 135: ROSITAS FINE SAND, WET, 0 TO 2 PERCENT SLOPES
- 142: VINT LOAMY VERY FINE SAND, WET
- 144: VINT AND INDIO VERY FINE SANDY LOAMS, WET
- 145: WATER

SOURCE: Maxar 2023; Imperial County 2023; USDA SSURGO 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 2

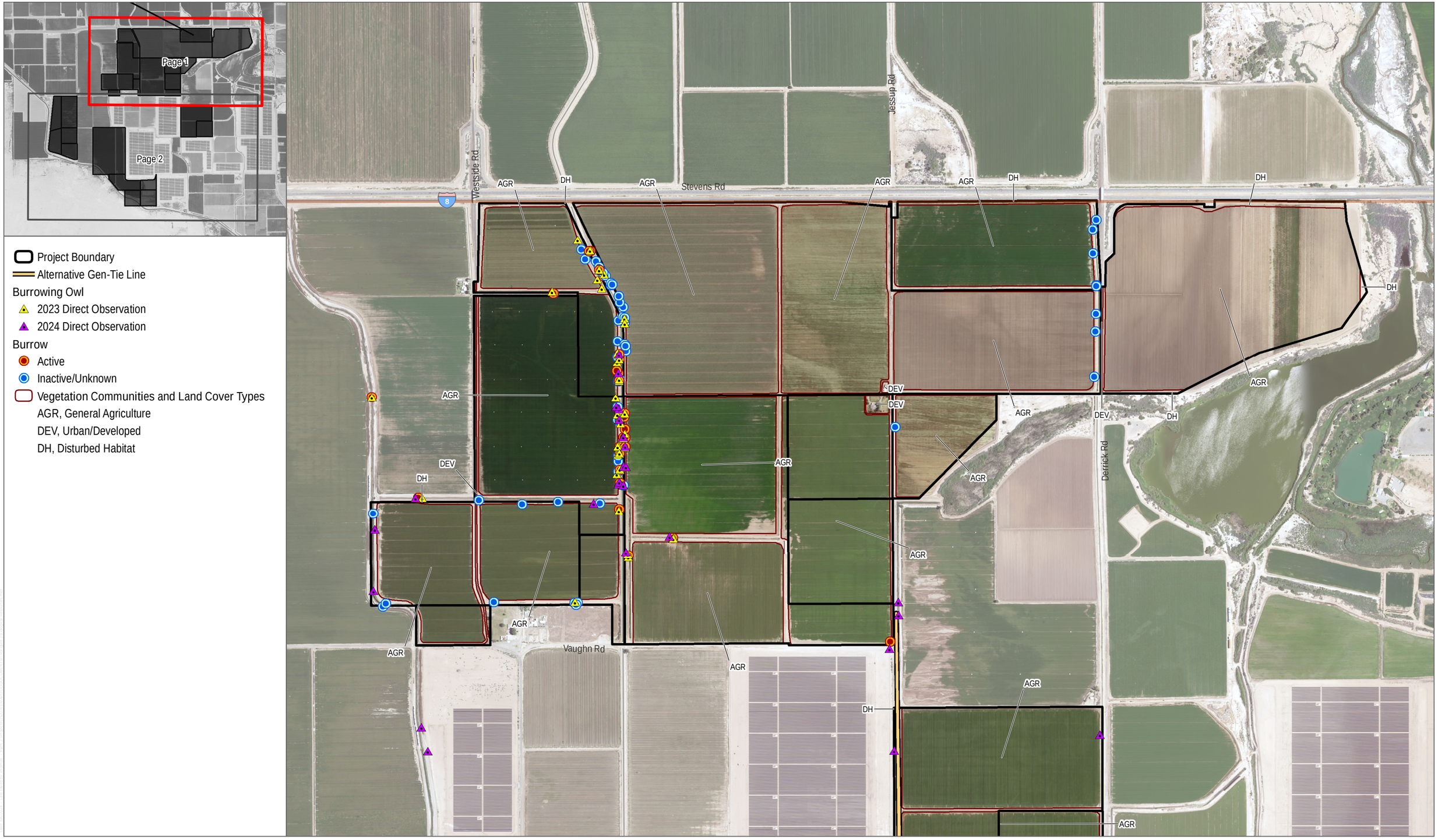
Soils

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Maxar 2023; Avantus 2023

DUDEK

0 550 1,100 Feet

FIGURE 3-1

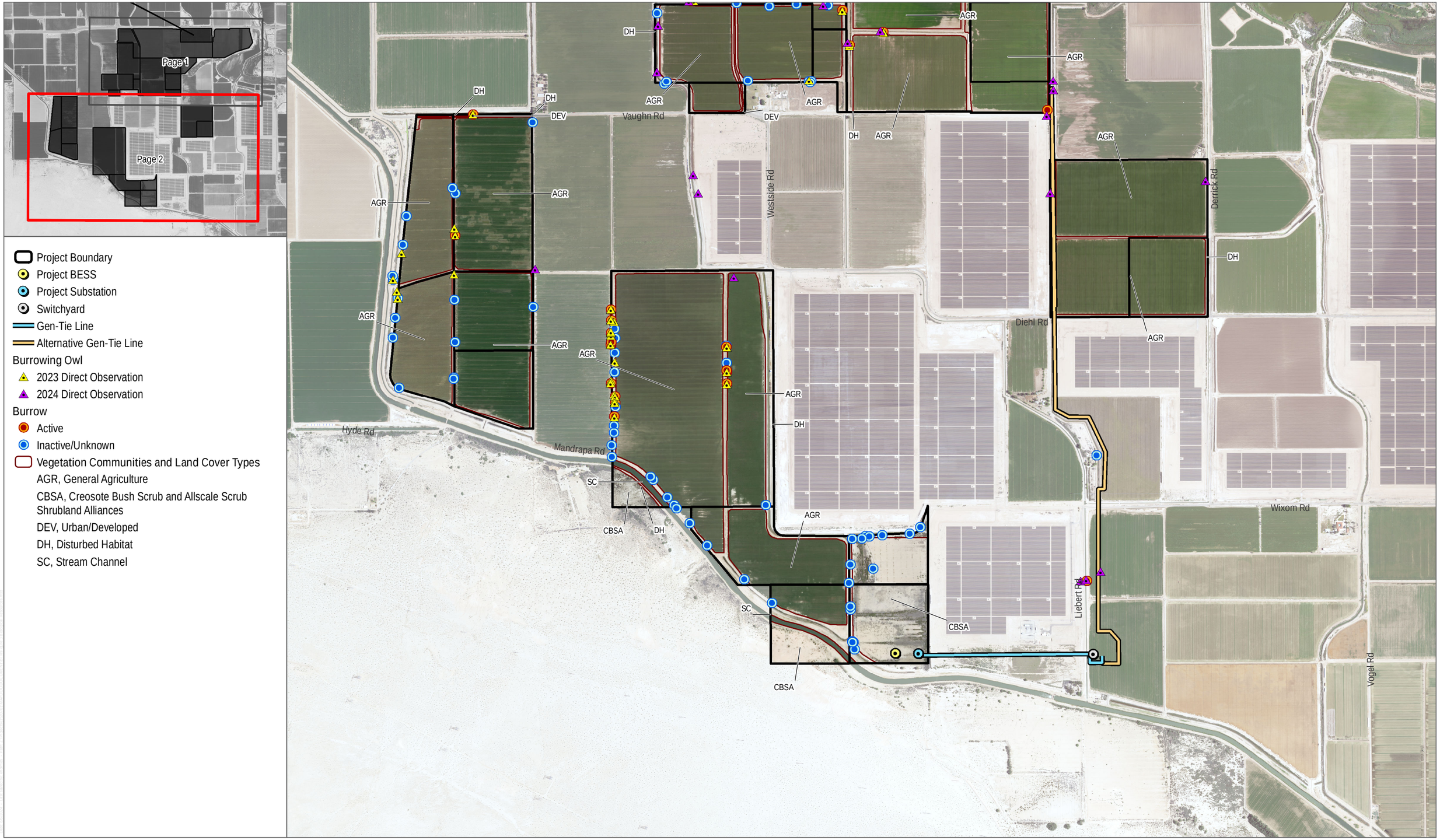
Biological Resources

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Maxar 2023; Avantus 2023

DUDEK

0 750 1,500 Feet

FIGURE 3-2

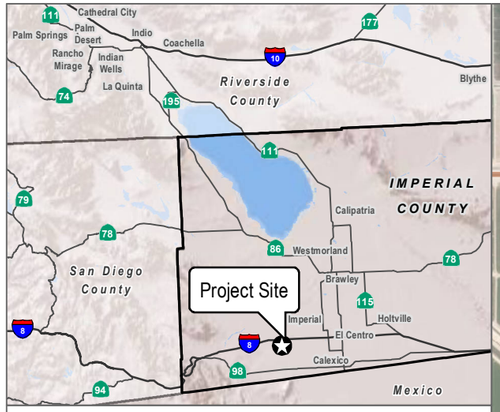
Biological Resources

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Project Boundary
Project BESS
Project Substation
Switchyard
Gen-Tie Line
Alternative Gen-Tie Line

Bat Survey Results

Acoustic Detector
Emergence Survey Location

SOURCE: Maxar 2023; Imperial County 2023; USDA SSURGO 2023; Avantus 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 4

Bat Survey Results

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK

FIGURE 5-1

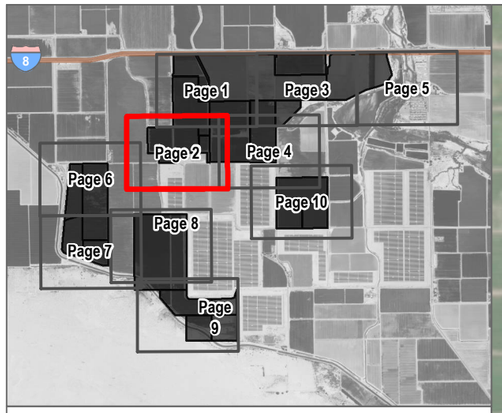
Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



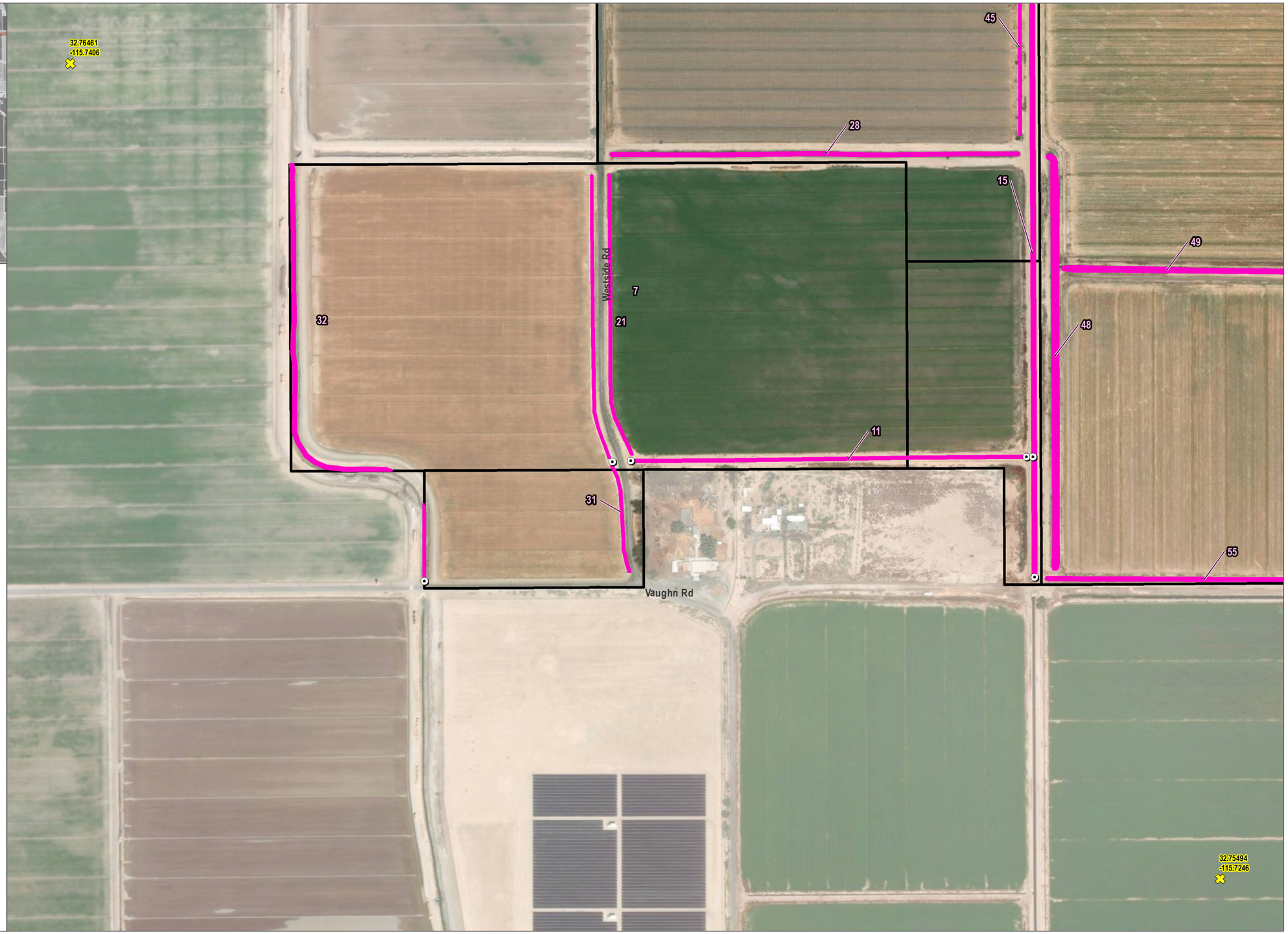
Project Boundary
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

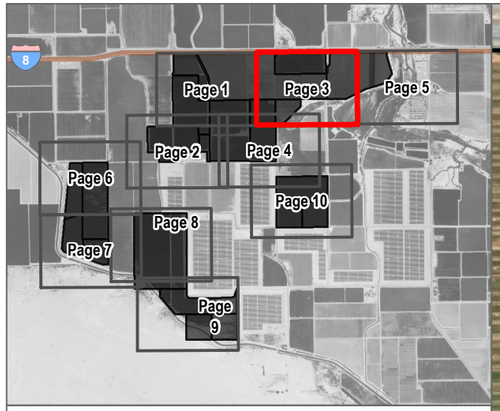
DUDEK 0 200 400 Feet

FIGURE 5-2
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



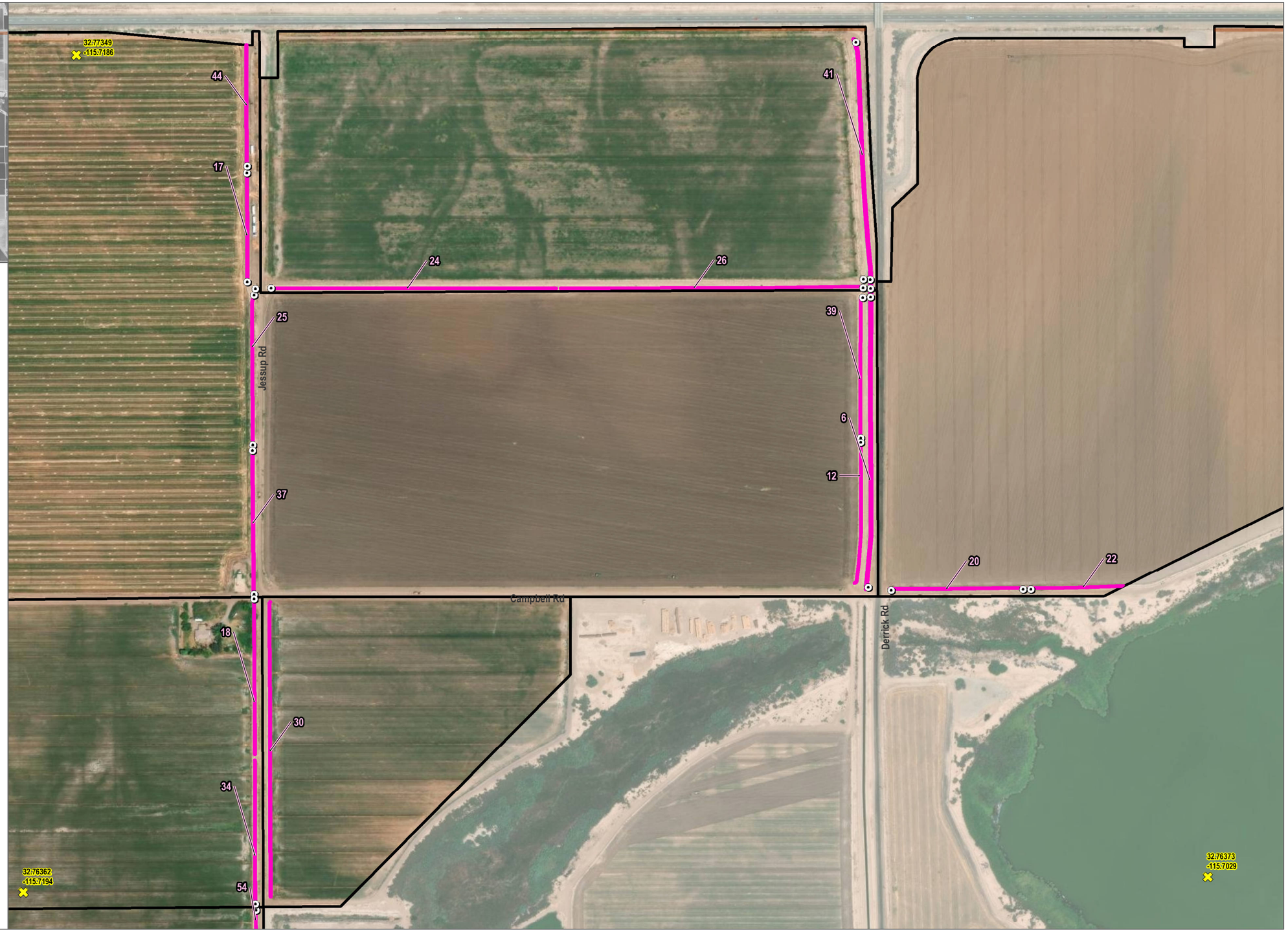
Project Boundary
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK

0 200 400 Feet

FIGURE 5-3

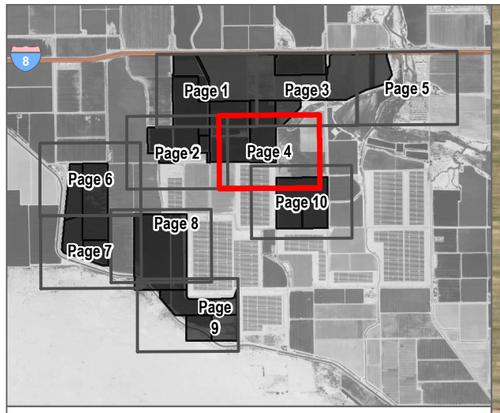
Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Project Boundary
Alternative Gen-Tie Line
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK

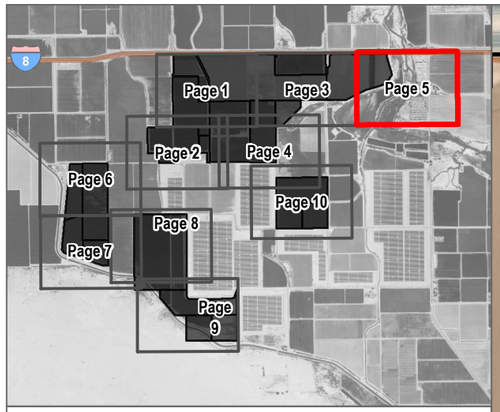
0 200 400 Feet

FIGURE 5-4
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Project Boundary

Map Reference Point

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK

0 200 400 Feet

FIGURE 5-5

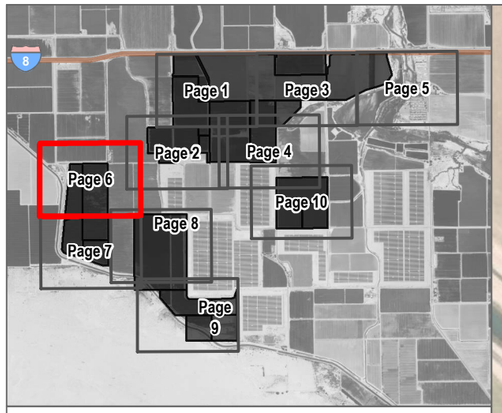
Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



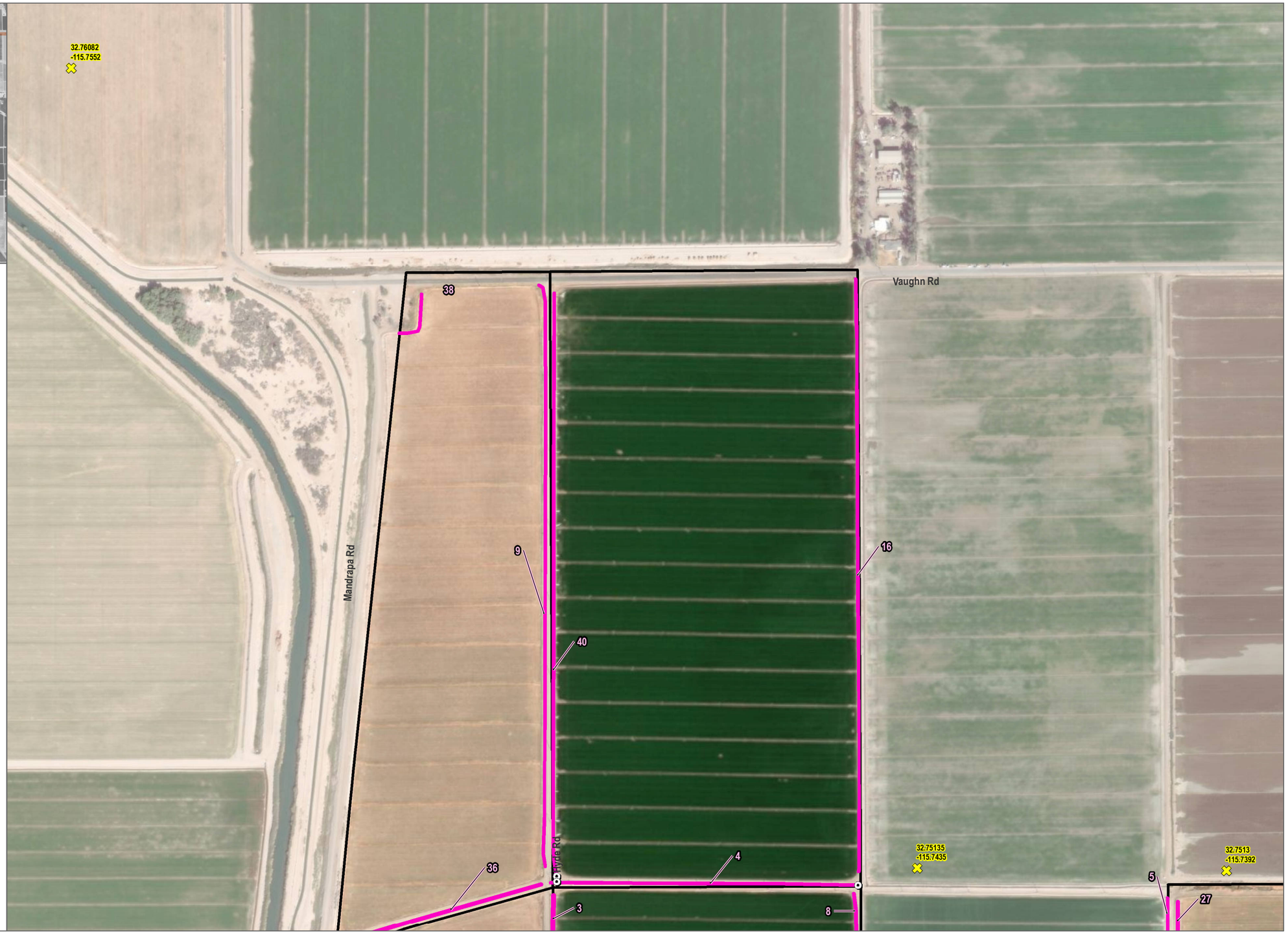
Project Boundary
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

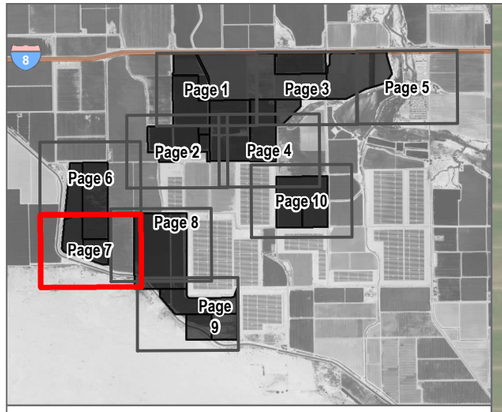
DUDEK 0 200 400 Feet

FIGURE 5-6
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



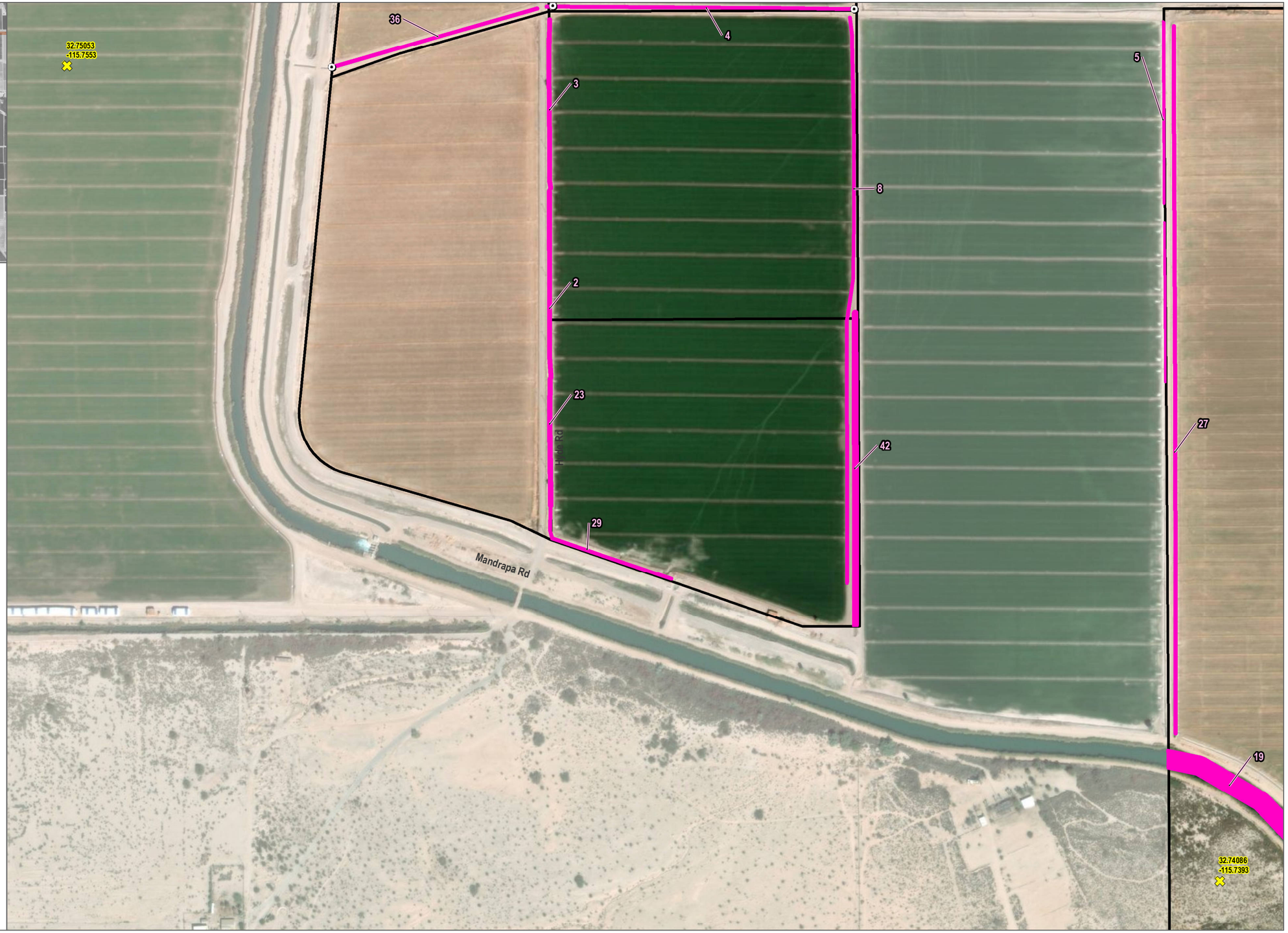
Project Boundary
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK

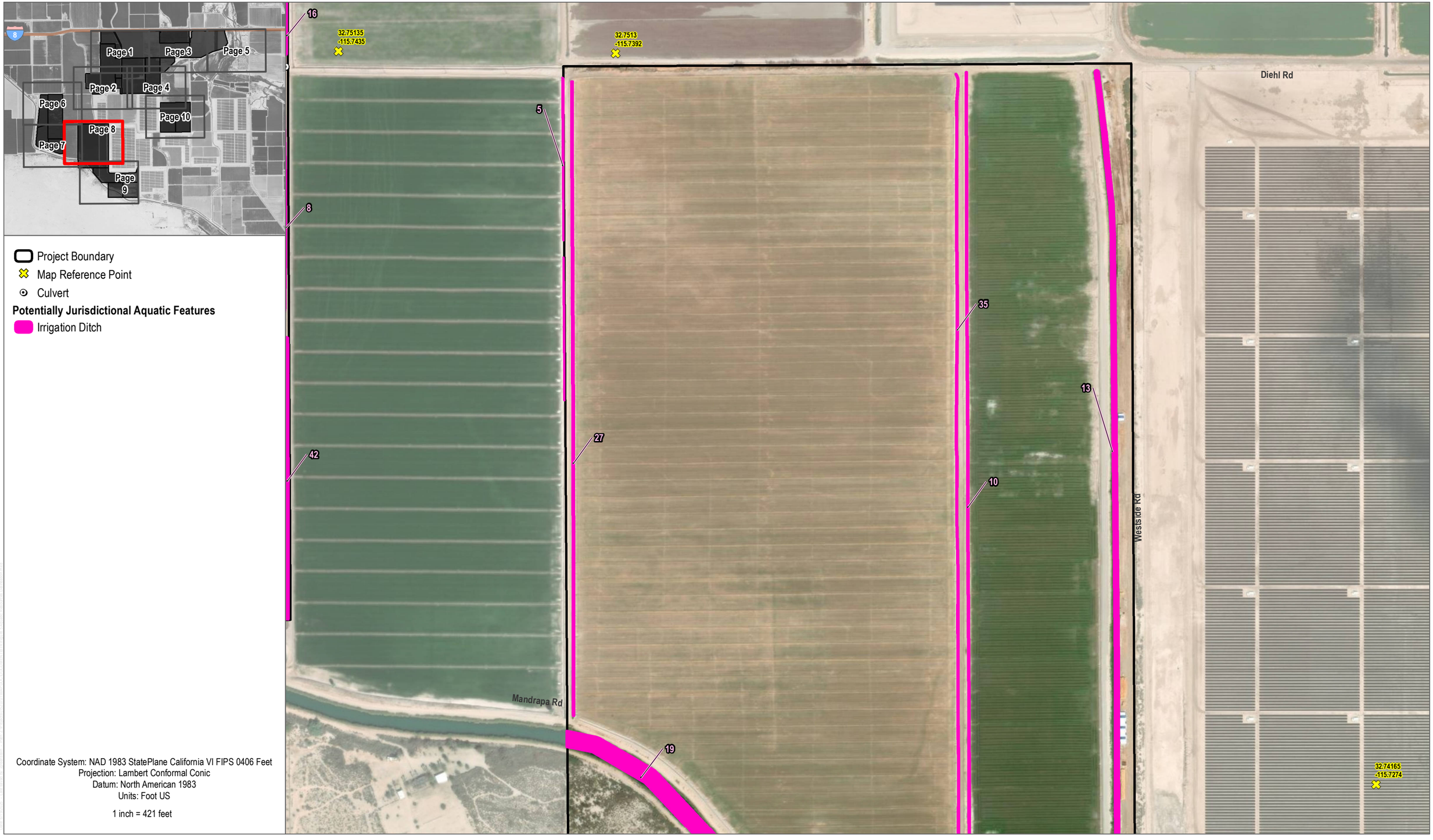
0 200 400 Feet

FIGURE 5-7
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK

FIGURE 5-8

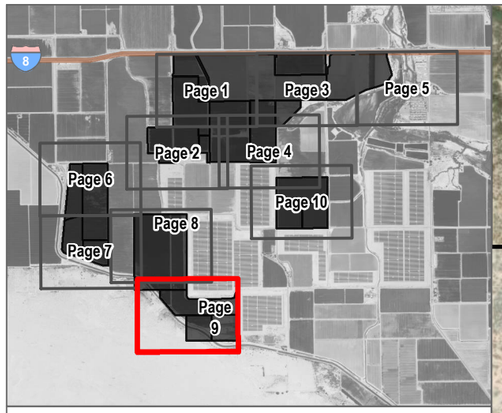
Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Project Boundary
Gen-Tie Line
Project BESS
Project Substation
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet

SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK 0 200 400 Feet

FIGURE 5-9

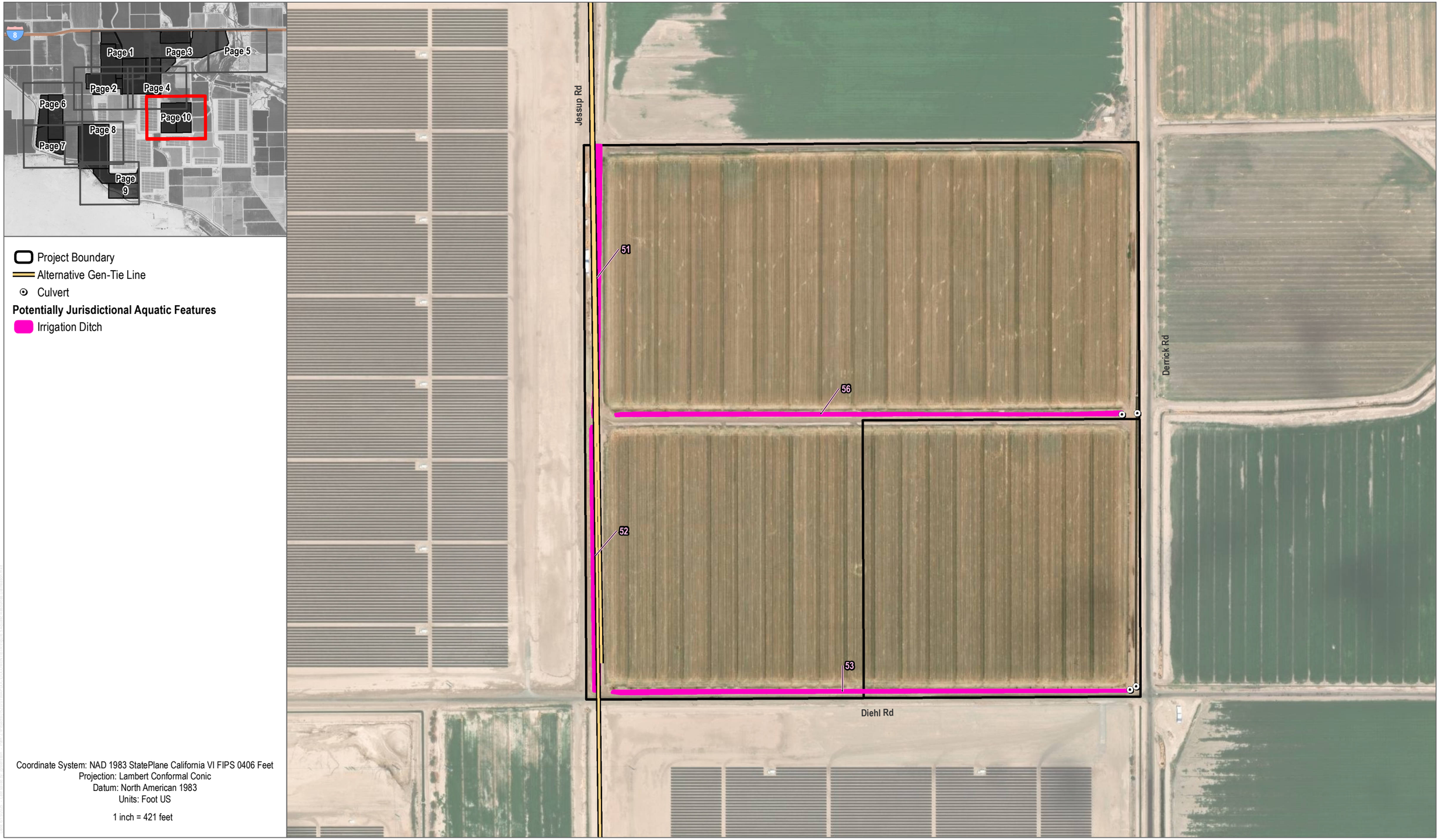
Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023; Avantus 2023

DUDEK 0 200 400 Feet

FIGURE 5-10

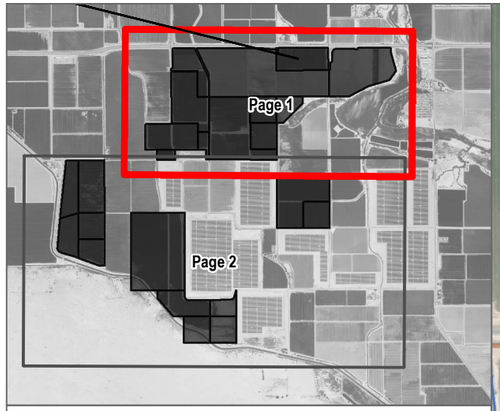
Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



Project Boundary
Alternative Gen-Tie Line

Impacts
Permanent

Burrowing Owl
Direct Observation

Burrow
Active
Inactive/Unknown

Vegetation Communities and Land Cover Types
AGR, General Agriculture
DEV, Urban/Developed
DH, Disturbed Habitat
Irrigation Ditch

National Wetland Inventory
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Riverine
Lake

SOURCE: Maxar 2023; USGS 2023

DUDEK

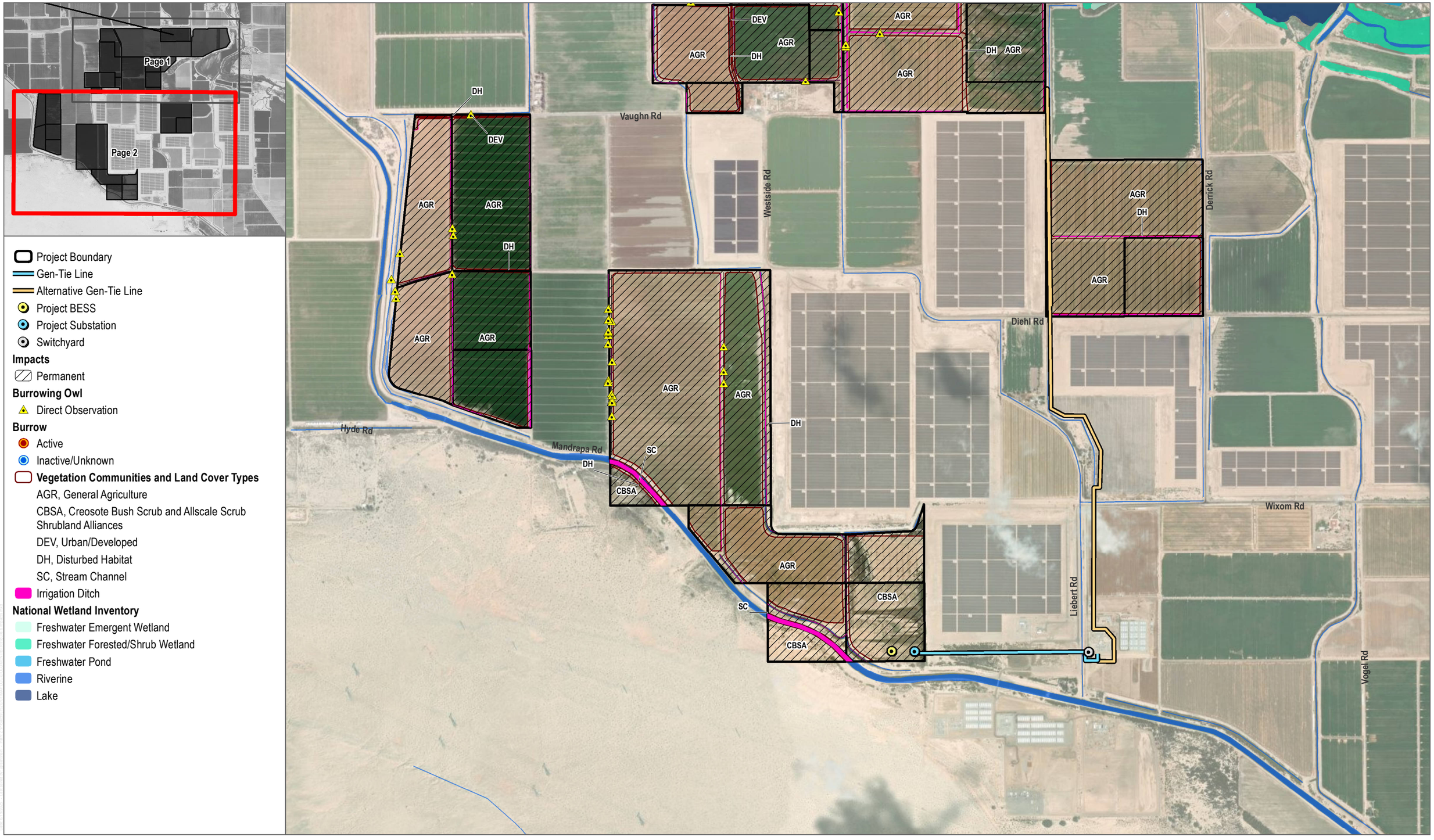
0 550 1,100 Feet

FIGURE 6-1
Impacts
P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



SOURCE: Maxar 2023; USGS 2023

DUDEK

0 750 1,500 Feet

FIGURE 6-2
Impacts
P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix A
Site Photos

PC ORIGINAL PKG



Photo 1. Representative photo of creosote bush scrub and allscale scrub shrubland alliances.



Photo 2. Representative photo of creosote bush scrub and allscale scrub shrubland alliances.



Photo 3. Concrete irrigation ditch running adjacent to agricultural fields.



Photo 4. Unpaved access road between agricultural fields and irrigation ditches.

PC ORIGINAL PKG



Photo 5. Active agricultural fields.



Photo 6. Fallow agricultural fields.



Photo 7. Image of an acoustic bat detector deployed near an open waterway within the project site.



Photo 8. Image of an acoustic bat detector deployed within desert riparian scrub habitat.

PC ORIGINAL PKG



Photo 9. Image of partially skirted palm tree that provides potentially suitable bat roosting habitat.

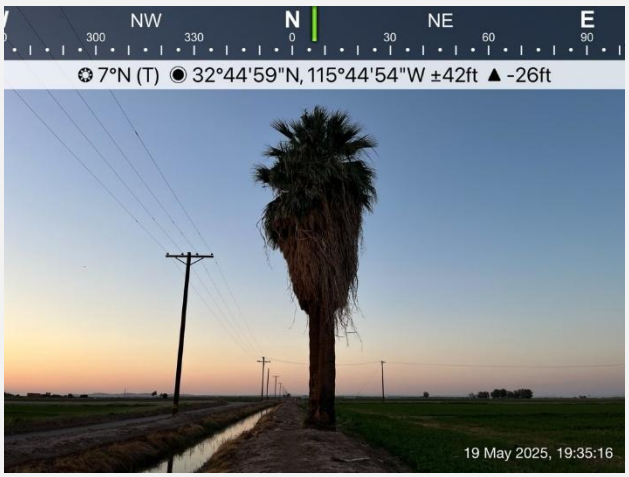


Photo 10. Image of partially skirted palm tree from one of the emergence survey site locations.

PC ORIGINAL PKG

Appendix B
Plant Compendium

PC ORIGINAL PKG

Vascular Species

Eudicots

AMARANTHACEAE – AMARANTH FAMILY

* *Amaranthus albus* – prostrate pigweed
None/None/None

ASTERACEAE – SUNFLOWER FAMILY

* *Erigeron bonariensis* – asthmaweed
None/None/None

Helianthus gracilentus – slender sunflower
None/None/None

* *Lactuca serriola* – prickly lettuce
None/None/None

Pluchea sericea – arrow weed
None/None/None

* *Sonchus oleraceus* – common sowthistle
None/None/None

BORAGINACEAE – BORAGE FAMILY

Heliotropium curassavicum – salt heliotrope
None/None/None

CHENOPODIACEAE – GOOSEFOOT FAMILY

Atriplex canescens – fourwing saltbush
None/None/None

* *Chenopodium album* – lambsquarters
None/None/None

FABACEAE – LEGUME FAMILY

* *Medicago sativa* – alfalfa
None/None/None

* *Melilotus indicus* – annual yellow sweetclover
None/None/None

Prosopis pubescens – screwbean mesquite
None/None/None

MALVACEAE – MALLOW FAMILY

* *Malva parviflora* – cheeseweed mallow
None/None/None

PC ORIGINAL PKG

POLYGONACEAE – BUCKWHEAT FAMILY

* *Rumex dentatus* – toothed dock
  None/None/None

SOLANACEAE – NIGHTSHADE FAMILY

* *Solanum elaeagnifolium* – silverleaf nightshade
  None/None/None

TAMARICACEAE – TAMARISK FAMILY

* *Tamarix ramosissima* – tamarisk
  None/None/None

Monocots

ARECACEAE – PALM FAMILY

* *Phoenix canariensis* – Canary Island date palm
  None/None/None
* *Washingtonia robusta* – Washington fan palm
  None/None/None

CYPERACEAE – SEDGE FAMILY

Bolboschoenus maritimus ssp. *paludosus* – cosmopolitan bulrush
None/None/None

POACEAE – GRASS FAMILY

* *Arundo donax* – giant reed
  None/None/None
* *Avena fatua* – wild oat
  None/None/None

Distichlis spicata – salt grass
None/None/None

* *Echinochloa colona* – jungle rice
  None/None/None
* *Hordeum vulgare* – common barley
  None/None/None

Leptochloa fusca ssp. *uninervia* – Mexican sprangletop
None/None/None

* *Phalaris canariensis* – annual canarygrass
  None/None/None
* *Sorghum halepense* – Johnsongrass
  None/None/None

PC ORIGINAL PKG

TYPHACEAE – CATTAIL FAMILY

Typha domingensis – southern cattail
None/None/None
Typha latifolia – broadleaf cattail
None/None/None

* signifies introduced (non-native) species

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix C

Assessment of Special-Status Plant Species Potentially Occurring on the Project Site

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia villosa var. *aurita*	chaparral sand-verbena	None/None/1B.1	Chaparral, coastal scrub, desert dunes; sandy/annual herb/(Jan) Mar–Sep/ 245–5,245	**Not expected to occur**. The site is outside of the species' known elevation range. A California Natural Diversity Database (CNDDB) search shows the nearest recorded occurrence of this species is 0.5 miles north of the Project site in 1949.
Astragalus sabulonum	gravel milk-vetch	None/None/2B.2	Desert dunes, Mojavean desert scrub, Sonoran desert scrub; flats, gravelly (sometimes), roadsides, sandy (usually), washes/annual/perennial herb/ Feb–June/200–3,050	**Not expected to occur**. The site is outside of the species' known elevation range. A CNDDB search shows the nearest recorded occurrence of this species is 1.4 miles south of the Project site in 1961.
Calliandra eriophylla	pink fairy-duster	None/None/2B.3	Sonoran desert scrub (sandy, rocky)/perennial deciduous shrub/ Jan–Mar/395–4,920	**Not expected to occur**. The site is outside of the species' known elevation range. A CNDDB search shows the nearest recorded occurrence of this species is 1.0 miles south of the Project site in 1970.
Castela emoryi	Emory's crucifixion-thorn	None/None/2B.2	Mojavean desert scrub, playas, Sonoran desert scrub; gravelly/perennial deciduous shrub/(Apr) June–July (Sep–Oct)/295–2,375	**Not expected to occur**. The site is outside of the species' known elevation range. A CNDDB search shows the nearest recorded occurrence of this species is 5.7 miles southwest of the Project site in 1956.
Croton wigginsii	Wiggins' croton	None/SR/2B.2	Desert dunes, Sonoran desert scrub (sandy)/perennial shrub/Mar–May/ 165–330	**Not expected to occur**. The site is outside of the species' known elevation range. A CNDDB search shows the nearest recorded occurrence of this species is 2.6 miles northwest of the Project site in 2010.
Euphorbia abramsiana	Abrams' spurge	None/None/2B.2	Mojavean desert scrub, Sonoran desert scrub; sandy/annual herb/ (Aug) Sep–Nov/15–4,295	**Low potential to occur**. The Project site is largely agriculture but contains areas of Sonoran desert scrub that could be suitable habitat for this species. A CNDDB search shows the nearest recorded occurrence of this species is 9.5 miles southwest of the Project site in 2013.

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Euphorbia platysperma	flat-seeded spurge	None/None/1B.2	Desert dunes, Sonoran desert scrub (sandy)/annual herb/Feb–Sep/ 215–330	**Not expected to occur**. The site is outside of the species' known elevation range. A CNDDB search showed no recorded occurrences within 10 miles of the Project site.
Imperata brevifolia	California satintail	None/None/2B.1	Chaparral, coastal scrub, meadows and seeps (often alkali), Mojavean desert scrub, riparian scrub; mesic/perennial rhizomatous herb/Sep–May/0–3,985	**Not expected to occur**. No suitable habitat present. A CNDDB search shows the nearest recorded occurrence of this species is 7.5 miles southeast of the Project site in 1963.
Ipomopsis effusa	Baja California ipomopsis	None/None/2B.1	Chaparral, Sonoran desert scrub (alluvial fans); sandy/annual herb/ Apr–June/0–330	**Low potential to occur**. The Project site is largely agriculture, but contains areas of Sonoran desert scrub that could be suitable habitat for this species. A CNDDB search shows the nearest recorded occurrence of this species is 4.4 miles south of the Project site in 1966.
Lycium parishii	Parish's desert-thorn	None/None/2B.3	Coastal scrub, Sonoran desert scrub/perennial shrub/Mar–Apr/ 445–3,280	**Not expected to occur**. The site is outside of the species' known elevation range. A CNDDB search shows the nearest recorded occurrence of this species is 1.1 miles west of the Project site in 2010.
Malperia tenuis	brown turbans	None/None/2B.3	Sonoran desert scrub (sandy, gravelly)/annual herb/ (Feb) Mar–Apr/50–1,095	**Low potential to occur**. The Project site is largely agriculture but contains areas of Sonoran desert scrub that can be suitable habitat for this species. A CNDDB search shows the nearest recorded occurrence of this species is 1.1 miles west of the Project site in 2010.

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Mentzelia hirsutissima	hairy stickleaf	None/None/2B.3	Sonoran desert scrub (rocky)/annual herb/Mar–May/0–2,295	**Low potential to occur**. The Project site is largely agriculture but contains areas of Sonoran desert scrub that can be suitable habitat for this species. A CNDDB search shows the nearest recorded occurrence of this species is 4.8 miles east of the Project site in 1961.
Nama stenocarpa	mud nama	None/None/2B.2	Marshes and swamps (lake margins, riverbanks)/annual/perennial herb/Jan–July/15–1,640	**Not expected to occur**. No suitable habitat present; however, marshes are found adjacent to northern areas of the Project site. A CNDDB search shows a species occurrence overlapped within the Project site in 1903.

Status Legend
None: No Status
State
SR: State listed as rare
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere
Threat Rank
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix D
Wildlife Compendium

PC ORIGINAL PKG

Birds

Blackbirds, Orioles and Allies

ICTERIDAE – BLACKBIRDS

Agelaius phoeniceus – red-winged blackbird
None/None
Euphagus cyanocephalus – Brewer's blackbird
None/None
Sturnella neglecta – western meadowlark
None/None

Falcons

FALCONIDAE – CARACARAS AND FALCONS

Falco sparverius – American kestrel
None/None

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

Tyrannus verticalis – western kingbird
None/None

Hawks

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Circus hudsonius – northern harrier
BCC/SSC

Herons and Bitterns

ARDEIDAE – HERONS, BITTERNS, AND ALLIES

Ardea alba – great egret
None/None
Egretta thula – snowy egret
None/None

PC ORIGINAL PKG

Jays, Magpies and Crows

CORVIDAE – CROWS AND JAYS

Corvus corax – common raven

None/None

Mockingbirds and Thrashers

MIMIDAE – MOCKINGBIRDS AND THRASHERS

Mimus polyglottos – northern mockingbird

None/None

Old World Sparrows

PASSERIDAE – OLD WORLD SPARROWS

* *Passer domesticus* – house sparrow

None/None

Owls

STRIGIDAE – TYPICAL OWLS

Athene cunicularia – burrowing owl

SCE/BCC/SSC

Bubo virginianus – great horned owl

None/None

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura – mourning dove

None/None

* *Streptopelia decaocto* – Eurasian collared-dove

None/None

Roadrunners and Cuckoos

CUCULIDAE – CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus – greater roadrunner

None/None

PC ORIGINAL PKG

Swallows

HIRUNDINIDAE – SWALLOWS

Petrochelidon pyrrhonota – cliff swallow

None/None

* signifies introduced (non-native) species

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix E

Assessment of Special-Status Wildlife Species Potentially Occurring on the Project Site

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
Lithobates pipiens (native populations only)	northern leopard frog	None/SSC	Adjacent to permanent and semi-permanent water in a range of habitats	**Not expected to occur**. Marginal suitable habitat is present within drainage canals. A California Natural Diversity Database (CNDDB) search shows the nearest recorded occurrence of this species is 6.5 miles east of the Project site in 1929.
Lithobates yavapaiensis	lowland (=Yavapai, San Sebastian and San Felipe) leopard frog	None/SSC	Streams, river side channels, springs, and artificial and natural ponds in desert scrub, grassland, woodland, and pinyon–juniper woodland	**Not expected to occur**. Marginal suitable habitat is present within drainage canals. A CNDDB search shows the nearest recorded occurrence of this species is 4.4 miles north of the Project site in 1909.
Reptiles				
Phrynosoma mcallii	flat-tailed horned lizard	None/SSC	Desert washes and flats with sparse low-diversity vegetation cover and sandy soils	**Not expected to occur.** Suitable desert wash habitat is not present on the Project site. A CNDDB search shows the nearest recorded occurrence of this species is 0.6 miles west of the Project site in 2018.
Uma notata	Colorado Desert fringe-toed lizard	None/SSC	Wind-blown sand dunes, dry lakebeds, sandy beaches, riverbanks, desert washes, and sparse desert scrub	**Low potential to occur.** Marginal desert scrub habitat is present in areas not used for agriculture. A CNDDB search shows the nearest recorded occurrence of this species is 3.7 miles south of the Project site in 2004.
Birds				
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC/SCE	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	**Observed**. This species was observed by Dudek during the April to July 2023 field surveys. Multiple individuals and burrows were recorded throughout the site.

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Charadrius montanus (wintering)	mountain plover	BCC/SSC	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts	**Low potential to forage; no potential to nest.** Agricultural fields could provide suitable wintering habitat for this species. The Project site falls outside of this species' nesting range.[1] A CNDDB search shows the species was recorded within the Project site in 2010.
Circus hudsonius	northern harrier	BCC/SSC	Nests in open wetlands (marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats	**Observed.** This species was observed by Dudek biologists during June 2023 burrowing owl surveys. One individual was recorded, but the Project site is not within the species' known breeding area. Therefore, this species has no potential to nest.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	**Low potential to forage; no potential to nest.** There is marginal suitable marsh habitat present within some drainage canals that could potentially support foraging; however, the species is not expected to breed due to the limited suitable habitat. A CNDDB search shows the nearest recorded occurrence of this species is 2.7 miles north of the Project site in 2001.
Melanerpes uropygialis	Gila woodpecker	BCC/SE	Nests and forages in Saguaro cacti, riparian woodland, and residential areas	**Not expected to occur**. No suitable vegetation present. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.
Pyrocephalus rubinus (nesting)	vermilion flycatcher	None/SSC	Nests in riparian woodlands, riparian scrub, and freshwater marshes; typical desert riparian with cottonwood, willow, mesquite adjacent to irrigated fields, ditches, or pastures	**Not expected to occur**. No suitable vegetation present. A CNDDB search shows the nearest recorded occurrence of this species is 2.7 miles east of the Project site in 1909.

[1] Cornell Lab of Ornithology. 2023. "All About Birds." Accessed July 2023. https://www.allaboutbirds.org/news/.

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Rallus obsoletus yumanensis	Yuma Ridgway's rail	FE/FP, ST	Freshwater marsh dominated by Typha spp., Scirpus spp., Schoenoplectus spp., and Bolboschoenus spp.; mix of riparian tree and shrub species along the marsh edge; many occupied areas are now artificial (human-made), such as managed ponds or effluent-supported marshes	**Low potential to forage; no potential to nest**. No suitable marsh habitat present is present within the Project site, but this species may fly over the Project site to access suitable foraging habitat. A CNDDB search shows the nearest recorded occurrence of this species was directly adjacent to the Project site in the Wixom Drain in 2007.
Setophaga petechia (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Not expected to occur**. No suitable vegetation present. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.
Toxostoma crissale	Crissal thrasher	None/SSC	Nests and forages in desert riparian and desert wash; dense thickets of sagebrush and other shrubs such as mesquite, iron catclaw acacia, and arrowweed willow within juniper and pinyon–juniper woodlands	**Not expected to occur**. No suitable vegetation present. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.
Toxostoma lecontei	LeConte's thrasher	BCC/SSC	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus	**Low potential to forage and nest.** Marginal desert scrub habitat on the Project site is present in areas not used for agriculture. A CNDDB search shows the nearest recorded occurrence of this species is 5.9 miles northwest of the Project site in 1933.
Mammals				
Dasypterus xanthinus	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	**Low potential to forage; no potential to roost.** Marginal desert scrub habitat for foraging is present, but there are no suitable riparian or palm habitat to roost within the Project site. A CNDDB search shows the nearest recorded occurrence of this species is 7.4 miles east of the Project site in 1999.

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	**Low potential to forage; no potential to roost.** Marginal desert scrub habitat for foraging is present, but there are no suitable cliffs or rock crevices to roost within the Project site. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.
Neotoma albigula venusta	Colorado Valley woodrat	None/None	Desert areas; closely associated with patches of beavertail cactus and mesquite	**Low potential to occur.** Marginal desert habitat in the Project site is present in areas not used for agriculture. A CNDDB search shows the nearest recorded occurrence of this species is 2.9 miles east of the Project site in 1909.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	**Low potential to forage; no potential to roost.** Marginal desert scrub habitat on the Project site is present in areas not used for agriculture. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.
Nyctinomops macrotis	big free-tailed bat	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	**Not expected to forage or roost**. No suitable vegetation present. A CNDDB search shows the nearest recorded occurrence of this species is 7.4 miles east of the Project site in 1999.
Perognathus longimembris bangsi	Palm Springs pocket mouse	None/SSC	Creosote scrub, desert scrub, and grasslands; sparse to moderately dense vegetative cover	**Low potential to occur.** Marginal desert scrub habitat on the Project site is present in areas not used for agriculture. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.
Sigmodon hispidus eremicus	Yuma hispid cotton rat	None/SSC	Backwater sloughs, marshy areas adjacent to Colorado River	**Not expected to occur**. No suitable vegetation is present in the Project site. A CNDDB search shows the nearest recorded occurrence of this species is 0.5 miles west of the Project site in 2009.

PC ORIGINAL PKG

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	**Low potential to occur**. Agricultural areas may provide suitable habitat for this species. A CNDDB search shows the nearest recorded occurrence of this species is 2.5 miles east of the Project site in 1911.
Vulpes macrotis arsipus	desert kit fox	None/None	Alluvial and riparian forest, woodland, and scrub; desert dunes and scrub; Joshua tree woodland	**Low potential to occur.** While the Project site occurs within the range of desert kit fox, the site is nearly entirely comprised of active agriculture, which does not provide suitable habitat for this species. However, there are two small areas in the southern portion of the Project site that comprise approximately 20 acres which include creosote bush scrub and allscale scrub. These vegetation communities provide suitable habitat for desert kit fox; therefore, this species has a low potential to occur within the Project site.
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources	**Not expected to occur.** Marginal desert scrub habitat is present in areas not used for agriculture. This species is generally absent from the desert floor.[2] The project site is not located within the current range for this species.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	**Not expected to occur**. No suitable vegetation present. A CNDDB search shows there are no recorded species observances within 10 miles of the Project site.

Status Legend
None: No Status
Federal
BCC: USFWS—Birds of Conservation Concern
FC: Candidate for federal listing as threatened or endangered
FE: Federally listed as endangered
State

[2] Richardson, L.L. 2023. Bumble Bees of North America Occurrence Records Database. Accessed May 3, 2023. https://www.leifrichardson.org/bbna.html.

PC ORIGINAL PKG

FP: CDFW Fully Protected species
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix F

Aquatic Resources Delineation Report

PC ORIGINAL PKG

Aquatic Resources Delineation Report

Big Rock 2 Cluster Solar and Storage Project Imperial County, California

OCTOBER 2024

Lead Agency:

IMPERIAL COUNTY
801 Main Street
El Centro, California 92243

Project Proponent:

90FI 8me LLC
4370 Town Center Boulevard, Suite 110
El Dorado Hills, California 95762

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Callie Amoaku

PC ORIGINAL PKG

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

Acronyms and Abbreviations iii

1 Introduction 1
- 1.1 Disclaimer Statement 1
- 1.2 Contact Information 1

2 Review Area Description and Landscape Setting 3
- 2.1 Soils 3
- 2.2 Vegetation 4
- 2.3 Watershed 5
- 2.4 Review Area Alterations, Current and Past Land Use 5

3 Precipitation Data and Analysis 7

4 Investigation Methods 9
- 4.1 U.S. Army Corps of Engineers 9
- 4.2 Regional Water Quality Control Board 11
- 4.3 California Department of Fish and Wildlife 11

5 Aquatic Resource Narrative 13
- 5.1 Waters of the United States (USACE) 13
- 5.2 Waters of the State 14
- 5.3 National Wetland Inventory 14

6 Results and Conclusions 15

7 References Cited 17

TABLES

1 Contact Information 1

2 Antecedent Precipitation Tool Data for the Review Area 7

3 USACE Aquatic Resource Summary for the Review Area 14

APPENDICES

A Figures

B Antecedent Precipitation Tool Output

C Review Area Photos

D ORM Upload Spreadsheet

PC ORIGINAL PKG

INTETNIONALLY LEFT BLANK

PC ORIGINAL PKG

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APT	Antecedent Precipitation Tool
ARC	antecedent runoff condition
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
EPA	Environmental Protection Agency
HUC	hydrologic unit code
IID	Imperial Irrigation District
NWI	National Wetland Inventory
OHWM	ordinary high water mark
PDSI	Palmer Drought Severity Index
Project	Big Rock 2 Energy Project
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

1 Introduction

This Aquatic Resources Delineation Report was prepared in accordance with the U.S. Army Corps of Engineers (USACE) Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2017). This report and supporting appendices provide the 20 items listed in the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports. This report presents the results of the jurisdictional aquatic resource delineation conducted by Dudek for the proposed Big Rock 2 Cluster Solar and Storage Project (project) located in Imperial County, California, south of Interstate 8 and west of the town of El Centro, California. The delineation was conducted to identify and map existing aquatic resources potentially subject to the regulatory jurisdiction of USACE pursuant to Section 404 of the Clean Water Act (33 USC 1344); waters of the state potentially subject to the regulatory jurisdiction of the Region 7 Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act; and stream and riparian habitats potentially subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code (collectively defined as jurisdictional aquatic resources).

1.1 Disclaimer Statement

This report presents Dudek's best effort to quantify the extent of aquatic resources potentially regulated by USACE, RWQCB, and CDFW (i.e., regulatory agencies) within the identified review areas using the current regulations, written policies, and guidance from these regulatory agencies. The potential jurisdictional boundaries described in this report are subject to verification by the regulatory agencies. Only the regulatory agencies can make a final determination on whether the features present are subject to USACE, RWQCB, and/or CDFW regulation. A request for USACE Jurisdictional Determination is not provided at this time; this report is purely informational.[1]

1.2 Contact Information

Contact information for the project applicant and agent are provided in Table 1.[2] Access to the proposed Project site is not restricted, but if a site visit is requested, the project applicant or agent will accompany regulatory staff to the site.[3] 90FI 8me LLC is the project applicant, and the proposed Project parcels are under the current ownership of various private parties.

Table 1. Contact Information

Project Applicant	90FI 8me LLC	**Agent**	Dudek
Contact Name	Available upon request	**Contact Name**	Callie Amoaku
Address	4370 Town Center Boulevard, Suite 110 El Dorado Hills, California 95762	**Address**	605 Third Street Encinitas, California 92024
Phone	Available upon request	**Phone**	760.479.4293
Email	Available upon request	**Email**	cford@dudek.com

1 Minimum Standards Item 1 (Request for Jurisdictional Determination)
2 Minimum Standards Item 2 (Contact Information)
3 Minimum Standards Item 3 (Site Access Statement)

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Review Area Description and Landscape Setting

The proposed project is in unincorporated Imperial County, California (Figure 1, Project Location; see Appendix A for figures), south of Interstate Highway 8 and west of the town of El Centro, California. The project area comprises approximately 1,849 acres of agricultural lands and associated roads, catchments, and irrigation ditches.

The project area is composed of the following 24 Accessor's Parcel Numbers: 051-290-019, 051-300-016, 051-290-018, 051-320-007, 051-350-004, 051-270-041, 051-270-028, 051-320-006, 051-320-005, 051-280-054, 051-270-036, 051-300-037, 051-300-035, 051-330-003, 051-350-006, 051-350-008, 051-350-007, 051-270-020, 051-300-011, 051-300-026, 051-300-032, 051-300-036, 051-310-027, and 051-310-028. The geographic center of the review area roughly corresponds with 32.75669 and –115.73002 (decimal degrees). Elevations with the project area range from 10 to 60 feet below sea level.

The topography of the review area is very flat, given its agricultural nature; various earthen and concrete irrigation ditches, with most major irrigation ditches running north to south across the project area, are the only portions of the site with varying topographic relief. These irrigation ditches are also under ownership and management of the Imperial Irrigation District (IID).

Current land use of the review area includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchard(s), pastureland, irrigation ditches, and developed lands with rural infrastructure.

2.1 Soils[4]

According to the USDA Web Soil Survey (USDA 2023a), 16 soil types are mapped within the proposed Project site, including Badland; Glenbar complex; Holtville silty clay, wet; Imperial silty clay, wet; Imperial-Glenbar silty clay loams, wet, 0% to 2% slopes; Indio Loam, wet; Indio-Vint complex; Meloland and Holtville loams, wet; Meloland fine sand; Meloland very fine sandy loam, wet; Niland fine sand; Rositas fine sand, 0% to 2% slopes; Rositas fine sand, wet, 0% to 2% slopes; Rositas sand, 0% to 2% slopes; Vint and Indio very fine sandy loams, wet; Vint loamy very fine sand, wet; and water (Figure 2, Soils).

- Holtville Series consists of very deep, well-drained soils formed in mixed and stratified alluvium. These soils have slow permeability, typically occur on floodplains, and are moderately alkaline in the A horizon (USDA 2023a). The Holtville series is the second-most-abundant soil type and comprises small patches throughout the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Imperial Series consists of very deep, calcareous soils with very slow permeability. This soil series typically occurs on floodplains and old lakebeds and is well and moderately well-drained (USDA 2023a). The Imperial series and Imperial-Glenbar association comprise the majority of the project site; however, these areas are currently dominated by agricultural use in existing condition.

4 Minimum Standards Item 13 (Soil Descriptions)

PC ORIGINAL PKG

- Glenbar Series consists of very deep, well-drained soils formed in stratified stream alluvium. These soils have moderately slow permeability, typically occur in desert floodplains and lacustrine basins, and are moderately alkaline in the A horizon (USDA 2023a). The Imperial-Glenbar association comprises the majority of the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Indio Series consists of very deep, well-drained soils formed in alluvium. These soils are well to moderately drained, with moderate permeability, and occur on lacustrine basins and flood plains (USDA 2023a). The Indio loam series occurs mainly in the northern area of the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Meloland Series consists of naturally well-drained soils with very slow permeability. This soil series typically occurs on floodplains and old lakebeds and are slightly alkaline in the A horizon (USDA 2023a). The Meloland series comprises patches throughout the project site; however, this area is currently dominated by agricultural use in existing condition.
- Rositas Series consists of very deep, somewhat excessively drained soils formed in sandy eolian material. These soils have rapid permeability and typically occur on dunes and sand sheets (USDA 2023a). The Rositas series comprises a fairly large area in the southern portion of the project site; however, this area is currently dominated by agricultural use in existing condition.
- Vint Series consists of very deep, somewhat excessively drained soils formed in stratified stream alluvium. These soils have moderately rapid permeability, typically occur on floodplains, and are moderately alkaline in the A horizon (USDA 2023a). The Vint series comprises both large and small patches throughout the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Niland Series consists of well and moderately well drained soils formed in coarse mixed alluvium overlying fine alluvium. These soils have a range of permeability, depending on the sand and clay content, and typically occur on basin and floodplain edges (USDA 2023a). The Niland series comprises a very small area in the southwestern corner of the project site.
- Badland Series are arid, clay-rich soils that have experienced excessive erosional forces due to wind and water. These soils typically have steep slopes with minimal vegetation and exhibit high drainage. Badlands comprise a very small area of the project site; however, this area is currently dominated by agricultural use in existing condition.

None of these soil types are ranked as a hydric soil in Imperial County, California (USDA 2023b).

2.2 Vegetation

Five land cover types are present within the proposed Project site: general agriculture, stream channel (irrigation ditch), creosote brush scrub and allscale scrub shrubland alliances, urban/developed, and disturbed habitat. Within the review area, agricultural lands consist of alfalfa (*Medicago sativa*), date palms (*Phoenix dactylifera*), Bermudagrass (*Cynodon dactylon*), and herbaceous vegetables, as well as several fallow fields, occupying nearly 98% of the project site. On-site farming practices include soil disking, plowing, herbicide application, and regular anthropogenic maintenance and disturbance associated with ongoing management actions. Compacted, dirt roads and brow ditches are included within this land cover type.

Within the proposed Project site, stream channel is characterized by irrigation ditches that convey flows throughout active agricultural lands. These areas include irrigation ditches that are unvegetated or vegetated with ruderal species such as giant reed *(Arundo donax*), nettleleaf goosefoot (*Chenopodium murale*), and asthmaweed (*Erigeron bonariensis*).

PC ORIGINAL PKG

2.3 Watershed

The proposed Project site occurs within the Salton Sea Subbasin (hydrologic unit code [HUC] 18100204); within this watershed, the proposed Project site overlaps with the Salt Creek Slough Subwatershed (HUC 181002040807) and the Upper New River Subwatershed (HUC 181002040902) within the New River Watershed (HUC 181002040902). The New River Watershed comprises approximately 328 square miles (209,920 acres) and contains the New River, which flows north from the United States/Mexico border, south of the site. The river flows approximately 66 miles across the Imperial Valley to its terminus in the Salton Sea. The Upper New River Subwatershed comprises approximately 7 square miles (4,480 acres) within the New River Watershed.

The western portion of the proposed Project site overlaps with the Salt Creek Slough Subwatershed, a catchment area of 34 square miles (21,760 acres) that sits within the larger Coyote Wash Watershed, which directs intermittent flows eastward from the Jacumba Mountains and has an area of 340 square miles (217,600 acres).

Figure 3, Hydrology, displays the New River Watershed, Salton Sea Subbasin and various subwatersheds mapped within the proposed Project site.

2.4 Review Area Alterations, Current and Past Land Use

The entirety of the proposed Project site has been significantly altered/modified from its natural state. The entire site, including all crop fields, dirt roads, and irrigation ditches are actively maintained and utilized for active agricultural operations.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

3 Precipitation Data and Analysis[5]

The USACE-developed Antecedent Precipitation Tool (APT) was used to assess whether the delineation date occurred in a drier-, average-, or wetter-than-normal period (USACE 2023). To determine what constitutes a "typical year," USACE developed the APT. The information generated from the APT can help to determine whether normal hydrologic and/or climatic conditions were present during the site visit and assist with completing the Wetland Determination Data Form.

The APT provides three climatological parameters: Palmer Drought Severity Index (PDSI), season, and antecedent precipitation condition. The PDSI is a standardized index calculated on a monthly basis, with PDSI value outputs ranging from –4 (extreme drought) to +4 (very wet) (NOAA 2023) to assess drought conditions (i.e., PDSI Class). The APT determines wet vs. dry season based on related procedures provided in the applicable regional supplement for the review area (in this case, the Arid West Supplement). If the antecedent runoff condition (ARC) score is less than 10, then the antecedent precipitation condition is classified as drier than normal; normal conditions are present with an ARC score of 10 to 14; conditions are wetter than normal when an ARC score is greater than 14 (USACE 2023).

Table 2 summarizes the key data extrapolated from the APT output: estimated drought conditions (PDSI Class), wet or dry season determination, ARC score, and antecedent precipitation condition. Based on the APT output provided in Appendix B and summarized in Table 2, the precipitation and climatic conditions for the review area were normal during the time of the delineation due to normal rainfall amounts in the spring of 2023.

Table 2. Antecedent Precipitation Tool Data for the Review Area

Field Survey Dates	PDSI Class	Season	ARC Score	Antecedent Precipitation Condition
4/21/2023	Moderate wetness	Dry season	12	Normal conditions

Notes: PDSI = Palmer Drought Severity Index; ARC = antecedent runoff condition

Additionally, according to the U.S. Department of Agriculture's (USDA) Agricultural Applied Climate Information System (USDA 2023c), the area around the proposed Project site receives an average of 2.56 inches of precipitation annually.

[5] Minimum Standards Item 11 (Discussion of Hydrology)

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

4 Investigation Methods[6]

The jurisdictional delineation was conducted initially using desktop review of aerial imagery and the U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) data (USFWS 2023). No natural features were apparent during the desktop review, but there are several ditches and irrigation ditches throughout the proposed Project site. A site visit was completed on April 21, 2023, by Dudek biologist Abby Bergsma. Remote sensing was not used for the delineation.

4.1 U.S. Army Corps of Engineers

The USACE wetlands delineation was conducted in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). A Field Guide to the Identification of the High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b) was used to determine the limits of non-wetland waters. Non-wetland waters were delineated on topographical maps in conjunction with Esri Collector on a mobile device. The widths of each non-wetland water were determined in the field according to the OHWM manual.

Wetland Determination Forms were not taken during the delineation since all hydrophytic vegetation was observed below the banks or OHWMs of actively maintained irrigation ditches; since these ditches are owned and managed by the IID, wetland sample points were not taken within them due to a lack of legal access. Accordingly, no USACE three-parameter wetlands were assumed to be present on the site since no areas of hydrophytic vegetation were observed outside of ditches.

Waters of the U.S.

The definition of waters of the United States establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes "waters of the United States" (provided in 33 CFR Section 328.3(a)) has changed multiple times over the past few decades, starting with the *United States v. Riverside Bayview Homes Inc*. court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Clean Water Rule), 2018 (suspension of the Clean Water Rule), 2019 (formal repeal of the Clean Water Rule), 2020 (Navigable Waters Protection Rule), and 2021 (*Pasqua Tribe et al v. United States Environmental Protection Agency* resulting in remand and vacatur of the Navigable Waters Protection Rule and a return to "the pre-2015 regulatory regime") have attempted to provide greater clarity to the term and its regulatory implementation. On December 30, 2022, the agencies announced the final Revised Definition of "Waters of the United States" rule (Rule) (88 CFR 3004–3144). The Rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, and upstream water resources that significantly affect those waters. The Rule represents a re-expansion of federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the

[6] Minimum Standards Item 8 (Dates of Field Work), Item 5 (Use of 1987 Manual, Regional Supplement, and OHWM guide), Item 12 (Statement Regarding Use of Remote Sensing), Item 18 (Data Forms) and Item 19 (Methods)

PC ORIGINAL PKG

2020 Navigable Waters Protection Rule. The Rule also considers various subsequent court decisions, including two notable Supreme Court decisions.

There are two key changes that the Rule incorporates. Firstly, the Rule reinstates the "Significant Nexus" test. The Significant Nexus test refers to waters that either alone, or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas (86 FR 69372-69450). The Significant Nexus test attempts to establish a scientific connection between smaller water bodies, such as ephemeral or intermittent tributaries, and larger, more traditional navigable waters such as rivers. Significant Nexus evaluations take into consideration hydrologic and ecologic factors including, but not limited to, volume, duration, and frequency of surface water flow in the resource and its proximity to a traditional navigable water, and the functions performed by the resource on adjacent wetlands. Second, the Rule adopts the "Relatively Permanent Standard" test. To meet the Relatively Permanent Standard, water bodies must be relatively permanent, standing, or continuously flowing and have a continuous surface connection to such waters.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in Sackett v. the Environmental Protection Agency (EPA), in which it rejected the EPA's claim that "waters of the United States," as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water[s] of the United States (i.e., a relatively permanent body of water connected to traditional interstate navigable waters), and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends and the wetland begins. On August 29, 2023, the EPA and USACE announced the final rule amending the 2023 definition of "waters of the United States", conforming with the Sackett v. EPA decision. Some of the key changes include removing the significant nexus test from consideration when identifying tributaries and other waters as federally protected and revising the adjacency test when identifying federally jurisdictional wetlands. Under the EPA's new "waters of the United States" definition, a "waters of the United States" is a relatively permanent, standing, or continuously flowing body of water that has an apparent surface connection to a "traditionally navigable water" to fall within federal purview. The new rule applies to wetlands and streams throughout the U.S. Although the Sackett opinion did not specifically reference streams, the EPA's new rule extends the "continuous surface connection" standard to streams, thereby removing non-permanent, ephemeral streams that do not meet these standards from federal jurisdiction.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

PC ORIGINAL PKG

4.2 Regional Water Quality Control Board

Waters of the state regulated by the RWQCB were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019). As described in these procedures, wetland waters of the state are mapped based on the procedures in USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters are mapped at the OHWM based on the procedures defined in USACE's 2008 A Field Guide to Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b).

4.3 California Department of Fish and Wildlife

CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code 1602. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines waters by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979). The boundaries were mapped to the top of bank to delineate the extent of the streambed area potentially regulated by CDFW.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

5 Aquatic Resource Narrative[7]

5.1 Waters of the United States (USACE)

Approximately 24.74 acres of non-wetland waters/ditches and their associated culverts were delineated within the proposed Project site below the OHWM of irrigation ditches (Figures 4-1 through 4-10, Aquatic Resources Delineation, and Figures 5-1 through 5-23, Culverts[8]). These non-wetland waters serve as IID irrigation ditches that convey water throughout the Imperial Valley and are connected to a vast network of ditches that source water from the Colorado River. Table 3 provides a detailed summary of aquatic resources delineated within the review area. Table 3 also includes a description of each feature identified within the review area; its Cowardin type, if available (Cowardin et al. 1979); any OHWM indicators present; the location; and the acreage/linear feet. The locations of the culverts conveying flow from these ditches are included on Figures 5-1 through 5-23 and included in the table below. Photos of the potential aquatic features delineated within the proposed Project site and additional areas reviewed for the presence of these resources are provided in Appendix C.[9] The locations of these photos are shown in Figures 4-1 through 4-10.

Many smaller, likely non-jurisdictional concrete or dry earthen ditches with gates exist within and along the boundaries of agricultural fields in the review area. While technically connected to potentially jurisdictional irrigation ditches, they are constructed in uplands purely for the function of irrigating individual fields and do not serve as critical conveyance pathways for regional irrigation like the larger, potentially jurisdictional ditches. These are shown on Figures 4-1 through 4-10.

When the field delineation occurred, surface water was present in all of the non-wetland waters/ditches mapped within the Project site; therefore, the waters onsite are likely considered relatively permanent waters. Based on site conditions observed in April 2023, the 24.74 acres of non-wetland waters/ditches and 0.05 acres of culverts connecting these non-wetland waters/ditches within the Project site contain surface water and include, or have a continuous surface connection to, the Fern Canal, Fig Canal, and the Westside Main Ditch. These have a continuous surface connection to the Salton Sea, a traditional navigable water (USACE 2023). Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters. Accordingly, all non-wetland waters mapped in the review area may be subject to USACE regulation.

Table 3 summarizes the characteristics of the non-wetland waters/ditches and culverts in the review area that are subject to USACE jurisdiction.

7 Minimum Standards Item 6 (Aquatic Resource Narrative)
8 Minimum Standards Item 16 (Delineation Maps)
9 Minimum Standards Item 17 (Ground Photos)

PC ORIGINAL PKG

Table 3. USACE Aquatic Resource Summary for the Review Area[10]

Feature Name	Cowardin[1]	OHWM Indicators	Location	Acres/Linear feet
Non-wetland Waters (Below OHWM)				
Irrigation Ditch[2]	R4SBCx	BBS, occasional CVS and CVC	Throughout review area (see Figures 4-1 through 4-10)	24.74/71,760
Culvert	N/A	N/A	Throughout review area (see Figures 5-1 through 5-23)	0.05/1,059
			Non-wetland Waters Total	**24.79/72,819**

Notes: OHWM = ordinary high water mark; R4SBCx = Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated; BBS = break in bank slope; CVS = change in vegetation species; CVC = change in vegetation cover

1 Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979).

2 These features are likely classified as seasonal "relatively permanent waters" that flow for at least 3 months of the year, based on conditions observed during the delineation.

A copy of the USACE Operations and Maintenance Business Information Link Regulatory Module (ORM) Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet is included as Appendix D.[11]

5.2 Waters of the State

All of the features described in Section 5.1, Waters of the United States, have also been identified as waters of the state. These features are subject to regulation by the RWQCB under the Porter-Cologne Water Quality Control Act and CDFW under Fish and Game Code 1600.

5.3 National Wetland Inventory

Most of the mapped non-wetland waters/ditches do not overlap with mapped resources from the U.S. Fish and Wildlife Service's National Wetland Inventory data (USFWS 2023; see Figure 3). There is one that is identified as Riverine (R4SBCx per Cowardin classification) habitats. R4SBCx is a classification code used to describe features that have the following attributes: Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated (Cowardin et al. 1979).

10 Minimum Standards Item 9 (Table Listing All Aquatic Resources)

11 Minimum Standards Item 15 (ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet)

PC ORIGINAL PKG

6 Results and Conclusions

Based on the jurisdictional delineation and review of relevant information provided in this Aquatic Resources Delineation Report, 24.79 acres of non-wetland waters/ditches and their associated culverts potentially regulated by USACE were delineated within the proposed Project site. All non-wetland waters/ditches within the review area may be regulated by USACE given their upstream or downstream connection to a traditional navigable water (the Salton Sea). These features may also be regulated by the RWQCB and CDFW.

The updated 2023 EPA guidance removed protections for aquatic features that do not have a relatively permanent, standing, or continuously flowing body of water that connects to a traditionally navigable water. When the field delineation occurred, surface water was present in all of the non-wetland waters/ditches mapped within the Project site; therefore, the waters onsite are likely considered relatively permanent waters and would not be excluded per the definition in 33 CFR, Section 328.3(b)(3). Based on site conditions observed in April 2023, the 24.79 acres of non-wetland waters/ditches and their associated culverts within the Project site contain surface water and appear to have a continuous surface connection (via ditches and canals) to the Salton Sea. Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters.

It is the intention of the Project applicant, as reflected in the proposed Project design, that impacts to all jurisdictional or potentially jurisdictional waters on the proposed Project site will be avoided to the extent possible by design during construction and operation of the Project.

This report can be used by USACE, RWQCB, and CDFW to determine if they would regulate the features described herein.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

7 References Cited

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* FWS/OBS-79/31. Prepared for U.S. Fish and Wildlife Service. December 1979. Reprinted 1992. http://www.fws.gov/wetlands/documents/classification-of-wetlands-and-deepwater-habitats-of-the-united-states.pdf.

NOAA (National Oceanic and Atmospheric Administration). 2023. Climate Division Scale Palmer Drought Severity Index (PDSI) dataset.

SWRCB (State Water Resources Control Board). 2019. State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019; revised April 6, 2021. https://www.waterboards.ca.gov/press_room/press_releases/2021/procedures.pdf.

USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf.

USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).* Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf.

USACE. 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual.* ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008. https://apps.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf.

USACE. 2017. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. U.S. Army Corps of Engineers, Los Angeles District. March 16, 2017. https://www.spl.usace.army.mil/Portals/17/Users/251/43/2043/Final%20Delin%20report%20standards%203-16-2017.pdf?ver=2017-03-16-170513-523.

USACE. 2023. Antecedent Precipitation Tool (APT) - v1.0.13. Accessed May 2023. https://github.com/jDeters-USACE/Antecedent-Precipitation-Tool/releases/tag/v1.0.13.

USACE and EPA (U.S. Environmental Protection Agency). 2008. "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*." December 2, 2008. http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf.

USACE. 2023. TNWs & Navigable Waters in Los Angeles District. Accessed October 2023. https://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/Navigable-Waterways/

PC ORIGINAL PKG

USDA (U.S. Department of Agriculture). 2023a. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed May 2023. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USDA. 2023b. "State Soil Data Access (SDA) Hydric Soils List." Accessed May 2023. https://www.nrcs.usda.gov/publications/query-by-state.html.

USDA. 2023c. Agricultural Applied Climate Information System (AgACIS). "El Centro 2 SSW." Accessed May 2023. http://agacis.rcc-acis.org/.

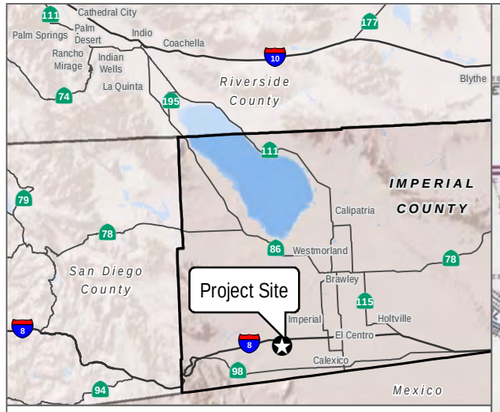
USFWS (U.S. Fish and Wildlife Service). 2023. "National Wetland Inventory" [map]. Accessed May 2023. http://www.fws.gov/data.

PC ORIGINAL PKG

Appendix A
Figures

PC ORIGINAL PKG

PC ORIGINAL PKG



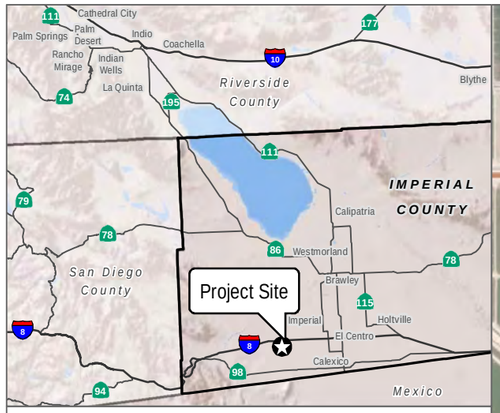
- Project Boundary
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

DUDEK 0 1,000 2,000 Feet

FIGURE 1
Project Location
P# 15207

PC ORIGINAL PKG



- Project Boundary
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

Soils

- 102: BADLAND
- 107: GLENBAR COMPLEX
- 110: HOLTVILLE SILTY CLAY, WET
- 114: IMPERIAL SILTY CLAY, WET
- 115: IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES
- 118: INDIO LOAM, WET
- 119: INDIO-VINT COMPLEX
- 121: MELOLAND FINE SAND
- 122: MELOLAND VERY FINE SANDY LOAM, WET
- 123: MELOLAND AND HOLTVILLE LOAMS, WET
- 126: NILAND FINE SAND
- 130: ROSITAS SAND, 0 TO 2 PERCENT SLOPES
- 132: ROSITAS FINE SAND, 0 TO 2 PERCENT SLOPES
- 135: ROSITAS FINE SAND, WET, 0 TO 2 PERCENT SLOPES
- 142: VINT LOAMY VERY FINE SAND, WET
- 144: VINT AND INDIO VERY FINE SANDY LOAMS, WET
- 145: WATER

SOURCE: Maxar 2023; Imperial County 2023; USDA SSURGO 2023

DUDEK

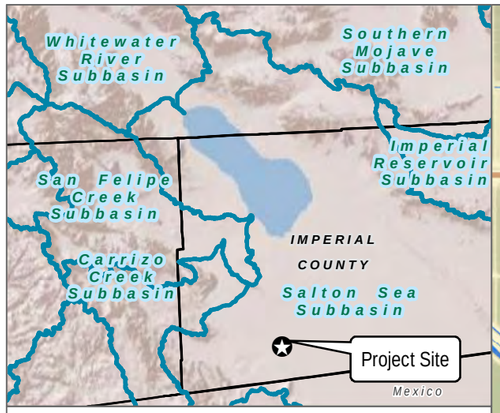
0 1,000 2,000 Feet

FIGURE 2

Soils

P# 15207

PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line
- Subwatershed (HUC 12)
- Subbasin (HUC 8)

Watershed (HUC 10)

- Coyote Wash
- New River

NHD Flowlines

- Stream/River
- Connector

National Wetland Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine
- Lake

SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

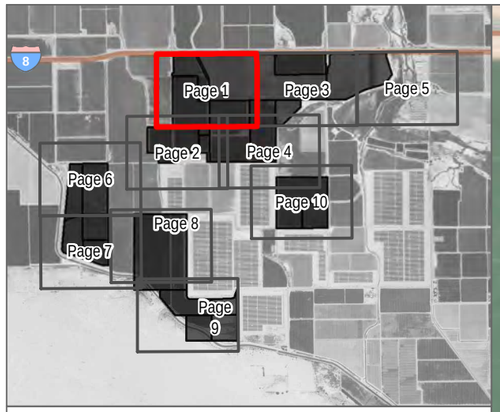
0 1,000 2,000 Feet

FIGURE 3

Hydrology

P# 15207

PC ORIGINAL PKG



Project Boundary
Map Reference Point
Photo Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet

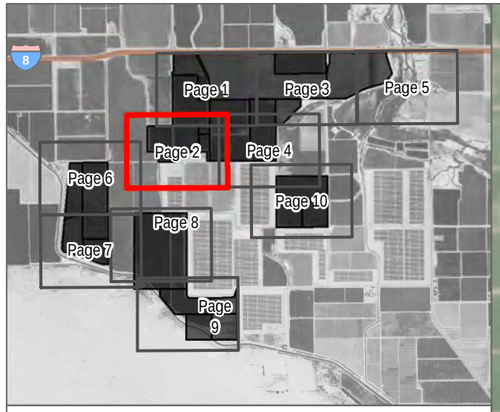
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-1
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



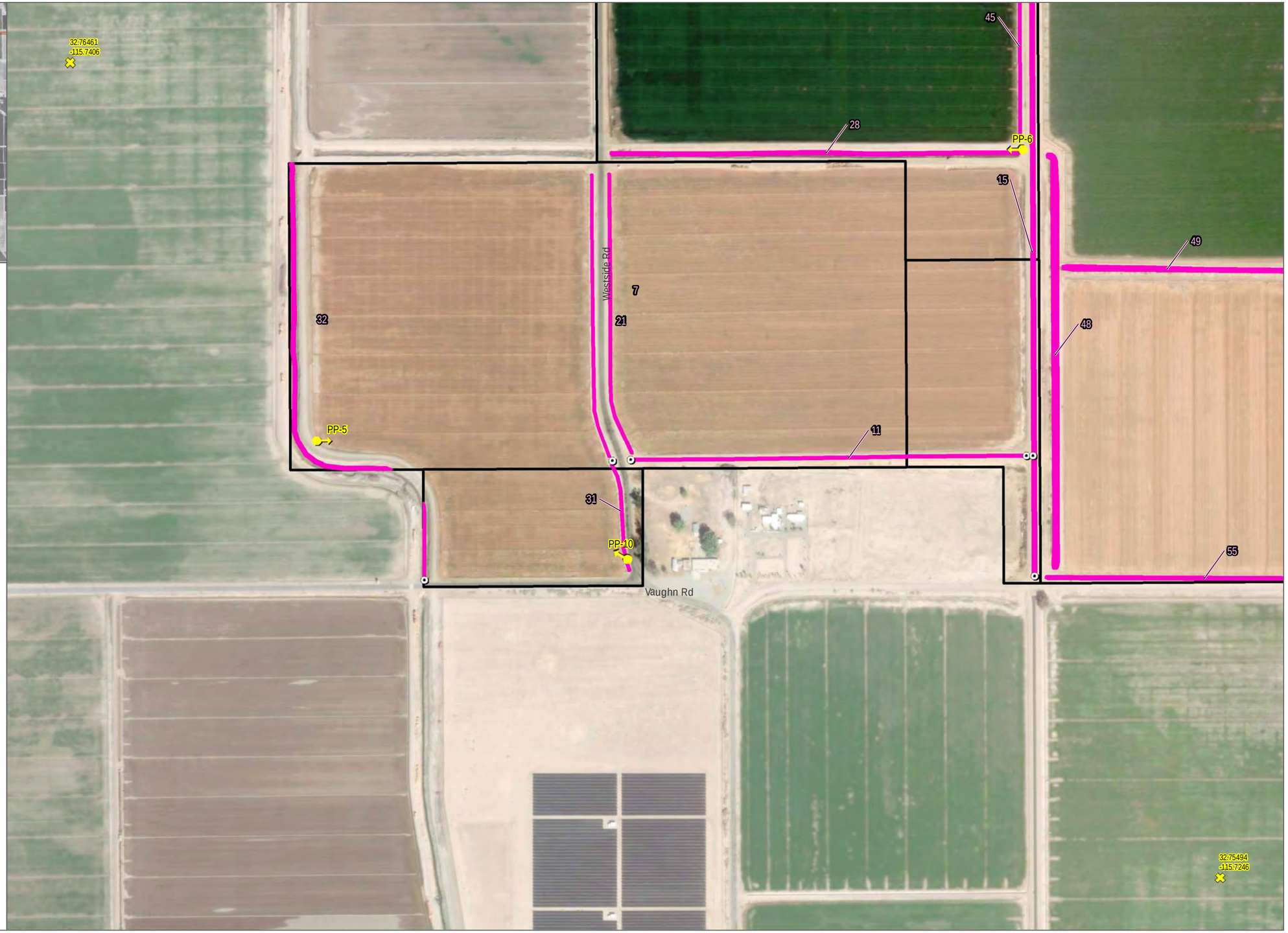
Project Boundary
Map Reference Point
Photo Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-2

Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

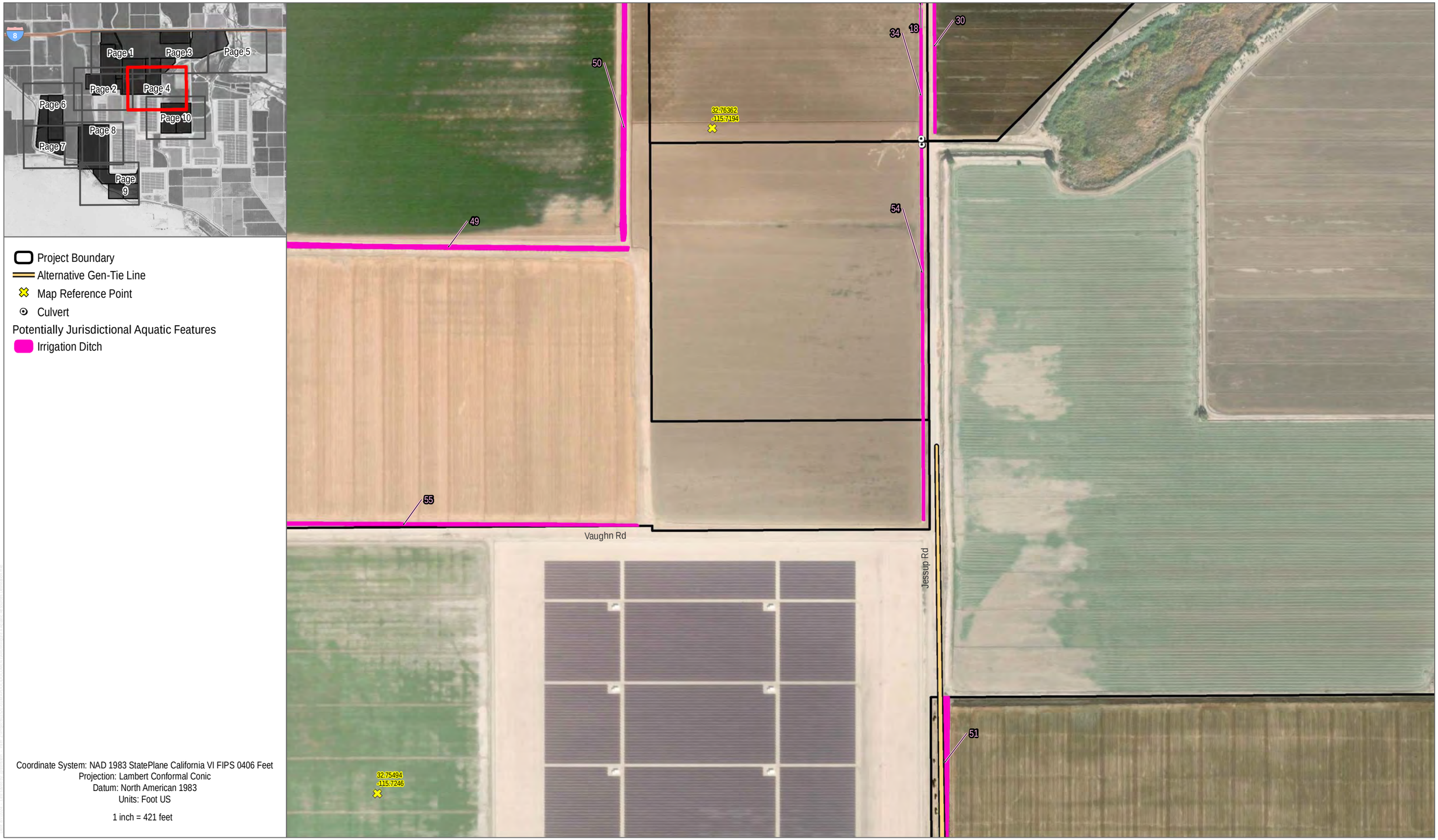
DUDEK 0 200 400 Feet

FIGURE 4-3

Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

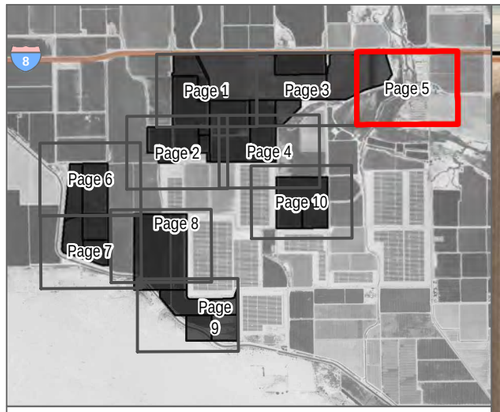
DUDEK

FIGURE 4-4

Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG



Project Boundary
Map Reference Point
Photo Point

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



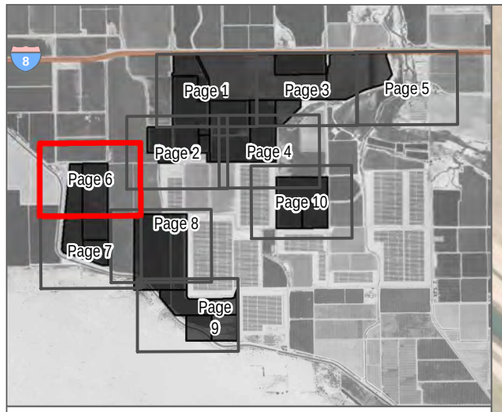
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-5
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG

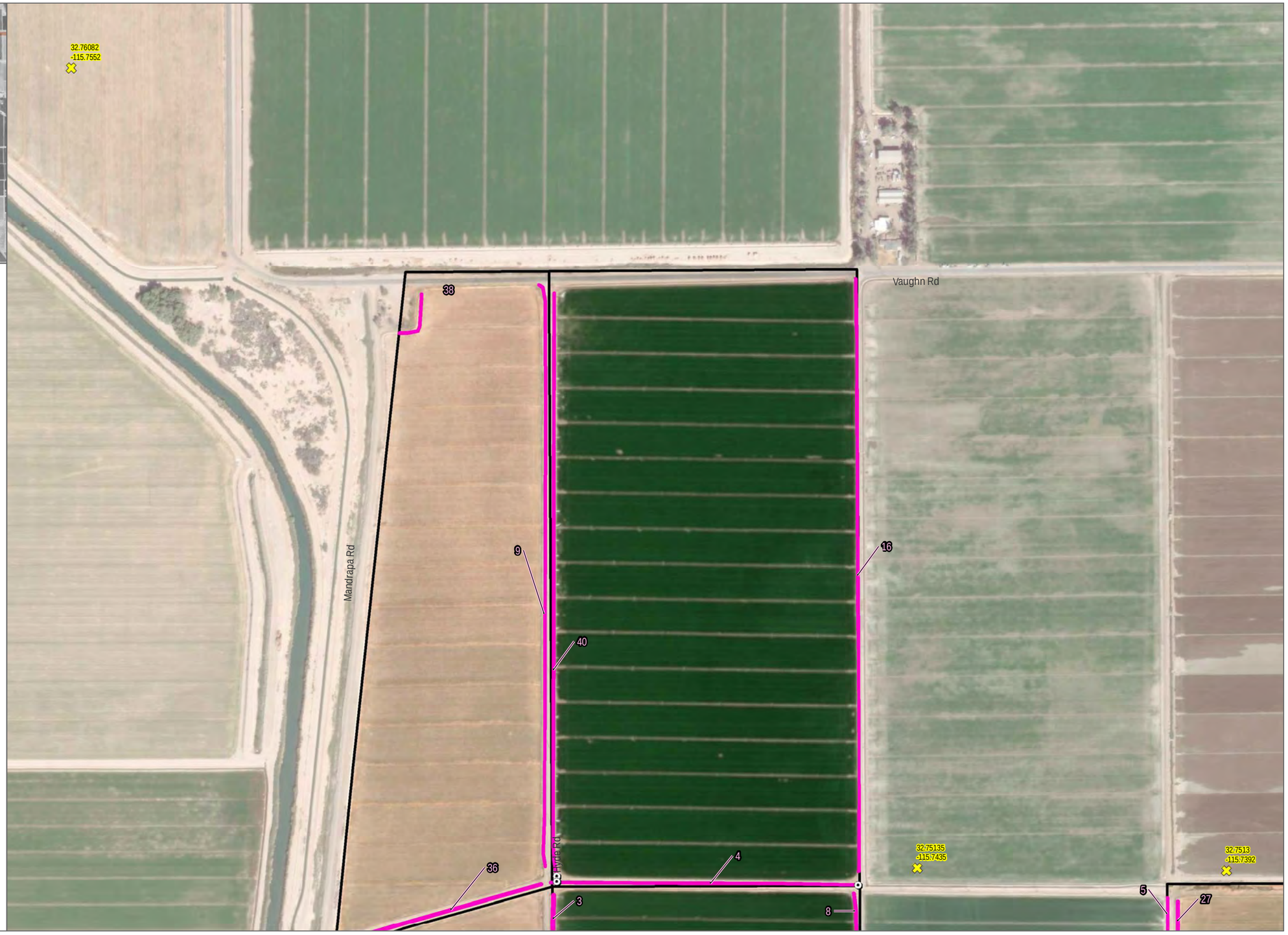


Project Boundary
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features
Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



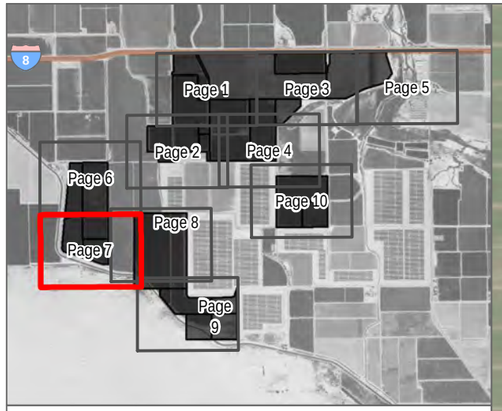
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-6
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



Project Boundary
Map Reference Point
Culvert
Potentially Jurisdictional Aquatic Features
Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



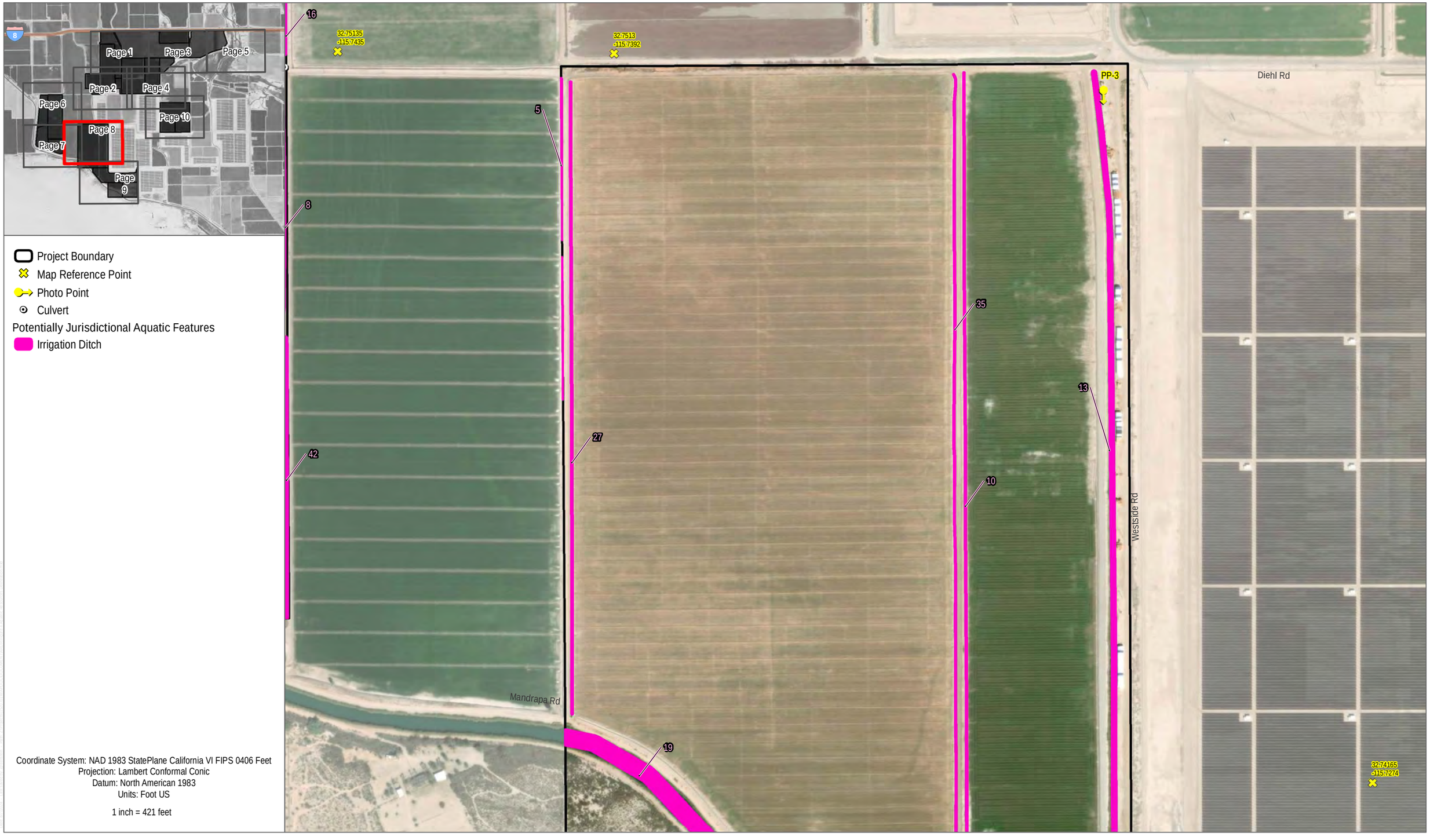
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-7
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

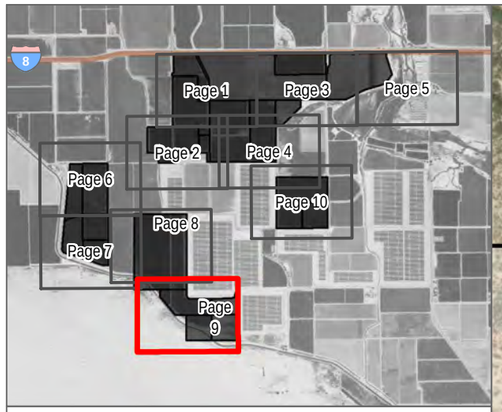
DUDEK 0 200 400 Feet

FIGURE 4-8

Aquatic Resources Delineation

P# 15207

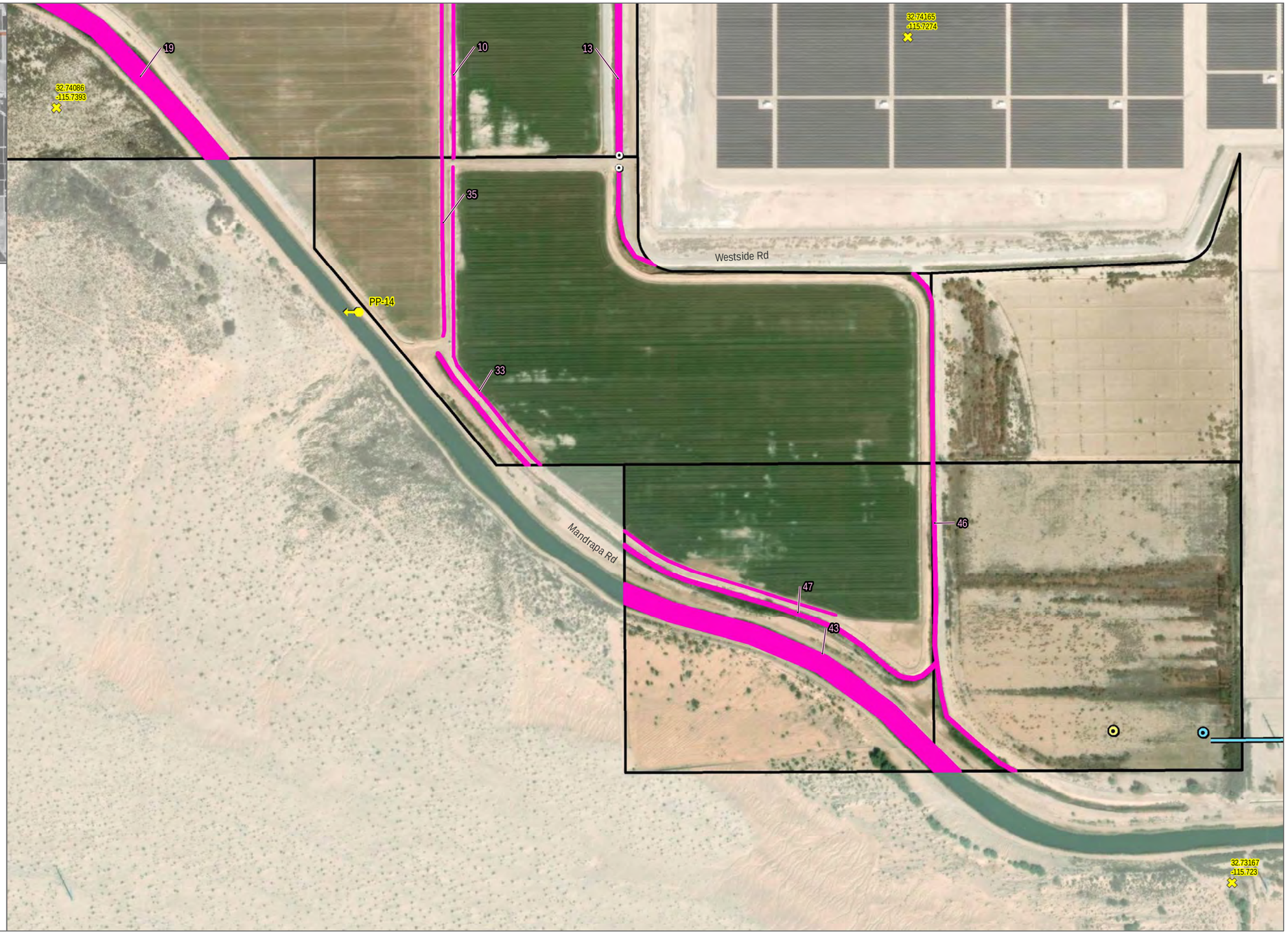
PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Gen-Tie Line
- Map Reference Point
- Photo Point
- Culvert

Potentially Jurisdictional Aquatic Features

- Irrigation Ditch



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet

SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

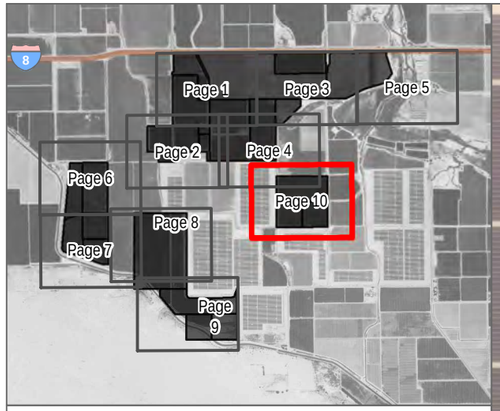
0 200 400 Feet

FIGURE 4-9

Aquatic Resources Delineation

P# 15207

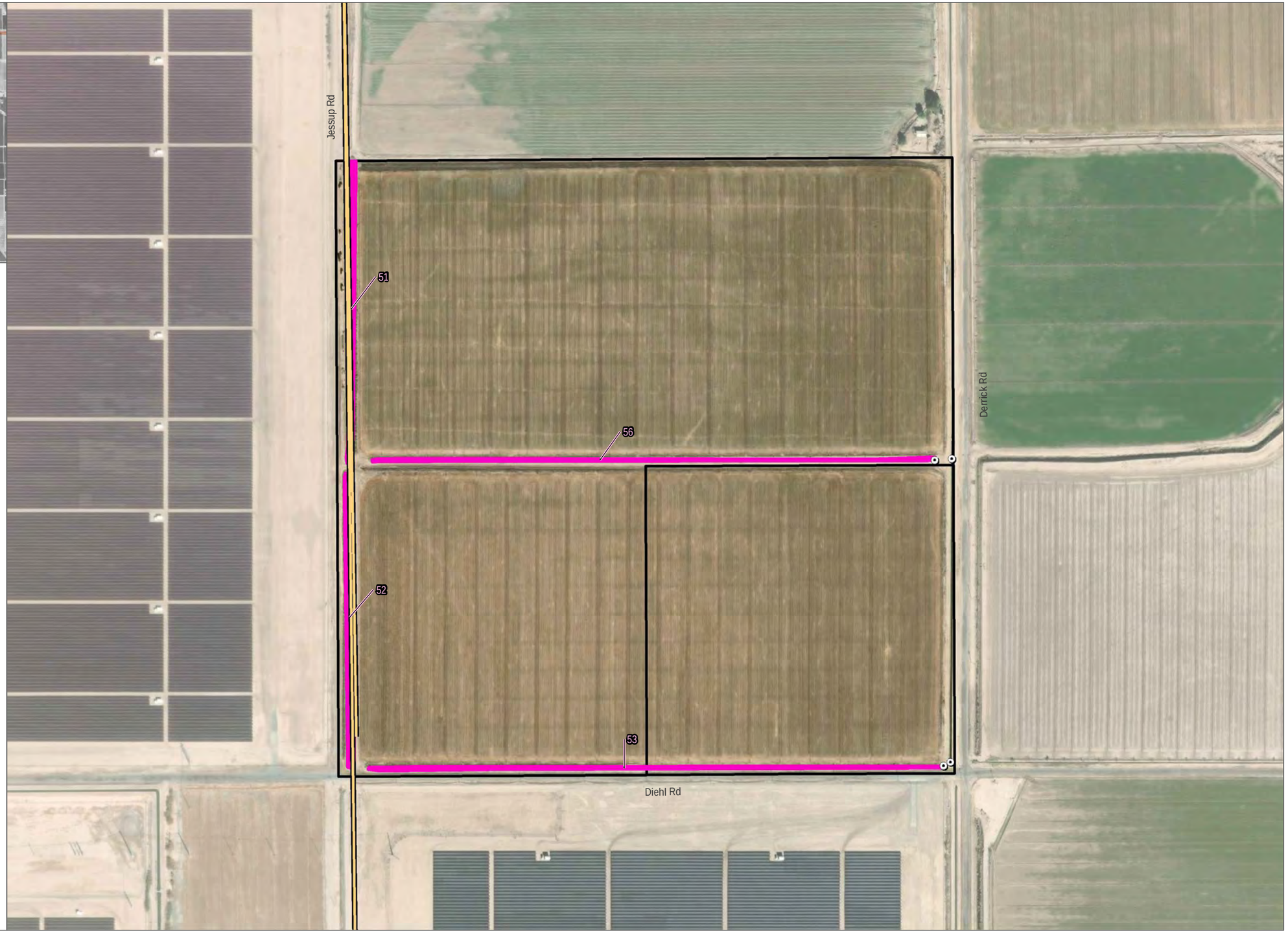
PC ORIGINAL PKG



Project Boundary
Alternative Gen-Tie Line
Culvert
Potentially Jurisdictional Aquatic Features
Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-10
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-20

Derrick Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-1
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-2
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-24

Derrick Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-3
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

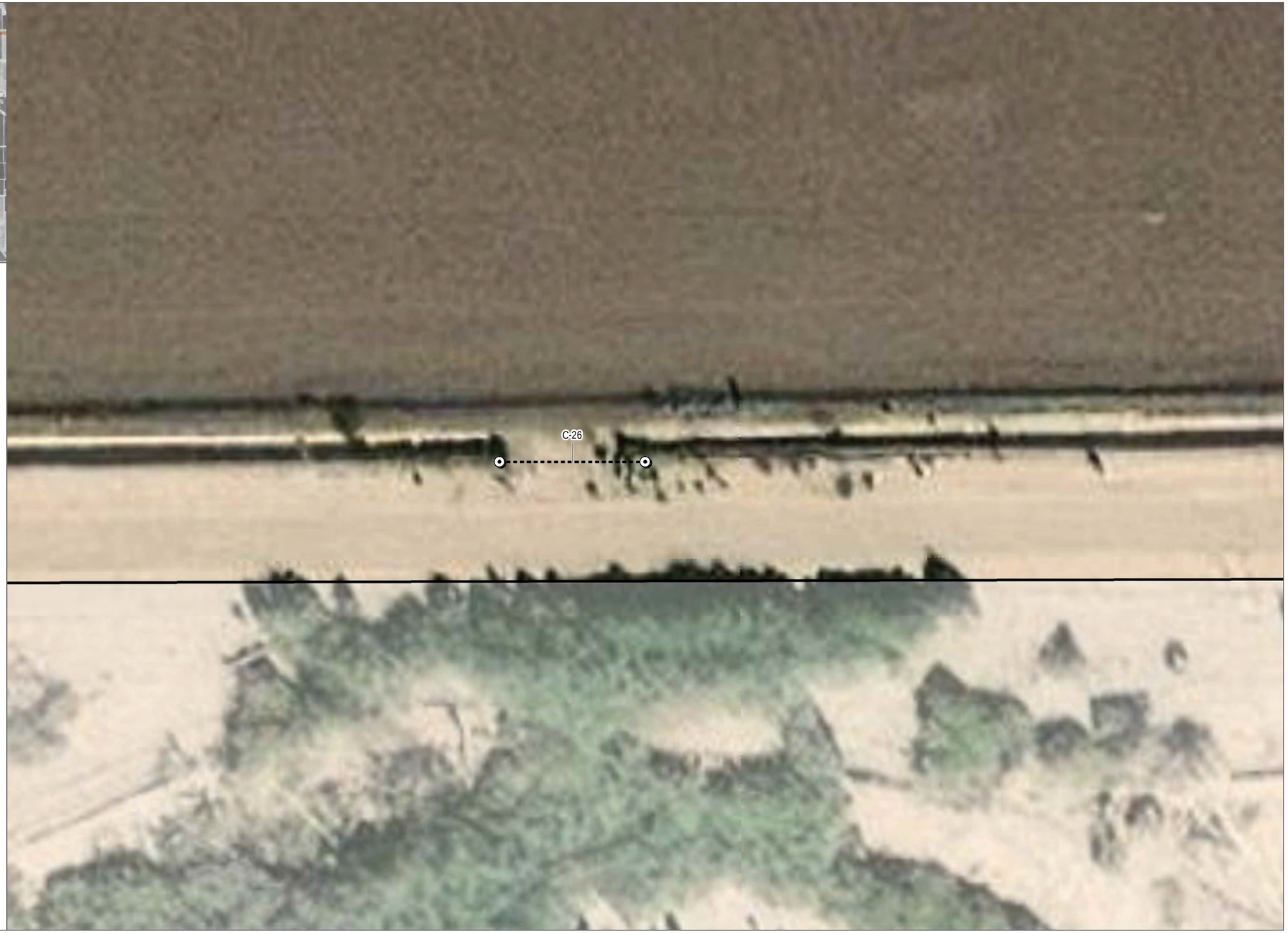
DUDEK 0 10 20 Feet

FIGURE 5-4
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-5
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-19

Jessup Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

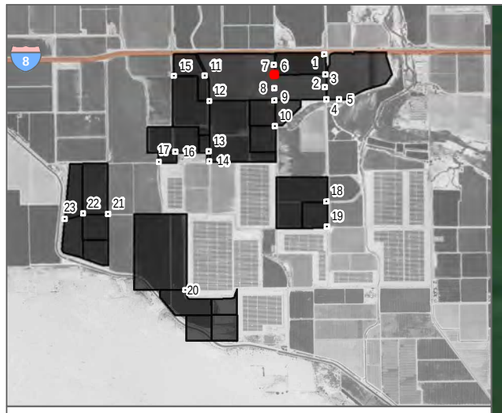
SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-6
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-16
C-18
C-17
Jessup Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-7
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-15

Jessup Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-8
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-9
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-10
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-11

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-11
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-12
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-7

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-13
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-6

Vaughn Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-14
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-10

Westside Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-15
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-8

Westside Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-16
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

C-9

Vaughn Rd

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-17
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-5

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-18
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-4

Diehl Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

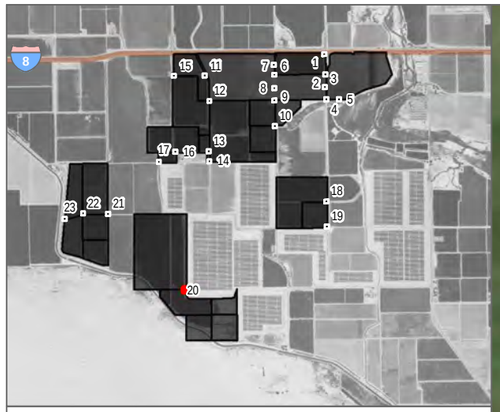
SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-19
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-3

Westside Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

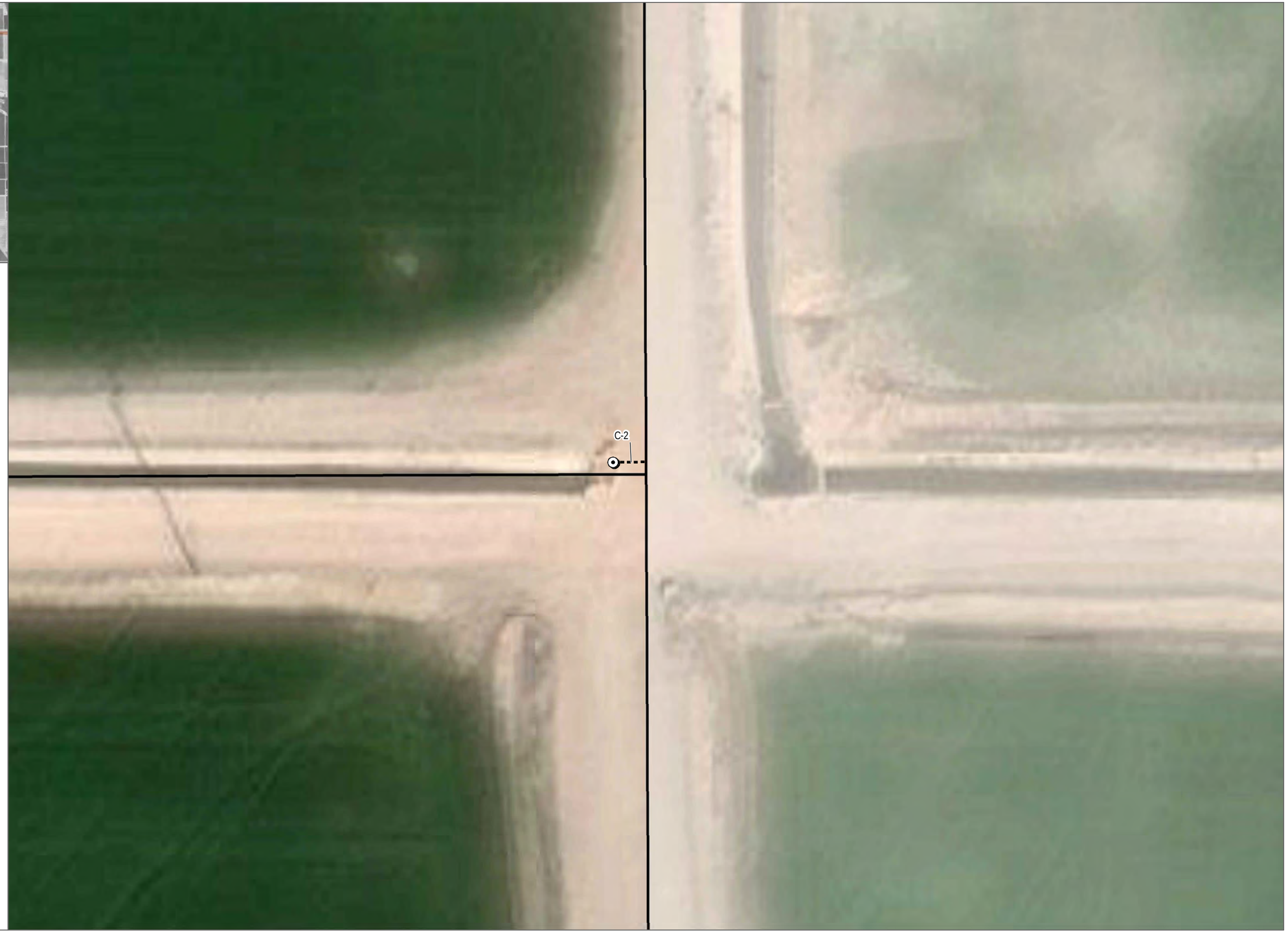
0 10 20 Feet

FIGURE 5-20
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-21
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Hyde Rd
C-1

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-22
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary

Culvert Point

Mandrapa Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-23

Culverts

P# 15207

PC ORIGINAL PKG

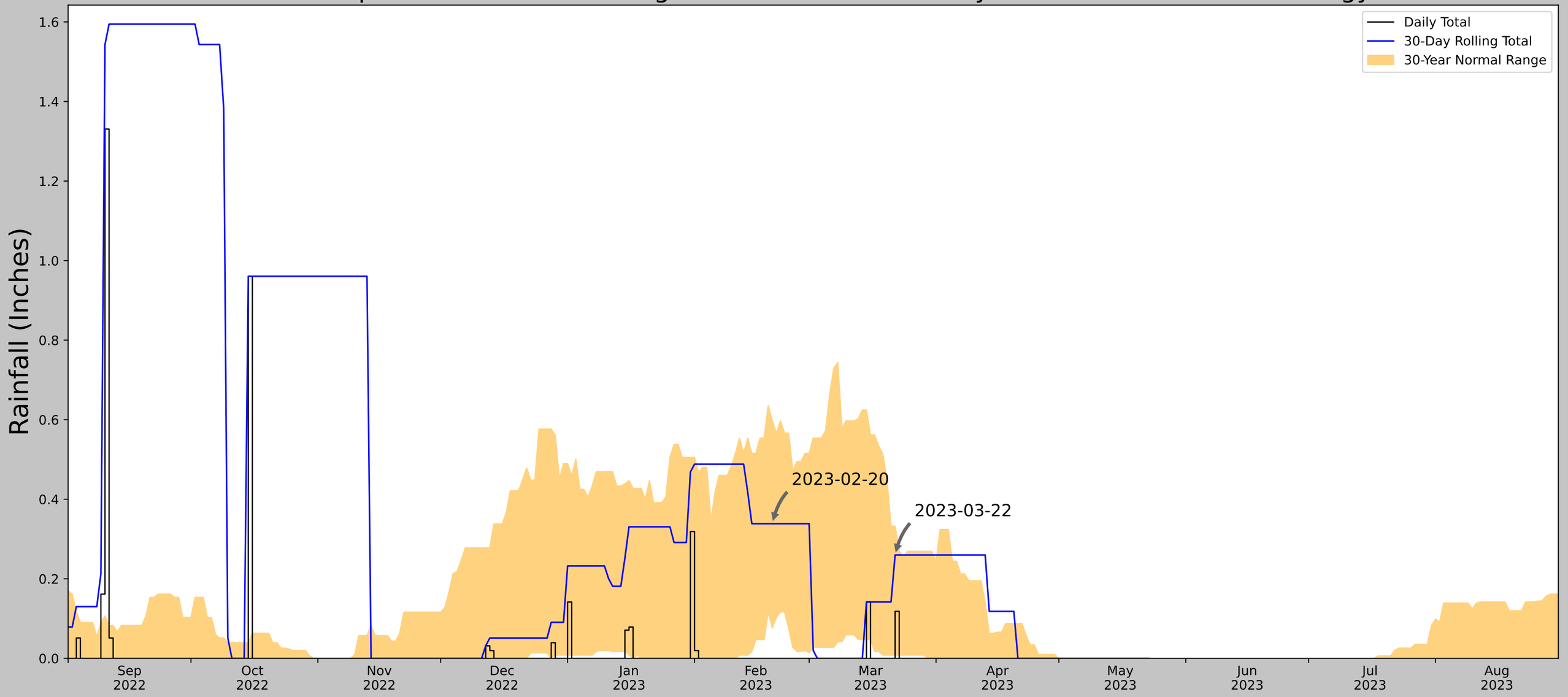
Appendix B

Antecedent Precipitation Tool Output

PC ORIGINAL PKG

PC ORIGINAL PKG

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	32.75669, -115.73002
Observation Date	2023-04-21
Elevation (ft)	-38.319
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-04-21	0.0	0.087402	0.0	Normal	2	3	6
2023-03-22	0.008268	0.332283	0.259843	Normal	2	2	4
2023-02-20	0.076378	0.59685	0.338583	Normal	2	1	2
Result							Normal Conditions - 12

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
EL CENTRO 2 SSW	32.7669, -115.5617	-29.856	9.805	8.463	4.495	10804	86
IMPERIAL CO AP	32.8347, -115.5767	-55.118	4.765	25.262	2.265	390	4
IMPERIAL	32.8489, -115.5667	-63.976	5.673	34.12	2.746	159	0

PC ORIGINAL PKG

PC ORIGINAL PKG

Appendix C
Review Area Photos

PC ORIGINAL PKG

PC ORIGINAL PKG



Photo Point 1. A larger concrete irrigation ditch that runs north/south and eventually connects to the Westside Main Canal (Photo Point 14) and may be jurisdictional.



Photo Point 2: View of a smaller concrete and larger gated concrete ditch running parallel.



Photo Point 3: A typical large earthen ditch in the southern area of the site.



Photo Point 4: View of wetted earthen irrigation ponds adjacent to a smaller concrete ditch that may be jurisdictional, as it receives water from the larger Fig Canal.

PC ORIGINAL PKG



Photo Point 5: View of an earthen running north/south ditch with water. This ditch connects to larger ditches and may be jurisdictional.



Photo Point 6: View of a large earthen ditch running east/west in the central portion of the site. This ditch connects to larger ditches and may be jurisdictional.



Photo Point 7: View of a likely non-jurisdictional seasonal earthen ditch used to deliver water to the adjacent agriculture field.



Photo Point 8: View of a typical concrete irrigation ditch running north/south that delivers water to smaller isolated ditches.

PC ORIGINAL PKG



Photo Point 9: View of a north/south irrigation ditch with a flooded active agricultural area to the right.



Photo Point 10: A wetted concrete irrigation ditch. This ditch runs north/south for a short distance adjacent to the agriculture area it conveys water to. This ditch is closed and likely non-jurisdictional.



Photo Point 11: A view of a small wetted, seasonal earthen ditch that is likely non-jurisdictional.



Photo Point 12: View of a dry, seasonal earthen irrigation ditch that is likely non-jurisdictional, with Interstate Highway 8 in the background.

PC ORIGINAL PKG



Photo Point 13: View of the larger Fern Canal that runs north/south through the northwestern area of the site, with active agriculture seen to the right. Likely jurisdictional, with eventual connectivity to the Westside Main Canal (Photo Point 14).



Photo Point 14: View of the Westside Main Canal that borders the southwestern portion of the project area.

PC ORIGINAL PKG

Appendix D
ORM Upload Spreadsheet

PC ORIGINAL PKG

PC ORIGINAL PKG

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
4	CALIFORNIA	R4SB		Area	0.15090373	ACRE	A3.TRIB-404	32.75117493	-115.74649048	
5	CALIFORNIA	R4SB		Area	0.05571039	ACRE	A3.TRIB-405	32.74984741	-115.74002838	
6	CALIFORNIA	R4SB		Area	0.36943884	ACRE	A3.TRIB-406	32.76901245	-115.70755768	
7	CALIFORNIA	R4SB		Area	0.16774736	ACRE	A3.TRIB-407	32.76159286	-115.73307800	
10	CALIFORNIA	R4SB		Area	0.54075873	ACRE	A3.TRIB-408	32.74563980	-115.73376465	
11	CALIFORNIA	R4SB		Area	0.27419883	ACRE	A3.TRIB-409	32.75990295	-115.73007965	
12	CALIFORNIA	R4SB		Area	0.0706309	ACRE	A3.TRIB-410	32.76803970	-115.70771027	
13	CALIFORNIA	R4SB		Area	1.80331326	ACRE	A3.TRIB-411	32.74565506	-115.73149872	
14	CALIFORNIA	R4SB		Area	0.22094966	ACRE	A3.TRIB-412	32.77072144	-115.73046875	
15	CALIFORNIA	R4SB		Area	3.08433604	ACRE	A3.TRIB-413	32.76525497	-115.72740173	
17	CALIFORNIA	R4SB		Area	0.07731558	ACRE	A3.TRIB-414	32.77145004	-115.71623993	
18	CALIFORNIA	R4SB		Area	0.09282766	ACRE	A3.TRIB-415	32.76615143	-115.71616364	
19	CALIFORNIA	R4SB		Area	2.06556273	ACRE	A3.TRIB-416	32.74142075	-115.73843384	
20	CALIFORNIA	R4SB		Area	0.06613179	ACRE	A3.TRIB-417	32.76714325	-115.70637512	
21	CALIFORNIA	R4SB		Area	0.14004992	ACRE	A3.TRIB-418	32.76158142	-115.73332977	
22	CALIFORNIA	R4SB		Area	0.03690025	ACRE	A3.TRIB-419	32.76715088	-115.70470428	
24	CALIFORNIA	R4SB		Area	0.11301442	ACRE	A3.TRIB-420	32.77071762	-115.71392822	
25	CALIFORNIA	R4SB		Area	0.09008852	ACRE	A3.TRIB-421	32.76977158	-115.71617126	
26	CALIFORNIA	R4SB		Area	0.11910388	ACRE	A3.TRIB-422	32.77070618	-115.70976257	
27	CALIFORNIA	R4SB		Area	0.48791948	ACRE	A3.TRIB-423	32.74676895	-115.73989868	
28	CALIFORNIA	R4SB		Area	0.40071779	ACRE	A3.TRIB-424	32.76349258	-115.73024750	
30	CALIFORNIA	R4SB		Area	0.17483258	ACRE	A3.TRIB-425	32.76528931	-115.71595764	
31	CALIFORNIA	R4SB		Area	0.0637867	ACRE	A3.TRIB-426	32.75922012	-115.73296356	
32	CALIFORNIA	R4SB		Area	0.98165417	ACRE	A3.TRIB-427	32.76105118	-115.73720551	
33	CALIFORNIA	R4SB		Area	0.44023177	ACRE	A3.TRIB-428	32.73704529	-115.73208618	
34	CALIFORNIA	R4SB		Area	0.08514063	ACRE	A3.TRIB-429	32.76431274	-115.71617126	
36	CALIFORNIA	R4SB		Area	0.14742877	ACRE	A3.TRIB-430	32.75083542	-115.75018311	
37	CALIFORNIA	R4SB		Area	0.08570509	ACRE	A3.TRIB-431	32.76797104	-115.71617889	
39	CALIFORNIA	R4SB		Area	0.08272728	ACRE	A3.TRIB-432	32.76976013	-115.70769501	
40	CALIFORNIA	R4SB		Area	0.28684011	ACRE	A3.TRIB-433	32.75470734	-115.74855804	
41	CALIFORNIA	R4SB		Area	0.22915435	ACRE	A3.TRIB-434	32.77227402	-115.70764923	
43	CALIFORNIA	R4SB		Area	2.95456958	ACRE	A3.TRIB-435	32.73423767	-115.72904968	
44	CALIFORNIA	R4SB		Area	0.08413167	ACRE	A3.TRIB-436	32.77288437	-115.71623993	
45	CALIFORNIA	R4SB		Area	0.34906125	ACRE	A3.TRIB-437	32.76718903	-115.72740173	
46	CALIFORNIA	R4SB		Area	1.12015676	ACRE	A3.TRIB-438	32.73638535	-115.72779083	
47	CALIFORNIA	R4SB		Area	1.16745198	ACRE	A3.TRIB-439	32.73555374	-115.73044586	
48	CALIFORNIA	R4SB		Area	0.99406278	ACRE	A3.TRIB-440	32.76112747	-115.72691345	
49	CALIFORNIA	R4SB		Area	0.67652631	ACRE	A3.TRIB-441	32.76208496	-115.72398376	
50	CALIFORNIA	R4SB		Area	0.59860855	ACRE	A3.TRIB-442	32.76436234	-115.72077179	
51	CALIFORNIA	R4SB		Area	0.81362903	ACRE	A3.TRIB-443	32.75447083	-115.71585846	
52	CALIFORNIA	R4SB		Area	1.01924801	ACRE	A3.TRIB-444	32.75080109	-115.71591187	
53	CALIFORNIA	R4SB		Area	0.65959144	ACRE	A3.TRIB-445	32.74898911	-115.71202087	
54	CALIFORNIA	R4SB		Area	0.22497077	ACRE	A3.TRIB-446	32.76093292	-115.71616364	
55	CALIFORNIA	R4SB		Area	0.43807167	ACRE	A3.TRIB-447	32.75845337	-115.72405243	
56	CALIFORNIA	R4SB		Area	0.63632029	ACRE	A3.TRIB-448	32.75261307	-115.71192169	
1	CALIFORNIA	R6		Area	0.32591072	ACRE	B3-EXCL-DITCH	32.77038574	-115.72080231	
2	CALIFORNIA	R7		Area	0.18516058	ACRE	B3-EXCL-DITCH	32.74793243	-115.74859619	
3	CALIFORNIA	R8		Area	0.16710001	ACRE	B3-EXCL-DITCH	32.75005341	-115.74858856	
8	CALIFORNIA	R9		Area	0.27882296	ACRE	B3-EXCL-DITCH	32.74771881	-115.74441528	
9	CALIFORNIA	R10		Area	0.23001304	ACRE	B3-EXCL-DITCH	32.75481796	-115.74868011	
16	CALIFORNIA	R11		Area	0.21795174	ACRE	B3-EXCL-DITCH	32.75508118	-115.74432373	
23	CALIFORNIA	R12		Area	0.1515706	ACRE	B3-EXCL-DITCH	32.74606705	-115.74860382	
29	CALIFORNIA	R13		Area	0.09282275	ACRE	B3-EXCL-DITCH	32.74477386	-115.74791718	
35	CALIFORNIA	R14		Area	0.53764641	ACRE	B3-EXCL-DITCH	32.74458313	-115.73393250	
38	CALIFORNIA	R15		Area	0.02234701	ACRE	B3-EXCL-DITCH	32.75783539	-115.75045776	
42	CALIFORNIA	R16		Area	0.55508375	ACRE	B3-EXCL-DITCH	32.74573135	-115.74435425	
C-1	CALIFORNIA	R4SB		Area	0.0011209	ACRE	A3.TRIB-432	32.75123596	-115.74853516	
C-2	CALIFORNIA	R4SB		Area	0.00034289	ACRE	A3.TRIB-432	32.75114822	-115.74433136	
C-3	CALIFORNIA	R4SB		Area	0.00242298	ACRE	A3.TRIB-432	32.74019623	-115.73146820	
C-4	CALIFORNIA	R4SB		Area	0.00154161	ACRE	A3.TRIB-432	32.74901199	-115.70760345	
C-5	CALIFORNIA	R4SB		Area	0.00336925	ACRE	A3.TRIB-432	32.75259781	-115.70762634	
C-6	CALIFORNIA	R4SB		Area	0.00141973	ACRE	A3.TRIB-432	32.75845337	-115.72721100	
C-7	CALIFORNIA	R4SB		Area	0.00124447	ACRE	A3.TRIB-432	32.75991440	-115.72727203	
C-8	CALIFORNIA	R4SB		Area	0.00356925	ACRE	A3.TRIB-432	32.75988770	-115.73295593	
C-9	CALIFORNIA	R4SB		Area	0.00135676	ACRE	A3.TRIB-432	32.75844574	-115.73571014	
C-10	CALIFORNIA	R4SB		Area	0.00316738	ACRE	A3.TRIB-432	32.77074051	-115.73316956	
C-11	CALIFORNIA	R4SB		Area	0.00147046	ACRE	A3.TRIB-432	32.77076721	-115.72783661	
C-12	CALIFORNIA	R4SB		Area	0.00157331	ACRE	A3.TRIB-432	32.76708221	-115.72711945	
C-13	CALIFORNIA	R4SB		Area	0.00122613	ACRE	A3.TRIB-432	32.76343155	-115.71616364	
C-14	CALIFORNIA	R4SB		Area	0.00090872	ACRE	A3.TRIB-432	32.76709366	-115.71616364	
C-15	CALIFORNIA	R4SB		Area	0.00108872	ACRE	A3.TRIB-432	32.76884460	-115.71617126	

Note: Acres for aquatic resources described in this datasheet, except for NWW-ICR-15, include mapping up to the top of bank.

PC ORIGINAL PKG

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
C-16	CALIFORNIA	R4SB		Area	0.00209973	ACRE	A3.TRIB-432	32.77076340	-115.71617889	
C-17	CALIFORNIA	R4SB		Area	0.00127058	ACRE	A3.TRIB-432	32.77068329	-115.71613312	
C-18	CALIFORNIA	R4SB		Area	0.00312333	ACRE	A3.TRIB-432	32.77072144	-115.71601105	
C-19	CALIFORNIA	R4SB		Area	0.00134328	ACRE	A3.TRIB-432	32.77213287	-115.71623230	
C-20	CALIFORNIA	R4SB		Area	0.0035386	ACRE	A3.TRIB-432	32.77368546	-115.70779419	
C-21	CALIFORNIA	R4SB		Area	0.00147716	ACRE	A3.TRIB-432	32.77068710	-115.70760345	
C-22	CALIFORNIA	R4SB		Area	0.00157372	ACRE	A3.TRIB-432	32.77058411	-115.70760345	
C-23	CALIFORNIA	R4SB		Area	0.00134542	ACRE	A3.TRIB-432	32.77079391	-115.70759583	
C-24	CALIFORNIA	R4SB		Area	0.00095271	ACRE	A3.TRIB-432	32.76890182	-115.70769501	
C-25	CALIFORNIA	R4SB		Area	0.00452386	ACRE	A3.TRIB-432	32.76714706	-115.70744324	
C-26	CALIFORNIA	R4SB		Area	0.0015326	ACRE	A3.TRIB-432	32.76713181	-115.70538330	

Note: Acres for aquatic resources described in this datasheet, except for NWW-ICR-15, include mapping up to the top of bank.

PC ORIGINAL PKG

Aquatic Resources Delineation Report

Big Rock 2 Cluster Solar and Storage Project Imperial County, California

OCTOBER 2024

Lead Agency:

IMPERIAL COUNTY
801 Main Street
El Centro, California 92243

Project Proponent:

90FI 8me LLC
4370 Town Center Boulevard, Suite 110
El Dorado Hills, California 95762

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Callie Amoaku

PC ORIGINAL PKG

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

Acronyms and Abbreviations iii

1 Introduction 1
- 1.1 Disclaimer Statement 1
- 1.2 Contact Information 1

2 Review Area Description and Landscape Setting 3
- 2.1 Soils 3
- 2.2 Vegetation 4
- 2.3 Watershed 5
- 2.4 Review Area Alterations, Current and Past Land Use 5

3 Precipitation Data and Analysis 7

4 Investigation Methods 9
- 4.1 U.S. Army Corps of Engineers 9
- 4.2 Regional Water Quality Control Board 11
- 4.3 California Department of Fish and Wildlife 11

5 Aquatic Resource Narrative 13
- 5.1 Waters of the United States (USACE) 13
- 5.2 Waters of the State 14
- 5.3 National Wetland Inventory 14

6 Results and Conclusions 15

7 References Cited 17

TABLES

1 Contact Information 1

2 Antecedent Precipitation Tool Data for the Review Area 7

3 USACE Aquatic Resource Summary for the Review Area 14

APPENDICES

A Figures

B Antecedent Precipitation Tool Output

C Review Area Photos

D ORM Upload Spreadsheet

PC ORIGINAL PKG

INTETNIONALLY LEFT BLANK

PC ORIGINAL PKG

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APT	Antecedent Precipitation Tool
ARC	antecedent runoff condition
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
EPA	Environmental Protection Agency
HUC	hydrologic unit code
IID	Imperial Irrigation District
NWI	National Wetland Inventory
OHWM	ordinary high water mark
PDSI	Palmer Drought Severity Index
Project	Big Rock 2 Energy Project
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

1 Introduction

This Aquatic Resources Delineation Report was prepared in accordance with the U.S. Army Corps of Engineers (USACE) Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2017). This report and supporting appendices provide the 20 items listed in the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports. This report presents the results of the jurisdictional aquatic resource delineation conducted by Dudek for the proposed Big Rock 2 Cluster Solar and Storage Project (project) located in Imperial County, California, south of Interstate 8 and west of the town of El Centro, California. The delineation was conducted to identify and map existing aquatic resources potentially subject to the regulatory jurisdiction of USACE pursuant to Section 404 of the Clean Water Act (33 USC 1344); waters of the state potentially subject to the regulatory jurisdiction of the Region 7 Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act; and stream and riparian habitats potentially subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code (collectively defined as jurisdictional aquatic resources).

1.1 Disclaimer Statement

This report presents Dudek's best effort to quantify the extent of aquatic resources potentially regulated by USACE, RWQCB, and CDFW (i.e., regulatory agencies) within the identified review areas using the current regulations, written policies, and guidance from these regulatory agencies. The potential jurisdictional boundaries described in this report are subject to verification by the regulatory agencies. Only the regulatory agencies can make a final determination on whether the features present are subject to USACE, RWQCB, and/or CDFW regulation. A request for USACE Jurisdictional Determination is not provided at this time; this report is purely informational.[1]

1.2 Contact Information

Contact information for the project applicant and agent are provided in Table 1.[2] Access to the proposed Project site is not restricted, but if a site visit is requested, the project applicant or agent will accompany regulatory staff to the site.[3] 90FI 8me LLC is the project applicant, and the proposed Project parcels are under the current ownership of various private parties.

Table 1. Contact Information

Project Applicant	90FI 8me LLC	**Agent**	Dudek
Contact Name	Available upon request	**Contact Name**	Callie Amoaku
Address	4370 Town Center Boulevard, Suite 110 El Dorado Hills, California 95762	**Address**	605 Third Street Encinitas, California 92024
Phone	Available upon request	**Phone**	760.479.4293
Email	Available upon request	**Email**	cford@dudek.com

1 Minimum Standards Item 1 (Request for Jurisdictional Determination)
2 Minimum Standards Item 2 (Contact Information)
3 Minimum Standards Item 3 (Site Access Statement)

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Review Area Description and Landscape Setting

The proposed project is in unincorporated Imperial County, California (Figure 1, Project Location; see Appendix A for figures), south of Interstate Highway 8 and west of the town of El Centro, California. The project area comprises approximately 1,849 acres of agricultural lands and associated roads, catchments, and irrigation ditches.

The project area is composed of the following 24 Accessor's Parcel Numbers: 051-290-019, 051-300-016, 051-290-018, 051-320-007, 051-350-004, 051-270-041, 051-270-028, 051-320-006, 051-320-005, 051-280-054, 051-270-036, 051-300-037, 051-300-035, 051-330-003, 051-350-006, 051-350-008, 051-350-007, 051-270-020, 051-300-011, 051-300-026, 051-300-032, 051-300-036, 051-310-027, and 051-310-028. The geographic center of the review area roughly corresponds with 32.75669 and –115.73002 (decimal degrees). Elevations with the project area range from 10 to 60 feet below sea level.

The topography of the review area is very flat, given its agricultural nature; various earthen and concrete irrigation ditches, with most major irrigation ditches running north to south across the project area, are the only portions of the site with varying topographic relief. These irrigation ditches are also under ownership and management of the Imperial Irrigation District (IID).

Current land use of the review area includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchard(s), pastureland, irrigation ditches, and developed lands with rural infrastructure.

2.1 Soils[4]

According to the USDA Web Soil Survey (USDA 2023a), 16 soil types are mapped within the proposed Project site, including Badland; Glenbar complex; Holtville silty clay, wet; Imperial silty clay, wet; Imperial-Glenbar silty clay loams, wet, 0% to 2% slopes; Indio Loam, wet; Indio-Vint complex; Meloland and Holtville loams, wet; Meloland fine sand; Meloland very fine sandy loam, wet; Niland fine sand; Rositas fine sand, 0% to 2% slopes; Rositas fine sand, wet, 0% to 2% slopes; Rositas sand, 0% to 2% slopes; Vint and Indio very fine sandy loams, wet; Vint loamy very fine sand, wet; and water (Figure 2, Soils).

- Holtville Series consists of very deep, well-drained soils formed in mixed and stratified alluvium. These soils have slow permeability, typically occur on floodplains, and are moderately alkaline in the A horizon (USDA 2023a). The Holtville series is the second-most-abundant soil type and comprises small patches throughout the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Imperial Series consists of very deep, calcareous soils with very slow permeability. This soil series typically occurs on floodplains and old lakebeds and is well and moderately well-drained (USDA 2023a). The Imperial series and Imperial-Glenbar association comprise the majority of the project site; however, these areas are currently dominated by agricultural use in existing condition.

4 Minimum Standards Item 13 (Soil Descriptions)

PC ORIGINAL PKG

- Glenbar Series consists of very deep, well-drained soils formed in stratified stream alluvium. These soils have moderately slow permeability, typically occur in desert floodplains and lacustrine basins, and are moderately alkaline in the A horizon (USDA 2023a). The Imperial-Glenbar association comprises the majority of the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Indio Series consists of very deep, well-drained soils formed in alluvium. These soils are well to moderately drained, with moderate permeability, and occur on lacustrine basins and flood plains (USDA 2023a). The Indio loam series occurs mainly in the northern area of the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Meloland Series consists of naturally well-drained soils with very slow permeability. This soil series typically occurs on floodplains and old lakebeds and are slightly alkaline in the A horizon (USDA 2023a). The Meloland series comprises patches throughout the project site; however, this area is currently dominated by agricultural use in existing condition.
- Rositas Series consists of very deep, somewhat excessively drained soils formed in sandy eolian material. These soils have rapid permeability and typically occur on dunes and sand sheets (USDA 2023a). The Rositas series comprises a fairly large area in the southern portion of the project site; however, this area is currently dominated by agricultural use in existing condition.
- Vint Series consists of very deep, somewhat excessively drained soils formed in stratified stream alluvium. These soils have moderately rapid permeability, typically occur on floodplains, and are moderately alkaline in the A horizon (USDA 2023a). The Vint series comprises both large and small patches throughout the project site; however, these areas are currently dominated by agricultural use in existing condition.
- Niland Series consists of well and moderately well drained soils formed in coarse mixed alluvium overlying fine alluvium. These soils have a range of permeability, depending on the sand and clay content, and typically occur on basin and floodplain edges (USDA 2023a). The Niland series comprises a very small area in the southwestern corner of the project site.
- Badland Series are arid, clay-rich soils that have experienced excessive erosional forces due to wind and water. These soils typically have steep slopes with minimal vegetation and exhibit high drainage. Badlands comprise a very small area of the project site; however, this area is currently dominated by agricultural use in existing condition.

None of these soil types are ranked as a hydric soil in Imperial County, California (USDA 2023b).

2.2 Vegetation

Five land cover types are present within the proposed Project site: general agriculture, stream channel (irrigation ditch), creosote brush scrub and allscale scrub shrubland alliances, urban/developed, and disturbed habitat. Within the review area, agricultural lands consist of alfalfa (*Medicago sativa*), date palms (*Phoenix dactylifera*), Bermudagrass (*Cynodon dactylon*), and herbaceous vegetables, as well as several fallow fields, occupying nearly 98% of the project site. On-site farming practices include soil disking, plowing, herbicide application, and regular anthropogenic maintenance and disturbance associated with ongoing management actions. Compacted, dirt roads and brow ditches are included within this land cover type.

Within the proposed Project site, stream channel is characterized by irrigation ditches that convey flows throughout active agricultural lands. These areas include irrigation ditches that are unvegetated or vegetated with ruderal species such as giant reed *(Arundo donax*), nettleleaf goosefoot (*Chenopodium murale*), and asthmaweed (*Erigeron bonariensis*).

PC ORIGINAL PKG

2.3 Watershed

The proposed Project site occurs within the Salton Sea Subbasin (hydrologic unit code [HUC] 18100204); within this watershed, the proposed Project site overlaps with the Salt Creek Slough Subwatershed (HUC 181002040807) and the Upper New River Subwatershed (HUC 181002040902) within the New River Watershed (HUC 181002040902). The New River Watershed comprises approximately 328 square miles (209,920 acres) and contains the New River, which flows north from the United States/Mexico border, south of the site. The river flows approximately 66 miles across the Imperial Valley to its terminus in the Salton Sea. The Upper New River Subwatershed comprises approximately 7 square miles (4,480 acres) within the New River Watershed.

The western portion of the proposed Project site overlaps with the Salt Creek Slough Subwatershed, a catchment area of 34 square miles (21,760 acres) that sits within the larger Coyote Wash Watershed, which directs intermittent flows eastward from the Jacumba Mountains and has an area of 340 square miles (217,600 acres).

Figure 3, Hydrology, displays the New River Watershed, Salton Sea Subbasin and various subwatersheds mapped within the proposed Project site.

2.4 Review Area Alterations, Current and Past Land Use

The entirety of the proposed Project site has been significantly altered/modified from its natural state. The entire site, including all crop fields, dirt roads, and irrigation ditches are actively maintained and utilized for active agricultural operations.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

3 Precipitation Data and Analysis[5]

The USACE-developed Antecedent Precipitation Tool (APT) was used to assess whether the delineation date occurred in a drier-, average-, or wetter-than-normal period (USACE 2023). To determine what constitutes a "typical year," USACE developed the APT. The information generated from the APT can help to determine whether normal hydrologic and/or climatic conditions were present during the site visit and assist with completing the Wetland Determination Data Form.

The APT provides three climatological parameters: Palmer Drought Severity Index (PDSI), season, and antecedent precipitation condition. The PDSI is a standardized index calculated on a monthly basis, with PDSI value outputs ranging from –4 (extreme drought) to +4 (very wet) (NOAA 2023) to assess drought conditions (i.e., PDSI Class). The APT determines wet vs. dry season based on related procedures provided in the applicable regional supplement for the review area (in this case, the Arid West Supplement). If the antecedent runoff condition (ARC) score is less than 10, then the antecedent precipitation condition is classified as drier than normal; normal conditions are present with an ARC score of 10 to 14; conditions are wetter than normal when an ARC score is greater than 14 (USACE 2023).

Table 2 summarizes the key data extrapolated from the APT output: estimated drought conditions (PDSI Class), wet or dry season determination, ARC score, and antecedent precipitation condition. Based on the APT output provided in Appendix B and summarized in Table 2, the precipitation and climatic conditions for the review area were normal during the time of the delineation due to normal rainfall amounts in the spring of 2023.

Table 2. Antecedent Precipitation Tool Data for the Review Area

Field Survey Dates	PDSI Class	Season	ARC Score	Antecedent Precipitation Condition
4/21/2023	Moderate wetness	Dry season	12	Normal conditions

Notes: PDSI = Palmer Drought Severity Index; ARC = antecedent runoff condition

Additionally, according to the U.S. Department of Agriculture's (USDA) Agricultural Applied Climate Information System (USDA 2023c), the area around the proposed Project site receives an average of 2.56 inches of precipitation annually.

[5] Minimum Standards Item 11 (Discussion of Hydrology)

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

4 Investigation Methods[6]

The jurisdictional delineation was conducted initially using desktop review of aerial imagery and the U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) data (USFWS 2023). No natural features were apparent during the desktop review, but there are several ditches and irrigation ditches throughout the proposed Project site. A site visit was completed on April 21, 2023, by Dudek biologist Abby Bergsma. Remote sensing was not used for the delineation.

4.1 U.S. Army Corps of Engineers

The USACE wetlands delineation was conducted in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). A Field Guide to the Identification of the High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b) was used to determine the limits of non-wetland waters. Non-wetland waters were delineated on topographical maps in conjunction with Esri Collector on a mobile device. The widths of each non-wetland water were determined in the field according to the OHWM manual.

Wetland Determination Forms were not taken during the delineation since all hydrophytic vegetation was observed below the banks or OHWMs of actively maintained irrigation ditches; since these ditches are owned and managed by the IID, wetland sample points were not taken within them due to a lack of legal access. Accordingly, no USACE three-parameter wetlands were assumed to be present on the site since no areas of hydrophytic vegetation were observed outside of ditches.

Waters of the U.S.

The definition of waters of the United States establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes "waters of the United States" (provided in 33 CFR Section 328.3(a)) has changed multiple times over the past few decades, starting with the *United States v. Riverside Bayview Homes Inc*. court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Clean Water Rule), 2018 (suspension of the Clean Water Rule), 2019 (formal repeal of the Clean Water Rule), 2020 (Navigable Waters Protection Rule), and 2021 (*Pasqua Tribe et al v. United States Environmental Protection Agency* resulting in remand and vacatur of the Navigable Waters Protection Rule and a return to "the pre-2015 regulatory regime") have attempted to provide greater clarity to the term and its regulatory implementation. On December 30, 2022, the agencies announced the final Revised Definition of "Waters of the United States" rule (Rule) (88 CFR 3004–3144). The Rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, and upstream water resources that significantly affect those waters. The Rule represents a re-expansion of federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the

[6] Minimum Standards Item 8 (Dates of Field Work), Item 5 (Use of 1987 Manual, Regional Supplement, and OHWM guide), Item 12 (Statement Regarding Use of Remote Sensing), Item 18 (Data Forms) and Item 19 (Methods)

PC ORIGINAL PKG

2020 Navigable Waters Protection Rule. The Rule also considers various subsequent court decisions, including two notable Supreme Court decisions.

There are two key changes that the Rule incorporates. Firstly, the Rule reinstates the "Significant Nexus" test. The Significant Nexus test refers to waters that either alone, or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas (86 FR 69372-69450). The Significant Nexus test attempts to establish a scientific connection between smaller water bodies, such as ephemeral or intermittent tributaries, and larger, more traditional navigable waters such as rivers. Significant Nexus evaluations take into consideration hydrologic and ecologic factors including, but not limited to, volume, duration, and frequency of surface water flow in the resource and its proximity to a traditional navigable water, and the functions performed by the resource on adjacent wetlands. Second, the Rule adopts the "Relatively Permanent Standard" test. To meet the Relatively Permanent Standard, water bodies must be relatively permanent, standing, or continuously flowing and have a continuous surface connection to such waters.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in Sackett v. the Environmental Protection Agency (EPA), in which it rejected the EPA's claim that "waters of the United States," as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water[s] of the United States (i.e., a relatively permanent body of water connected to traditional interstate navigable waters), and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends and the wetland begins. On August 29, 2023, the EPA and USACE announced the final rule amending the 2023 definition of "waters of the United States", conforming with the Sackett v. EPA decision. Some of the key changes include removing the significant nexus test from consideration when identifying tributaries and other waters as federally protected and revising the adjacency test when identifying federally jurisdictional wetlands. Under the EPA's new "waters of the United States" definition, a "waters of the United States" is a relatively permanent, standing, or continuously flowing body of water that has an apparent surface connection to a "traditionally navigable water" to fall within federal purview. The new rule applies to wetlands and streams throughout the U.S. Although the Sackett opinion did not specifically reference streams, the EPA's new rule extends the "continuous surface connection" standard to streams, thereby removing non-permanent, ephemeral streams that do not meet these standards from federal jurisdiction.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

PC ORIGINAL PKG

4.2 Regional Water Quality Control Board

Waters of the state regulated by the RWQCB were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019). As described in these procedures, wetland waters of the state are mapped based on the procedures in USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters are mapped at the OHWM based on the procedures defined in USACE's 2008 A Field Guide to Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b).

4.3 California Department of Fish and Wildlife

CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code 1602. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines waters by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979). The boundaries were mapped to the top of bank to delineate the extent of the streambed area potentially regulated by CDFW.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

5 Aquatic Resource Narrative[7]

5.1 Waters of the United States (USACE)

Approximately 24.74 acres of non-wetland waters/ditches and their associated culverts were delineated within the proposed Project site below the OHWM of irrigation ditches (Figures 4-1 through 4-10, Aquatic Resources Delineation, and Figures 5-1 through 5-23, Culverts[8]). These non-wetland waters serve as IID irrigation ditches that convey water throughout the Imperial Valley and are connected to a vast network of ditches that source water from the Colorado River. Table 3 provides a detailed summary of aquatic resources delineated within the review area. Table 3 also includes a description of each feature identified within the review area; its Cowardin type, if available (Cowardin et al. 1979); any OHWM indicators present; the location; and the acreage/linear feet. The locations of the culverts conveying flow from these ditches are included on Figures 5-1 through 5-23 and included in the table below. Photos of the potential aquatic features delineated within the proposed Project site and additional areas reviewed for the presence of these resources are provided in Appendix C.[9] The locations of these photos are shown in Figures 4-1 through 4-10.

Many smaller, likely non-jurisdictional concrete or dry earthen ditches with gates exist within and along the boundaries of agricultural fields in the review area. While technically connected to potentially jurisdictional irrigation ditches, they are constructed in uplands purely for the function of irrigating individual fields and do not serve as critical conveyance pathways for regional irrigation like the larger, potentially jurisdictional ditches. These are shown on Figures 4-1 through 4-10.

When the field delineation occurred, surface water was present in all of the non-wetland waters/ditches mapped within the Project site; therefore, the waters onsite are likely considered relatively permanent waters. Based on site conditions observed in April 2023, the 24.74 acres of non-wetland waters/ditches and 0.05 acres of culverts connecting these non-wetland waters/ditches within the Project site contain surface water and include, or have a continuous surface connection to, the Fern Canal, Fig Canal, and the Westside Main Ditch. These have a continuous surface connection to the Salton Sea, a traditional navigable water (USACE 2023). Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters. Accordingly, all non-wetland waters mapped in the review area may be subject to USACE regulation.

Table 3 summarizes the characteristics of the non-wetland waters/ditches and culverts in the review area that are subject to USACE jurisdiction.

7 Minimum Standards Item 6 (Aquatic Resource Narrative)
8 Minimum Standards Item 16 (Delineation Maps)
9 Minimum Standards Item 17 (Ground Photos)

PC ORIGINAL PKG

Table 3. USACE Aquatic Resource Summary for the Review Area[10]

Feature Name	Cowardin[1]	OHWM Indicators	Location	Acres/Linear feet
Non-wetland Waters (Below OHWM)				
Irrigation Ditch[2]	R4SBCx	BBS, occasional CVS and CVC	Throughout review area (see Figures 4-1 through 4-10)	24.74/71,760
Culvert	N/A	N/A	Throughout review area (see Figures 5-1 through 5-23)	0.05/1,059
			Non-wetland Waters Total	**24.79/72,819**

Notes: OHWM = ordinary high water mark; R4SBCx = Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated; BBS = break in bank slope; CVS = change in vegetation species; CVC = change in vegetation cover

1 Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979).

2 These features are likely classified as seasonal "relatively permanent waters" that flow for at least 3 months of the year, based on conditions observed during the delineation.

A copy of the USACE Operations and Maintenance Business Information Link Regulatory Module (ORM) Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet is included as Appendix D.[11]

5.2 Waters of the State

All of the features described in Section 5.1, Waters of the United States, have also been identified as waters of the state. These features are subject to regulation by the RWQCB under the Porter-Cologne Water Quality Control Act and CDFW under Fish and Game Code 1600.

5.3 National Wetland Inventory

Most of the mapped non-wetland waters/ditches do not overlap with mapped resources from the U.S. Fish and Wildlife Service's National Wetland Inventory data (USFWS 2023; see Figure 3). There is one that is identified as Riverine (R4SBCx per Cowardin classification) habitats. R4SBCx is a classification code used to describe features that have the following attributes: Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated (Cowardin et al. 1979).

10 Minimum Standards Item 9 (Table Listing All Aquatic Resources)

11 Minimum Standards Item 15 (ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet)

PC ORIGINAL PKG

6 Results and Conclusions

Based on the jurisdictional delineation and review of relevant information provided in this Aquatic Resources Delineation Report, 24.79 acres of non-wetland waters/ditches and their associated culverts potentially regulated by USACE were delineated within the proposed Project site. All non-wetland waters/ditches within the review area may be regulated by USACE given their upstream or downstream connection to a traditional navigable water (the Salton Sea). These features may also be regulated by the RWQCB and CDFW.

The updated 2023 EPA guidance removed protections for aquatic features that do not have a relatively permanent, standing, or continuously flowing body of water that connects to a traditionally navigable water. When the field delineation occurred, surface water was present in all of the non-wetland waters/ditches mapped within the Project site; therefore, the waters onsite are likely considered relatively permanent waters and would not be excluded per the definition in 33 CFR, Section 328.3(b)(3). Based on site conditions observed in April 2023, the 24.79 acres of non-wetland waters/ditches and their associated culverts within the Project site contain surface water and appear to have a continuous surface connection (via ditches and canals) to the Salton Sea. Therefore, these features meet the definition of a 33 CFR, Section 328.3 (a)(3) waters.

It is the intention of the Project applicant, as reflected in the proposed Project design, that impacts to all jurisdictional or potentially jurisdictional waters on the proposed Project site will be avoided to the extent possible by design during construction and operation of the Project.

This report can be used by USACE, RWQCB, and CDFW to determine if they would regulate the features described herein.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

7 References Cited

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* FWS/OBS-79/31. Prepared for U.S. Fish and Wildlife Service. December 1979. Reprinted 1992. http://www.fws.gov/wetlands/documents/classification-of-wetlands-and-deepwater-habitats-of-the-united-states.pdf.

NOAA (National Oceanic and Atmospheric Administration). 2023. Climate Division Scale Palmer Drought Severity Index (PDSI) dataset.

SWRCB (State Water Resources Control Board). 2019. State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019; revised April 6, 2021. https://www.waterboards.ca.gov/press_room/press_releases/2021/procedures.pdf.

USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf.

USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).* Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf.

USACE. 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual.* ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008. https://apps.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf.

USACE. 2017. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. U.S. Army Corps of Engineers, Los Angeles District. March 16, 2017. https://www.spl.usace.army.mil/Portals/17/Users/251/43/2043/Final%20Delin%20report%20standards%203-16-2017.pdf?ver=2017-03-16-170513-523.

USACE. 2023. Antecedent Precipitation Tool (APT) - v1.0.13. Accessed May 2023. https://github.com/jDeters-USACE/Antecedent-Precipitation-Tool/releases/tag/v1.0.13.

USACE and EPA (U.S. Environmental Protection Agency). 2008. "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*." December 2, 2008. http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf.

USACE. 2023. TNWs & Navigable Waters in Los Angeles District. Accessed October 2023. https://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/Navigable-Waterways/

PC ORIGINAL PKG

USDA (U.S. Department of Agriculture). 2023a. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed May 2023. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USDA. 2023b. "State Soil Data Access (SDA) Hydric Soils List." Accessed May 2023. https://www.nrcs.usda.gov/publications/query-by-state.html.

USDA. 2023c. Agricultural Applied Climate Information System (AgACIS). "El Centro 2 SSW." Accessed May 2023. http://agacis.rcc-acis.org/.

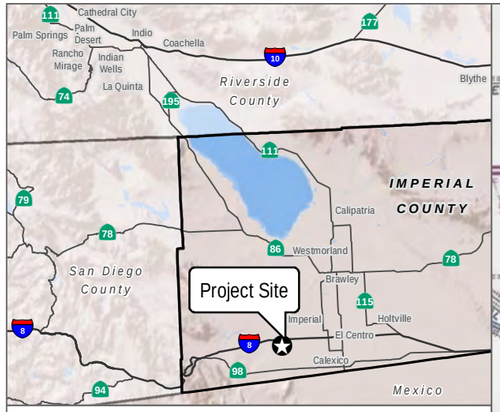
USFWS (U.S. Fish and Wildlife Service). 2023. "National Wetland Inventory" [map]. Accessed May 2023. http://www.fws.gov/data.

PC ORIGINAL PKG

Appendix A
Figures

PC ORIGINAL PKG

PC ORIGINAL PKG



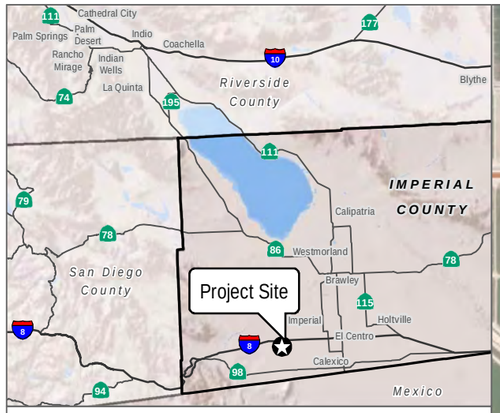
- Project Boundary
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

DUDEK 0 1,000 2,000 Feet

FIGURE 1
Project Location
P# 15207

PC ORIGINAL PKG



- Project Boundary
- Gen-Tie Line
- Alternative Gen-Tie Line
- Project BESS
- Project Substation
- Switchyard

Soils

- 102: BADLAND
- 107: GLENBAR COMPLEX
- 110: HOLTVILLE SILTY CLAY, WET
- 114: IMPERIAL SILTY CLAY, WET
- 115: IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES
- 118: INDIO LOAM, WET
- 119: INDIO-VINT COMPLEX
- 121: MELOLAND FINE SAND
- 122: MELOLAND VERY FINE SANDY LOAM, WET
- 123: MELOLAND AND HOLTVILLE LOAMS, WET
- 126: NILAND FINE SAND
- 130: ROSITAS SAND, 0 TO 2 PERCENT SLOPES
- 132: ROSITAS FINE SAND, 0 TO 2 PERCENT SLOPES
- 135: ROSITAS FINE SAND, WET, 0 TO 2 PERCENT SLOPES
- 142: VINT LOAMY VERY FINE SAND, WET
- 144: VINT AND INDIO VERY FINE SANDY LOAMS, WET
- 145: WATER

SOURCE: Maxar 2023; Imperial County 2023; USDA SSURGO 2023

DUDEK

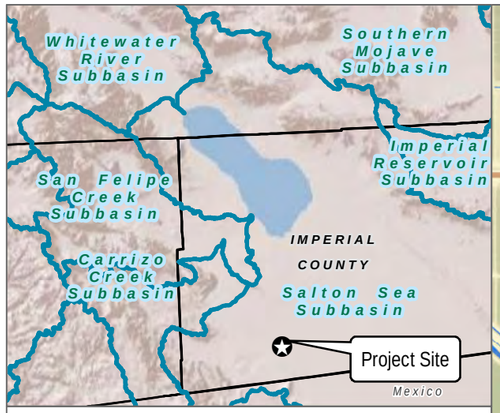
0 1,000 2,000 Feet

FIGURE 2

Soils

P# 15207

PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line
- Subwatershed (HUC 12)
- Subbasin (HUC 8)

Watershed (HUC 10)

- Coyote Wash
- New River

NHD Flowlines

- Stream/River
- Connector

National Wetland Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine
- Lake

SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

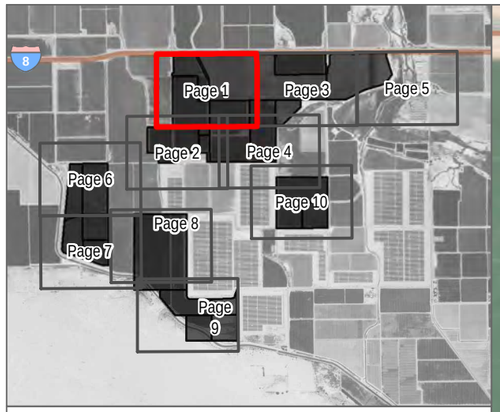
0 1,000 2,000 Feet

FIGURE 3

Hydrology

P# 15207

PC ORIGINAL PKG



Project Boundary
Map Reference Point
Photo Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet

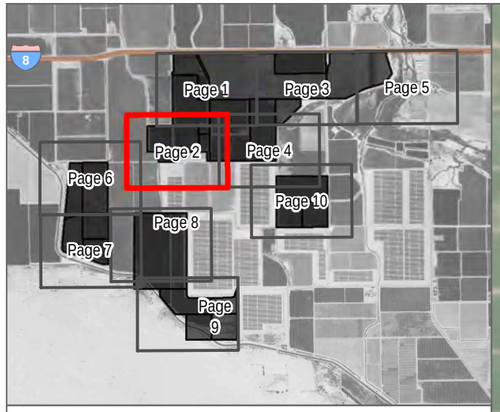
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-1
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



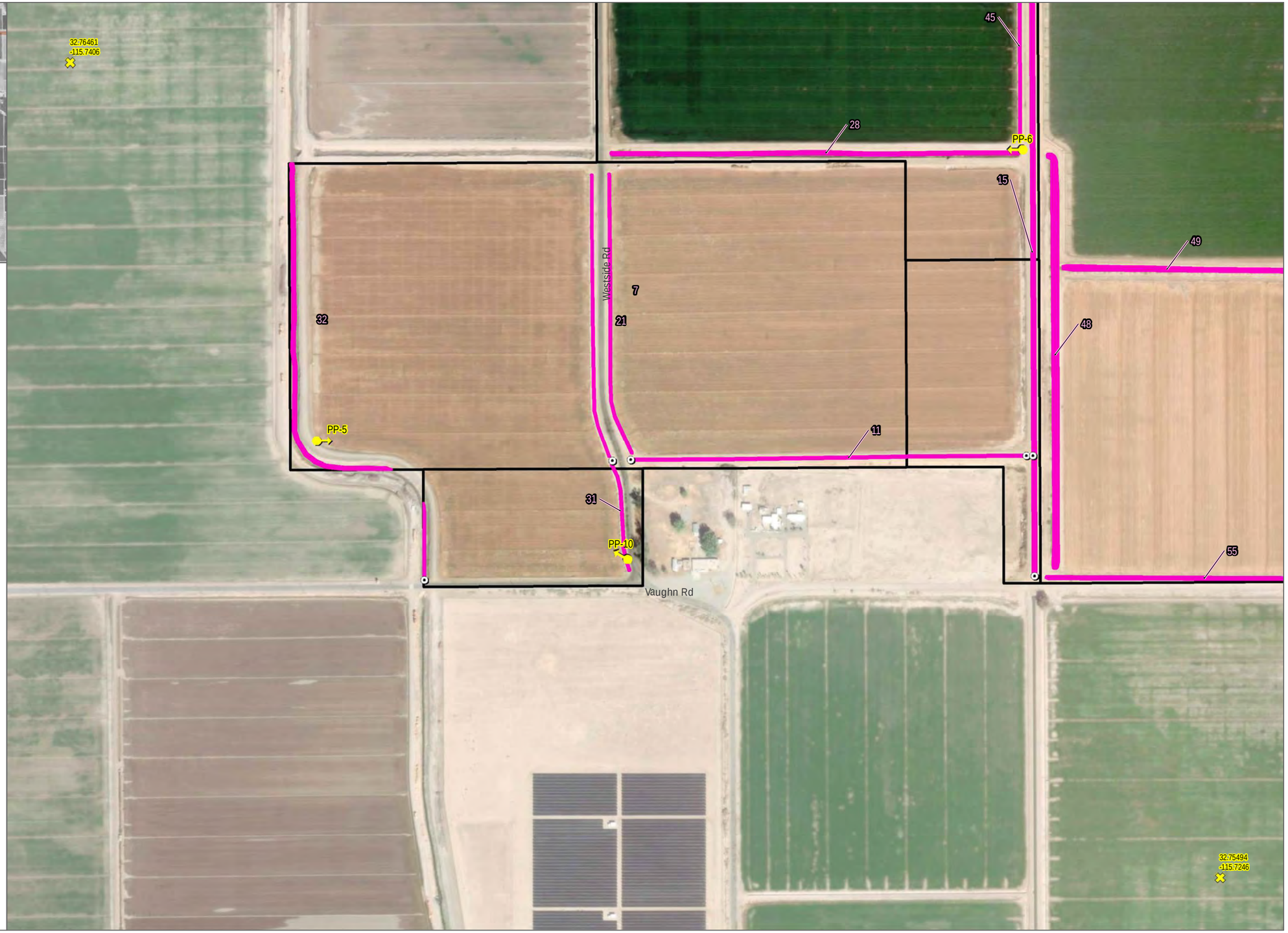
Project Boundary
Map Reference Point
Photo Point
Culvert

Potentially Jurisdictional Aquatic Features

Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-2

Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

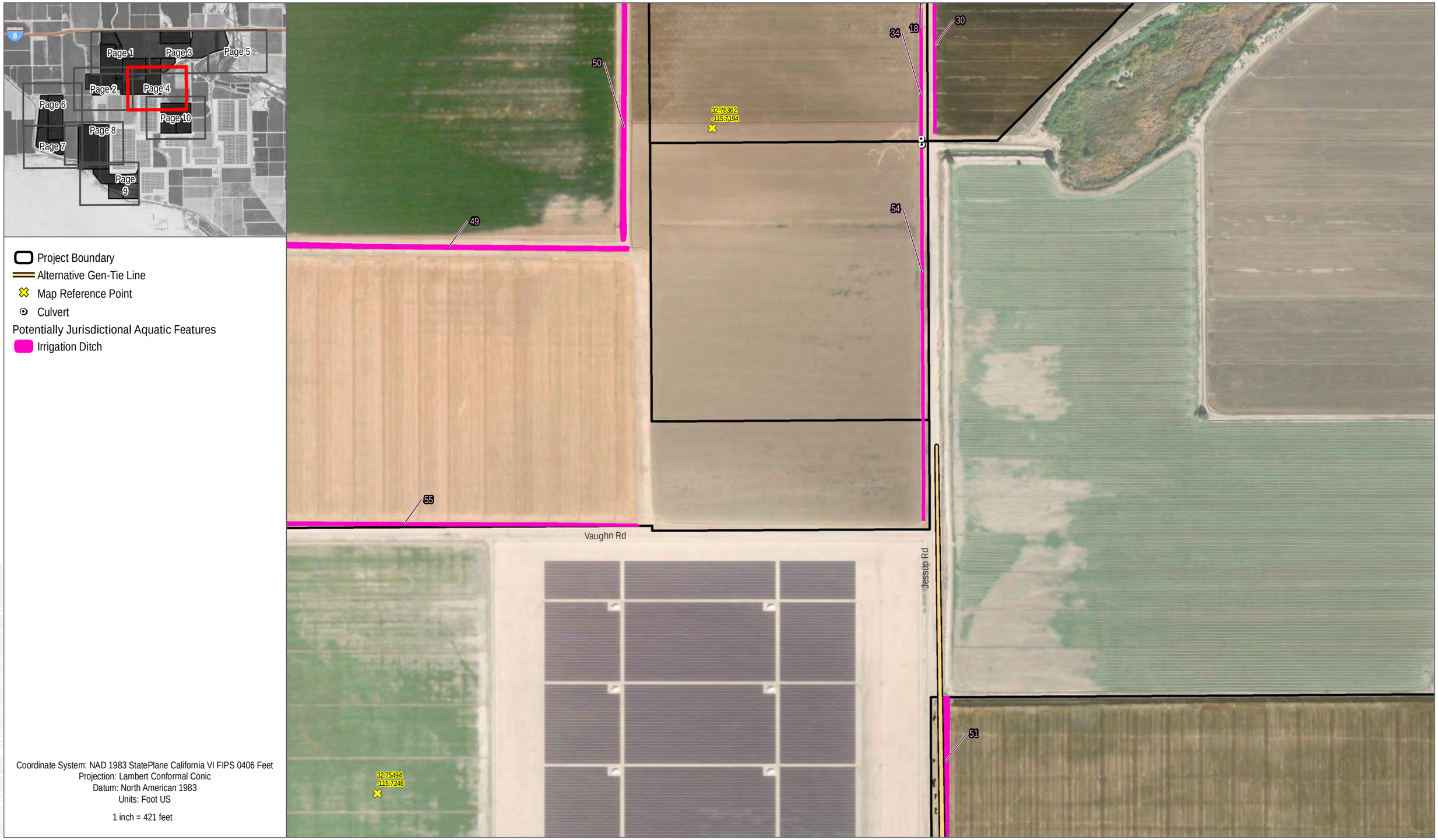
DUDEK 0 200 400 Feet

FIGURE 4-3

Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

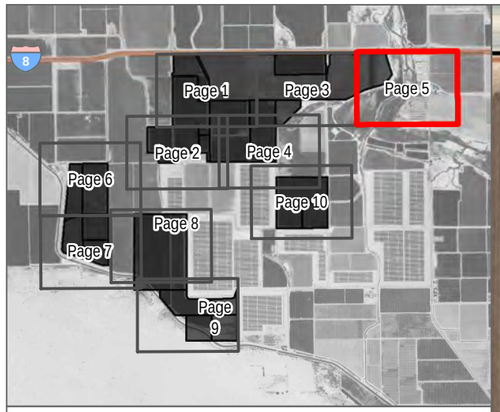
DUDEK

FIGURE 4-4

Aquatic Resources Delineation

P# 15207

PC ORIGINAL PKG



Project Boundary
Map Reference Point
Photo Point

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



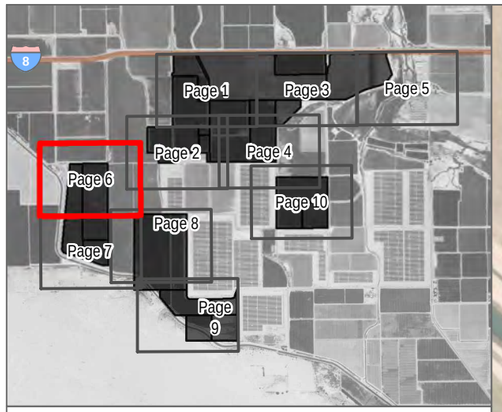
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-5
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG

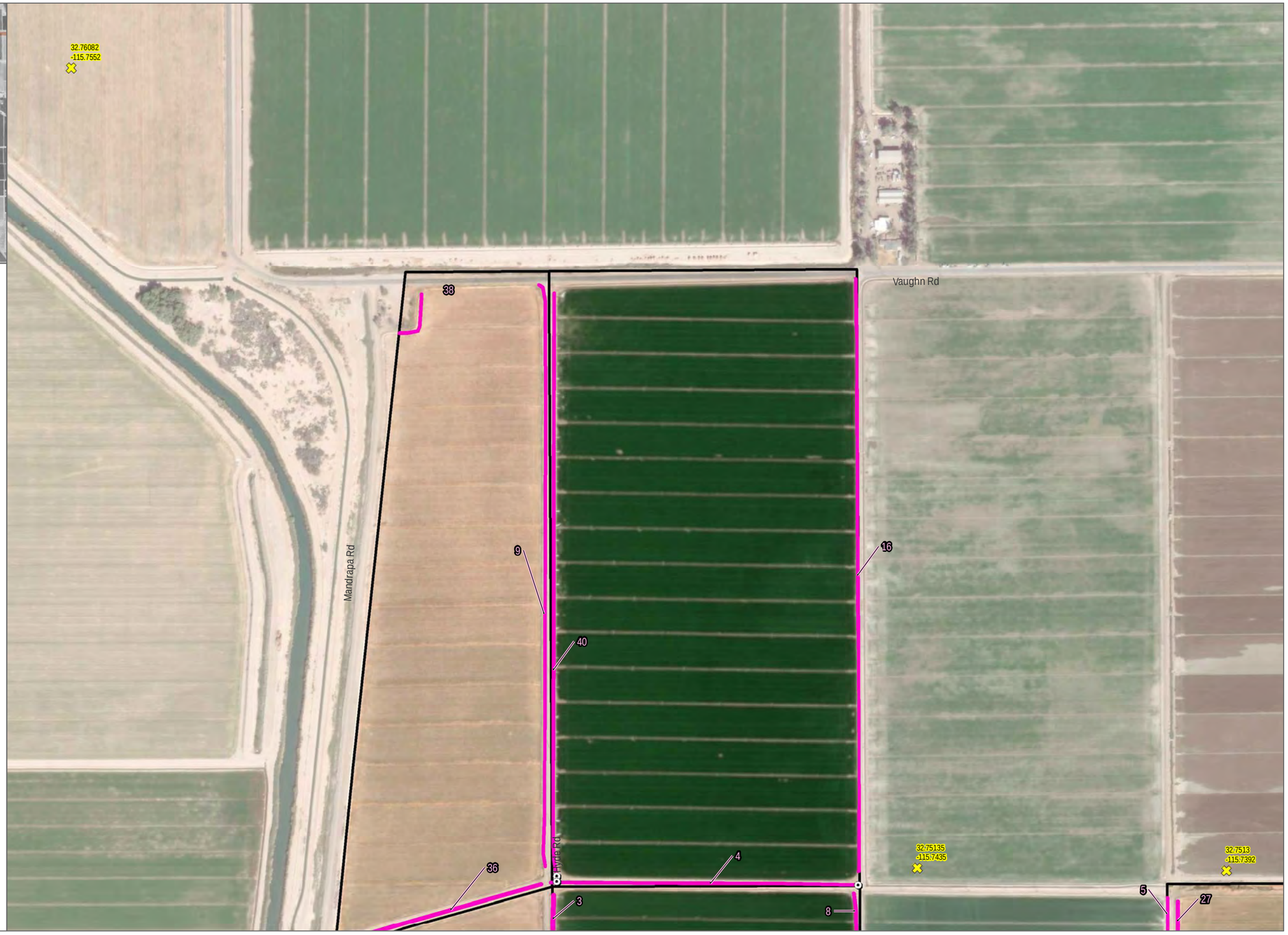


Project Boundary
Map Reference Point
Culvert

Potentially Jurisdictional Aquatic Features
Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



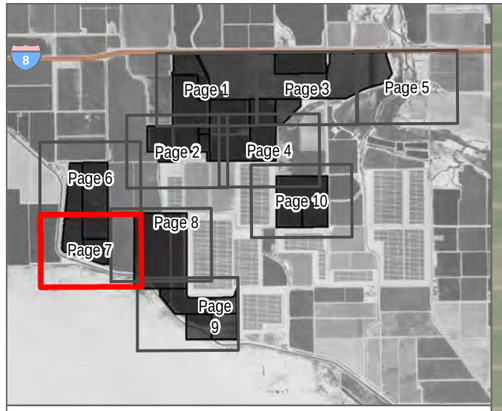
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-6
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



Project Boundary
Map Reference Point
Culvert
Potentially Jurisdictional Aquatic Features
Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



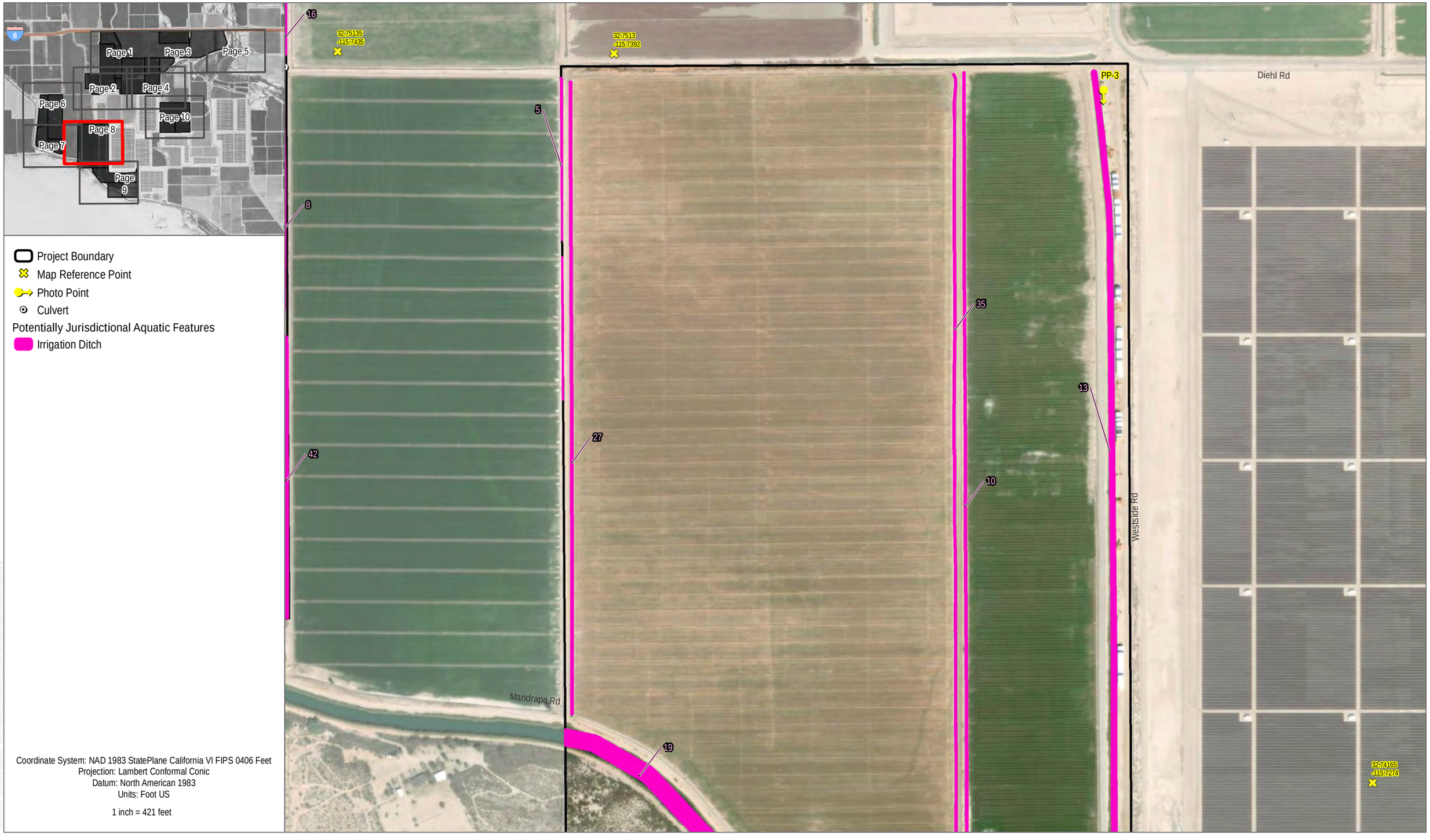
SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-7
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

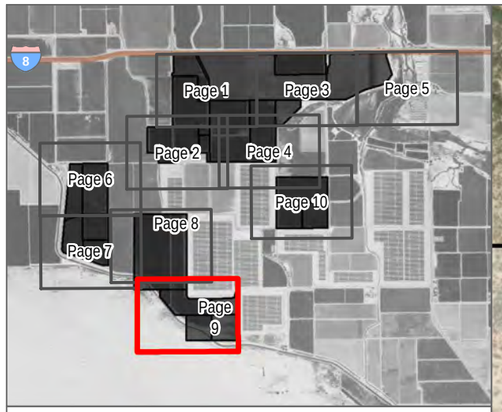
DUDEK 0 200 400 Feet

FIGURE 4-8

Aquatic Resources Delineation

P# 15207

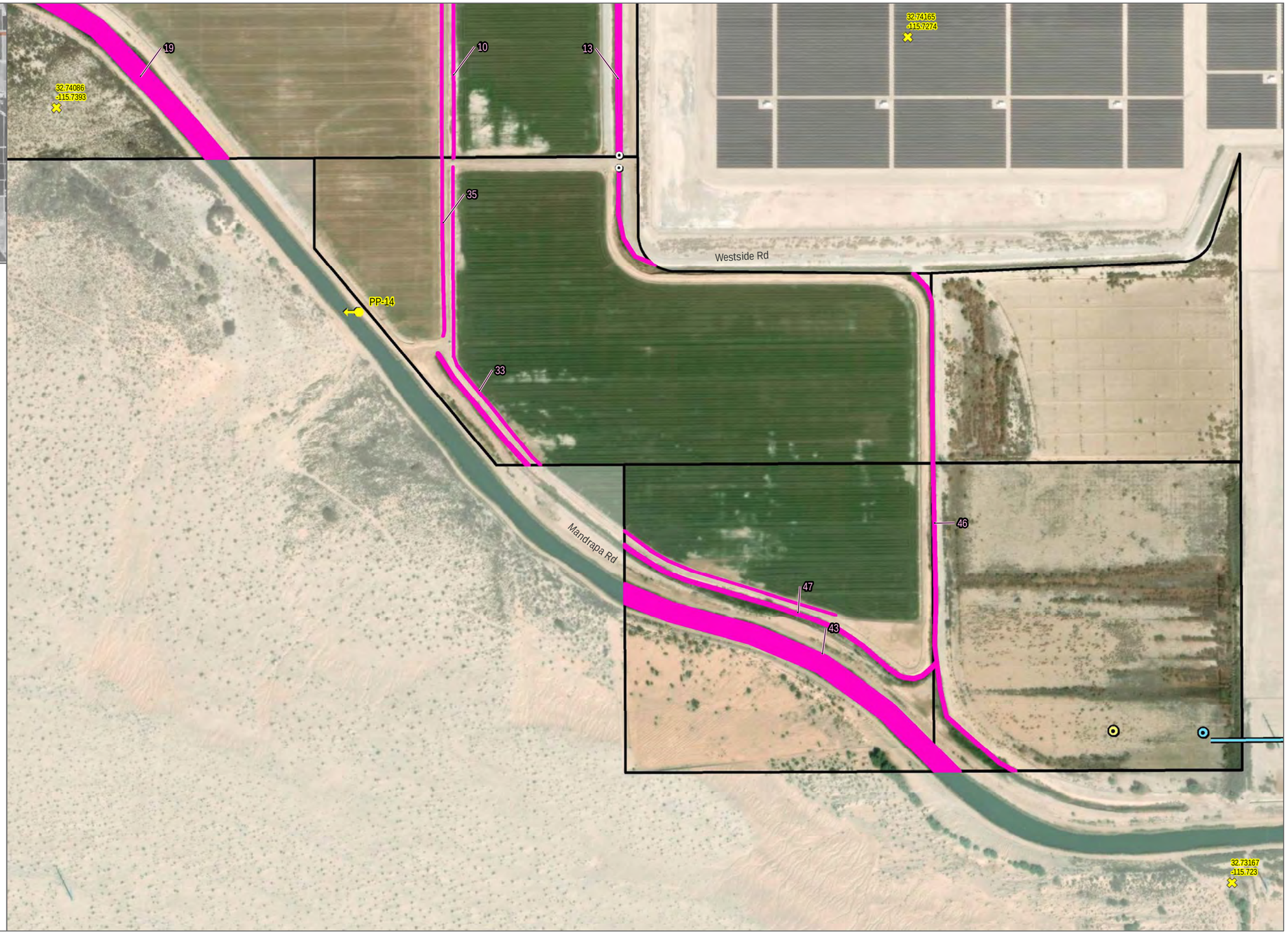
PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Gen-Tie Line
- Map Reference Point
- Photo Point
- Culvert

Potentially Jurisdictional Aquatic Features

- Irrigation Ditch



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet

SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

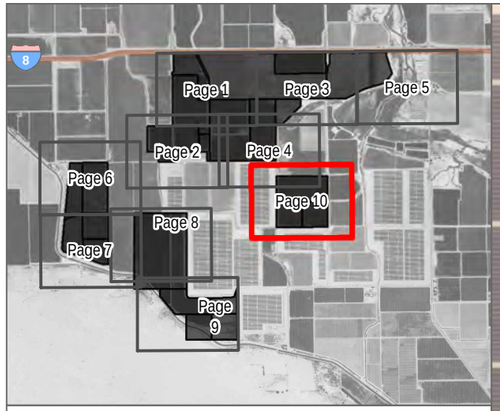
0 200 400 Feet

FIGURE 4-9

Aquatic Resources Delineation

P# 15207

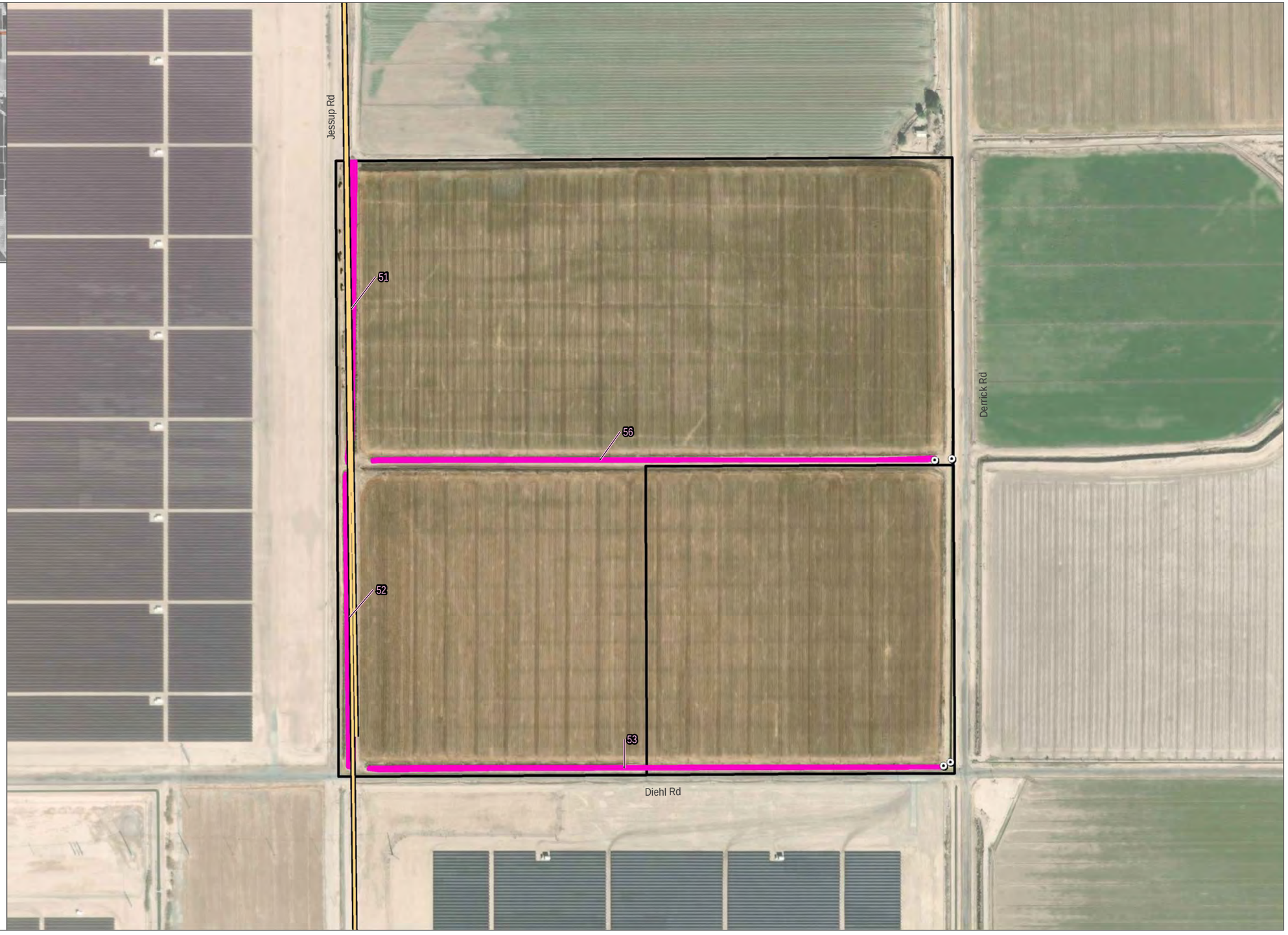
PC ORIGINAL PKG



Project Boundary
Alternative Gen-Tie Line
Culvert
Potentially Jurisdictional Aquatic Features
Irrigation Ditch

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 421 feet



SOURCE: Maxar 2023; Imperial County 2023; USFWS 2023, USGS 2023, FEMA 2023

DUDEK

0 200 400 Feet

FIGURE 4-10
Aquatic Resources Delineation
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-20

Derrick Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-1
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-2
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-24

Derrick Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-3
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

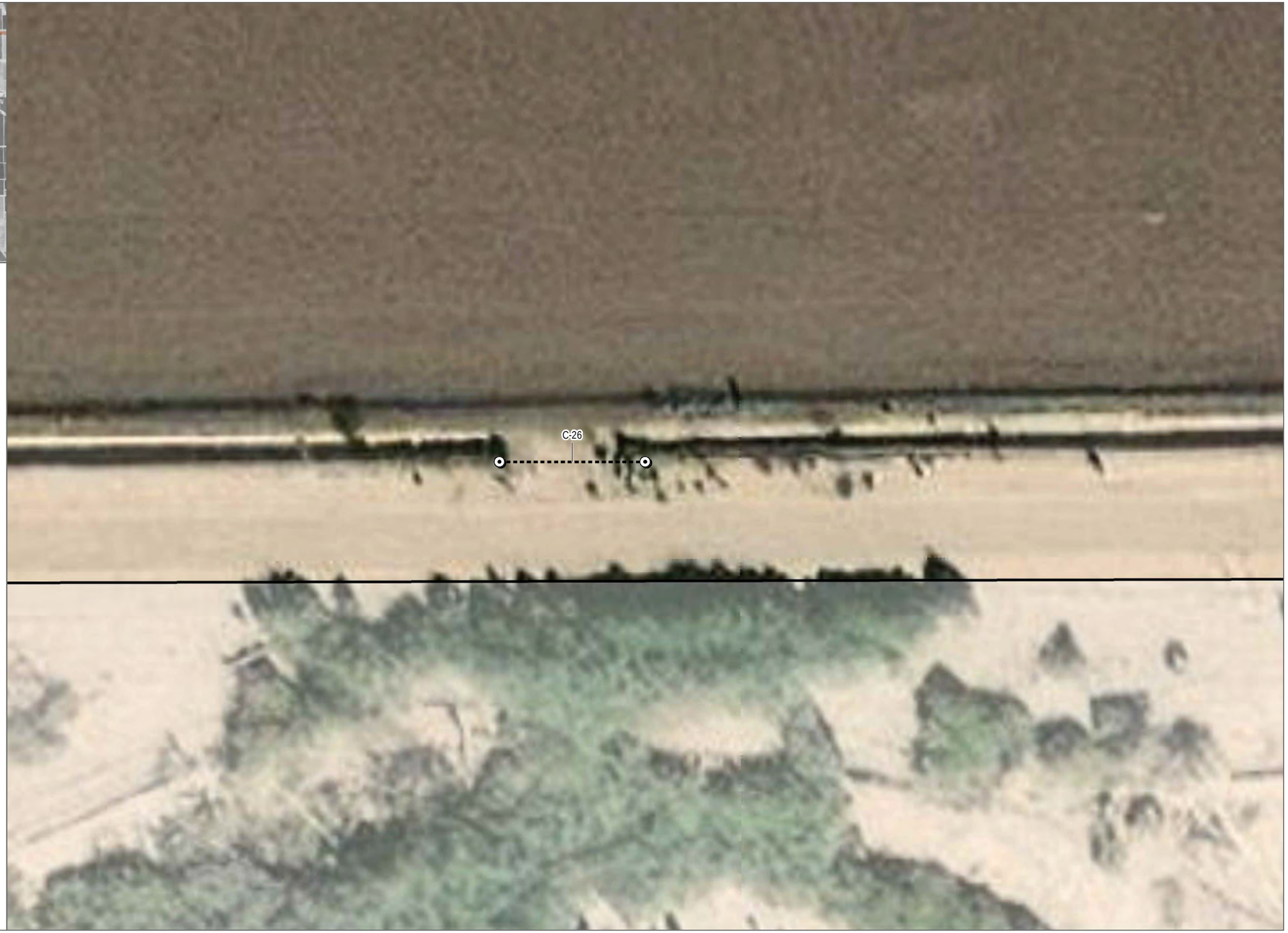
DUDEK 0 10 20 Feet

FIGURE 5-4
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-5
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-19

Jessup Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

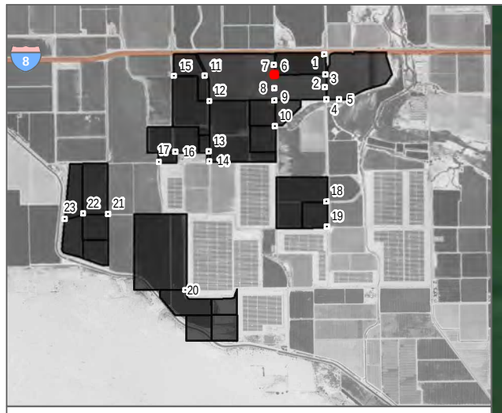
SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-6
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-16
C-18
C-17
Jessup Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-7
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-15

Jessup Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-8
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-9
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-10
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-11

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-11
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-12
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-7

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-13
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-6

Vaughn Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-14
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-10

Westside Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-15
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-8

Westside Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-16
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

C-9

Vaughn Rd

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-17
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-5

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-18
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-4

Diehl Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

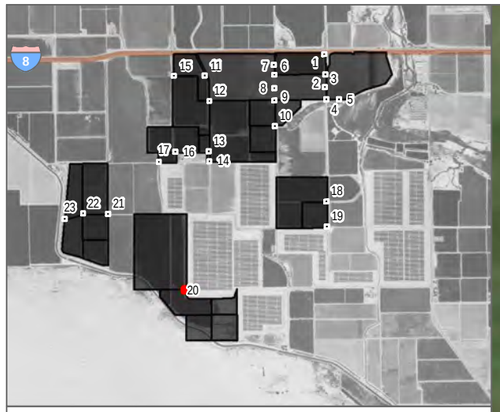
SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-19
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

C-3

Westside Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

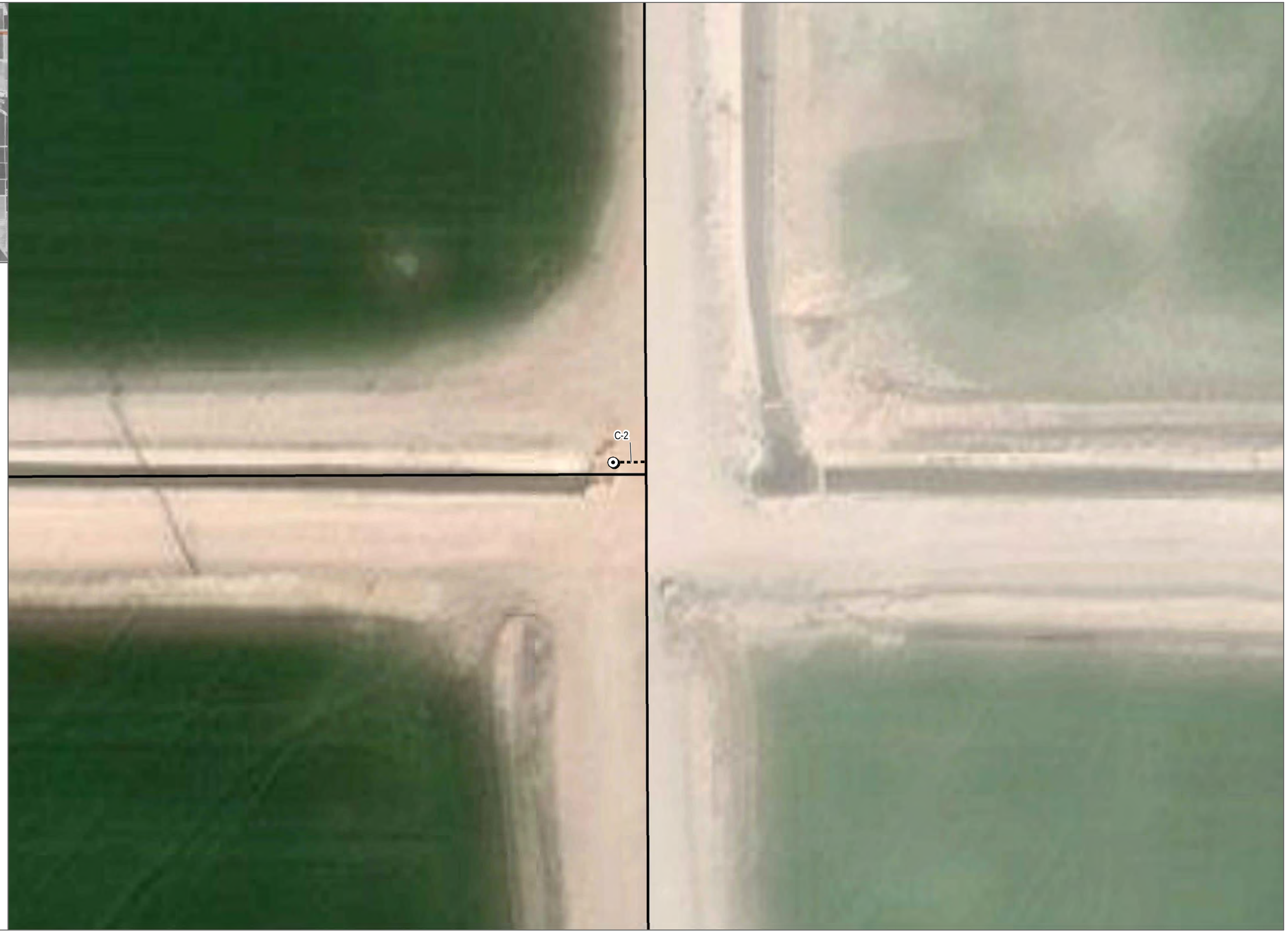
0 10 20 Feet

FIGURE 5-20
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line



Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-21
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary
Culvert Point
Culvert Line

Hyde Rd
C-1

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-22
Culverts
P# 15207

PC ORIGINAL PKG



Project Boundary

Culvert Point

Mandrapa Rd

Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

1 inch = 23 feet

SOURCE: Maxar 2023

DUDEK

0 10 20 Feet

FIGURE 5-23

Culverts

P# 15207

PC ORIGINAL PKG

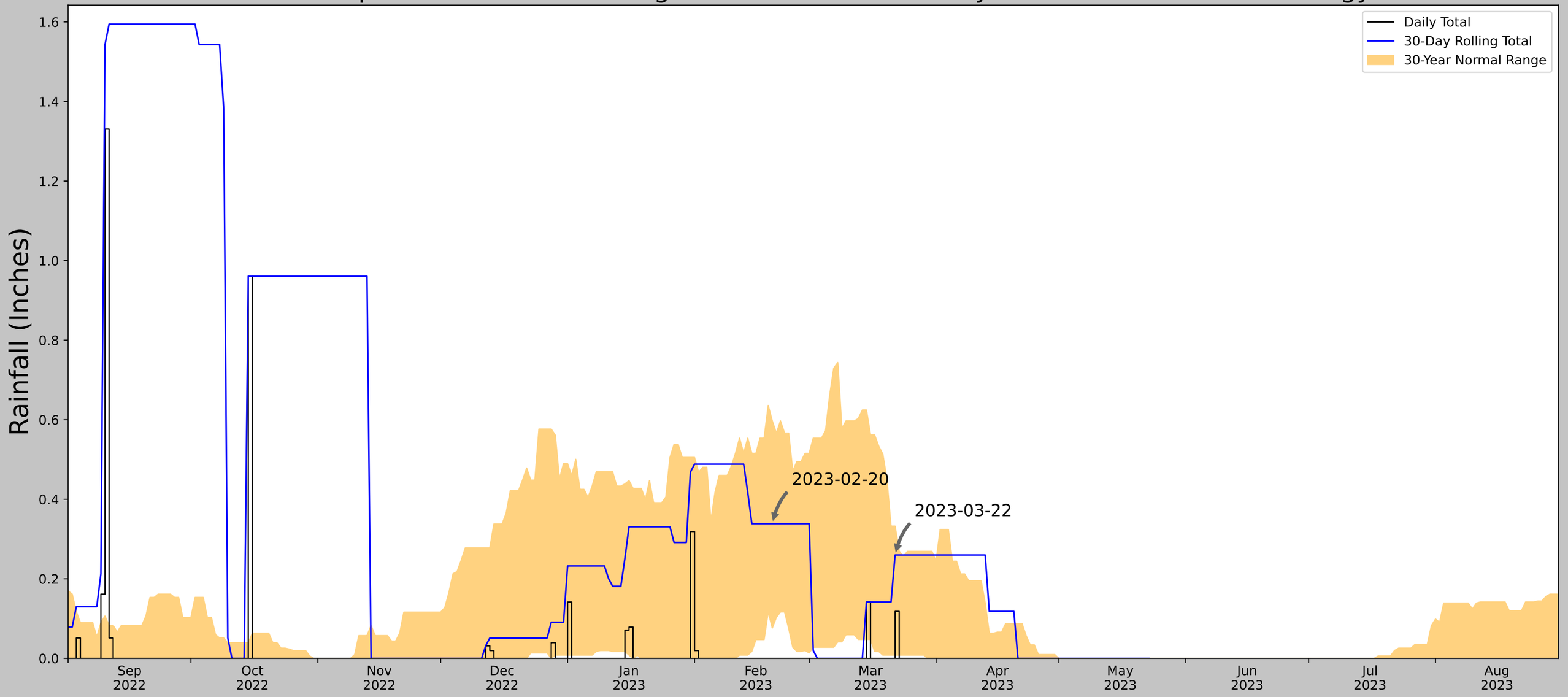
Appendix B

Antecedent Precipitation Tool Output

PC ORIGINAL PKG

PC ORIGINAL PKG

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	32.75669, -115.73002
Observation Date	2023-04-21
Elevation (ft)	-38.319
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-04-21	0.0	0.087402	0.0	Normal	2	3	6
2023-03-22	0.008268	0.332283	0.259843	Normal	2	2	4
2023-02-20	0.076378	0.59685	0.338583	Normal	2	1	2
Result							Normal Conditions - 12

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
EL CENTRO 2 SSW	32.7669, -115.5617	-29.856	9.805	8.463	4.495	10804	86
IMPERIAL CO AP	32.8347, -115.5767	-55.118	4.765	25.262	2.265	390	4
IMPERIAL	32.8489, -115.5667	-63.976	5.673	34.12	2.746	159	0

PC ORIGINAL PKG

PC ORIGINAL PKG

Appendix C
Review Area Photos

PC ORIGINAL PKG

PC ORIGINAL PKG



Photo Point 1. A larger concrete irrigation ditch that runs north/south and eventually connects to the Westside Main Canal (Photo Point 14) and may be jurisdictional.



Photo Point 2: View of a smaller concrete and larger gated concrete ditch running parallel.



Photo Point 3: A typical large earthen ditch in the southern area of the site.



Photo Point 4: View of wetted earthen irrigation ponds adjacent to a smaller concrete ditch that may be jurisdictional, as it receives water from the larger Fig Canal.

PC ORIGINAL PKG



Photo Point 5: View of an earthen running north/south ditch with water. This ditch connects to larger ditches and may be jurisdictional.



Photo Point 6: View of a large earthen ditch running east/west in the central portion of the site. This ditch connects to larger ditches and may be jurisdictional.



Photo Point 7: View of a likely non-jurisdictional seasonal earthen ditch used to deliver water to the adjacent agriculture field.



Photo Point 8: View of a typical concrete irrigation ditch running north/south that delivers water to smaller isolated ditches.

PC ORIGINAL PKG



Photo Point 9: View of a north/south irrigation ditch with a flooded active agricultural area to the right.



Photo Point 10: A wetted concrete irrigation ditch. This ditch runs north/south for a short distance adjacent to the agriculture area it conveys water to. This ditch is closed and likely non-jurisdictional.



Photo Point 11: A view of a small wetted, seasonal earthen ditch that is likely non-jurisdictional.



Photo Point 12: View of a dry, seasonal earthen irrigation ditch that is likely non-jurisdictional, with Interstate Highway 8 in the background.

PC ORIGINAL PKG



Photo Point 13: View of the larger Fern Canal that runs north/south through the northwestern area of the site, with active agriculture seen to the right. Likely jurisdictional, with eventual connectivity to the Westside Main Canal (Photo Point 14).



Photo Point 14: View of the Westside Main Canal that borders the southwestern portion of the project area.

PC ORIGINAL PKG

Appendix D
ORM Upload Spreadsheet

PC ORIGINAL PKG

PC ORIGINAL PKG

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
4	CALIFORNIA	R4SB		Area	0.15090373	ACRE	A3.TRIB-404	32.75117493	-115.74649048	
5	CALIFORNIA	R4SB		Area	0.05571039	ACRE	A3.TRIB-405	32.74984741	-115.74002838	
6	CALIFORNIA	R4SB		Area	0.36943884	ACRE	A3.TRIB-406	32.76901245	-115.70755768	
7	CALIFORNIA	R4SB		Area	0.16774736	ACRE	A3.TRIB-407	32.76159286	-115.73307800	
10	CALIFORNIA	R4SB		Area	0.54075873	ACRE	A3.TRIB-408	32.74563980	-115.73376465	
11	CALIFORNIA	R4SB		Area	0.27419883	ACRE	A3.TRIB-409	32.75990295	-115.73007965	
12	CALIFORNIA	R4SB		Area	0.0706309	ACRE	A3.TRIB-410	32.76803970	-115.70771027	
13	CALIFORNIA	R4SB		Area	1.80331326	ACRE	A3.TRIB-411	32.74565506	-115.73149872	
14	CALIFORNIA	R4SB		Area	0.22094966	ACRE	A3.TRIB-412	32.77072144	-115.73046875	
15	CALIFORNIA	R4SB		Area	3.08433604	ACRE	A3.TRIB-413	32.76525497	-115.72740173	
17	CALIFORNIA	R4SB		Area	0.07731558	ACRE	A3.TRIB-414	32.77145004	-115.71623993	
18	CALIFORNIA	R4SB		Area	0.09282766	ACRE	A3.TRIB-415	32.76615143	-115.71616364	
19	CALIFORNIA	R4SB		Area	2.06556273	ACRE	A3.TRIB-416	32.74142075	-115.73843384	
20	CALIFORNIA	R4SB		Area	0.06613179	ACRE	A3.TRIB-417	32.76714325	-115.70637512	
21	CALIFORNIA	R4SB		Area	0.14004992	ACRE	A3.TRIB-418	32.76158142	-115.73332977	
22	CALIFORNIA	R4SB		Area	0.03690025	ACRE	A3.TRIB-419	32.76715088	-115.70470428	
24	CALIFORNIA	R4SB		Area	0.11301442	ACRE	A3.TRIB-420	32.77071762	-115.71392822	
25	CALIFORNIA	R4SB		Area	0.09008852	ACRE	A3.TRIB-421	32.76977158	-115.71617126	
26	CALIFORNIA	R4SB		Area	0.11910388	ACRE	A3.TRIB-422	32.77070618	-115.70976257	
27	CALIFORNIA	R4SB		Area	0.48791948	ACRE	A3.TRIB-423	32.74676895	-115.73989868	
28	CALIFORNIA	R4SB		Area	0.40071779	ACRE	A3.TRIB-424	32.76349258	-115.73024750	
30	CALIFORNIA	R4SB		Area	0.17483258	ACRE	A3.TRIB-425	32.76528931	-115.71595764	
31	CALIFORNIA	R4SB		Area	0.0637867	ACRE	A3.TRIB-426	32.75922012	-115.73296356	
32	CALIFORNIA	R4SB		Area	0.98165417	ACRE	A3.TRIB-427	32.76105118	-115.73720551	
33	CALIFORNIA	R4SB		Area	0.44023177	ACRE	A3.TRIB-428	32.73704529	-115.73208618	
34	CALIFORNIA	R4SB		Area	0.08514063	ACRE	A3.TRIB-429	32.76431274	-115.71617126	
36	CALIFORNIA	R4SB		Area	0.14742877	ACRE	A3.TRIB-430	32.75083542	-115.75018311	
37	CALIFORNIA	R4SB		Area	0.08570509	ACRE	A3.TRIB-431	32.76797104	-115.71617889	
39	CALIFORNIA	R4SB		Area	0.08272728	ACRE	A3.TRIB-432	32.76976013	-115.70769501	
40	CALIFORNIA	R4SB		Area	0.28684011	ACRE	A3.TRIB-433	32.75470734	-115.74855804	
41	CALIFORNIA	R4SB		Area	0.22915435	ACRE	A3.TRIB-434	32.77227402	-115.70764923	
43	CALIFORNIA	R4SB		Area	2.95456958	ACRE	A3.TRIB-435	32.73423767	-115.72904968	
44	CALIFORNIA	R4SB		Area	0.08413167	ACRE	A3.TRIB-436	32.77288437	-115.71623993	
45	CALIFORNIA	R4SB		Area	0.34906125	ACRE	A3.TRIB-437	32.76718903	-115.72740173	
46	CALIFORNIA	R4SB		Area	1.12015676	ACRE	A3.TRIB-438	32.73638535	-115.72779083	
47	CALIFORNIA	R4SB		Area	1.16745198	ACRE	A3.TRIB-439	32.73555374	-115.73044586	
48	CALIFORNIA	R4SB		Area	0.99406278	ACRE	A3.TRIB-440	32.76112747	-115.72691345	
49	CALIFORNIA	R4SB		Area	0.67652631	ACRE	A3.TRIB-441	32.76208496	-115.72398376	
50	CALIFORNIA	R4SB		Area	0.59860855	ACRE	A3.TRIB-442	32.76436234	-115.72077179	
51	CALIFORNIA	R4SB		Area	0.81362903	ACRE	A3.TRIB-443	32.75447083	-115.71585846	
52	CALIFORNIA	R4SB		Area	1.01924801	ACRE	A3.TRIB-444	32.75080109	-115.71591187	
53	CALIFORNIA	R4SB		Area	0.65959144	ACRE	A3.TRIB-445	32.74898911	-115.71202087	
54	CALIFORNIA	R4SB		Area	0.22497077	ACRE	A3.TRIB-446	32.76093292	-115.71616364	
55	CALIFORNIA	R4SB		Area	0.43807167	ACRE	A3.TRIB-447	32.75845337	-115.72405243	
56	CALIFORNIA	R4SB		Area	0.63632029	ACRE	A3.TRIB-448	32.75261307	-115.71192169	
1	CALIFORNIA	R6		Area	0.32591072	ACRE	B3-EXCL-DITCH	32.77038574	-115.72080231	
2	CALIFORNIA	R7		Area	0.18516058	ACRE	B3-EXCL-DITCH	32.74793243	-115.74859619	
3	CALIFORNIA	R8		Area	0.16710001	ACRE	B3-EXCL-DITCH	32.75005341	-115.74858856	
8	CALIFORNIA	R9		Area	0.27882296	ACRE	B3-EXCL-DITCH	32.74771881	-115.74441528	
9	CALIFORNIA	R10		Area	0.23001304	ACRE	B3-EXCL-DITCH	32.75481796	-115.74868011	
16	CALIFORNIA	R11		Area	0.21795174	ACRE	B3-EXCL-DITCH	32.75508118	-115.74432373	
23	CALIFORNIA	R12		Area	0.1515706	ACRE	B3-EXCL-DITCH	32.74606705	-115.74860382	
29	CALIFORNIA	R13		Area	0.09282275	ACRE	B3-EXCL-DITCH	32.74477386	-115.74791718	
35	CALIFORNIA	R14		Area	0.53764641	ACRE	B3-EXCL-DITCH	32.74458313	-115.73393250	
38	CALIFORNIA	R15		Area	0.02234701	ACRE	B3-EXCL-DITCH	32.75783539	-115.75045776	
42	CALIFORNIA	R16		Area	0.55508375	ACRE	B3-EXCL-DITCH	32.74573135	-115.74435425	
C-1	CALIFORNIA	R4SB		Area	0.0011209	ACRE	A3.TRIB-432	32.75123596	-115.74853516	
C-2	CALIFORNIA	R4SB		Area	0.00034289	ACRE	A3.TRIB-432	32.75114822	-115.74433136	
C-3	CALIFORNIA	R4SB		Area	0.00242298	ACRE	A3.TRIB-432	32.74019623	-115.73146820	
C-4	CALIFORNIA	R4SB		Area	0.00154161	ACRE	A3.TRIB-432	32.74901199	-115.70760345	
C-5	CALIFORNIA	R4SB		Area	0.00336925	ACRE	A3.TRIB-432	32.75259781	-115.70762634	
C-6	CALIFORNIA	R4SB		Area	0.00141973	ACRE	A3.TRIB-432	32.75845337	-115.72721100	
C-7	CALIFORNIA	R4SB		Area	0.00124447	ACRE	A3.TRIB-432	32.75991440	-115.72727203	
C-8	CALIFORNIA	R4SB		Area	0.00356925	ACRE	A3.TRIB-432	32.75988770	-115.73295593	
C-9	CALIFORNIA	R4SB		Area	0.00135676	ACRE	A3.TRIB-432	32.75844574	-115.73571014	
C-10	CALIFORNIA	R4SB		Area	0.00316738	ACRE	A3.TRIB-432	32.77074051	-115.73316956	
C-11	CALIFORNIA	R4SB		Area	0.00147046	ACRE	A3.TRIB-432	32.77076721	-115.72783661	
C-12	CALIFORNIA	R4SB		Area	0.00157331	ACRE	A3.TRIB-432	32.76708221	-115.72711945	
C-13	CALIFORNIA	R4SB		Area	0.00122613	ACRE	A3.TRIB-432	32.76343155	-115.71616364	
C-14	CALIFORNIA	R4SB		Area	0.00090872	ACRE	A3.TRIB-432	32.76709366	-115.71616364	
C-15	CALIFORNIA	R4SB		Area	0.00108872	ACRE	A3.TRIB-432	32.76884460	-115.71617126	

Note: Acres for aquatic resources described in this datasheet, except for NWW-ICR-15, include mapping up to the top of bank.

PC ORIGINAL PKG

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
C-16	CALIFORNIA	R4SB		Area	0.00209973	ACRE	A3.TRIB-432	32.77076340	-115.71617889	
C-17	CALIFORNIA	R4SB		Area	0.00127058	ACRE	A3.TRIB-432	32.77068329	-115.71613312	
C-18	CALIFORNIA	R4SB		Area	0.00312333	ACRE	A3.TRIB-432	32.77072144	-115.71601105	
C-19	CALIFORNIA	R4SB		Area	0.00134328	ACRE	A3.TRIB-432	32.77213287	-115.71623230	
C-20	CALIFORNIA	R4SB		Area	0.0035386	ACRE	A3.TRIB-432	32.77368546	-115.70779419	
C-21	CALIFORNIA	R4SB		Area	0.00147716	ACRE	A3.TRIB-432	32.77068710	-115.70760345	
C-22	CALIFORNIA	R4SB		Area	0.00157372	ACRE	A3.TRIB-432	32.77058411	-115.70760345	
C-23	CALIFORNIA	R4SB		Area	0.00134542	ACRE	A3.TRIB-432	32.77079391	-115.70759583	
C-24	CALIFORNIA	R4SB		Area	0.00095271	ACRE	A3.TRIB-432	32.76890182	-115.70769501	
C-25	CALIFORNIA	R4SB		Area	0.00452386	ACRE	A3.TRIB-432	32.76714706	-115.70744324	
C-26	CALIFORNIA	R4SB		Area	0.0015326	ACRE	A3.TRIB-432	32.76713181	-115.70538330	

Note: Acres for aquatic resources described in this datasheet, except for NWW-ICR-15, include mapping up to the top of bank.

PC ORIGINAL PKG

Cultural Resources Inventory Report

Big Rock 2 Cluster Solar and Storage Project,

Imperial County, California

MAY 2024

Lead Agency:

IMPERIAL COUNTY
801 Main Street
El Centro, California 92243

Project Proponent:

90FI 8me LLC
4370 Town Center Boulevard, Suite 110
El Dorado Hills, California 95762

Prepared by:

Angela Pham, MA, RPA
Roshanne Bakhtiary, MA
Keshia Montifolca, MA, RPA
Micah Hale, PhD, RPA

DUDEK

605 Third Street
Encinitas, California 92024

PC ORIGINAL PKG

This report was prepared by Dudek Archaeologists Angela Pham, MA, RPA; Roshanne Bakhtiary, MA; Keshia Montifolca MA, RPA; and Micah Hale, PhD, RPA, who meet the Secretary of the Interior's professional qualifications standards for archaeology. This report is intended for the exclusive use of the Client and its representatives. It contains professional conclusions and recommendations concerning the potential for project-related impacts to cultural resources based on the results of Dudek's investigation. It should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

National Archaeological Database (NADB) Information iii

Management Summary v

1 Introduction 1

2 Project Description and Location 5
2.1 Regulatory Context 5
2.1.1 State Level Regulations 5
2.1.2 Native American Historic Cultural Sites (California Public Resources Code section 5097 et seq.) 6
2.1.3 California Native American Graves Protection and Repatriation Act 6
2.1.4 California Environmental Quality Act 6
2.1.5 California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 7
2.1.6 Assembly Bill 52 8
2.1.7 Traditional Cultural Properties 8
2.1.8 County of Imperial 9
2.2 Project Personnel 9

3 Setting 11
3.1 Natural Setting 11
3.2 Cultural Setting 11
3.2.1 Late Pleistocene 11
3.2.2 Terminal Pleistocene-Very Early Holocene 12
3.2.3 Mid-Holocene 12
3.2.4 Late Holocene 13
3.2.5 Ethnohistoric Period 14
3.2.6 Historic Period 14

4 Methods 19
4.1 South Coastal Information Center Records Search 19
4.2 Native American Consultation 19
4.3 Pedestrian Survey 19

5 Results 23
5.1 South Coastal Information Center Records Search 23
5.1.1 Previously Conducted Cultural Resources Studies 23
5.1.2 Previously Recorded Cultural Resources 24

PC ORIGINAL PKG

5.1.3 Historic Archival Research 27
5.2 Survey Results 28
6 Summary and Recommendations 33
7 References 35

TABLES

1. Previous Cultural Resources Studies within the Project area 23
2 Previously Recorded Cultural Resources Within One-Mile of the Project area 24

FIGURES

1 Project Location 3
2 Study Area 21
3 Example of poor ground visibility (0-30%). Photo taken from northeast corner of APN 051-300-037, view facing south. 29
4 Example of moderate ground visibility (40-60%). Photo taken from northern boundary of APN 051-270-036, view facing south. 30
5 Example of excellent ground visibility (70-100%). Photo taken from northeast corner of APN 051-280-054, view facing south. 31

APPENDICES

A SCIC Records Search Results (Confidential)
B Cultural Resources Overview Map (Confidential)
C Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project
D Paleontological Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project

PC ORIGINAL PKG

National Archaeological Database (NADB) Information

Authors:	Angela Pham, MA, RPA; Roshanne Bakhtiary, MA; Keshia Montifolca, MA, RPA; Micah Hale, PhD, RPA
Firm:	Dudek
Project Proponent:	90FI 8me LLC
Report Date:	April 2024
Report Title:	Cultural Resources Inventory Report for the Big Rock Cluster Solar and Storage Project, Imperial County, California
Type of Study:	Phase I Cultural Resources Inventory
Resources:	None
USGS Quads:	Seeley, Plaster City, and Mount Signal, California USGS 7.5 Minute Series Quadrangles, Township 16S, Range 12E; Sections 14, 15, 16, 20, 21, 22, 23, 26, 27, 28, 29, 33, 34
Acreage:	1,849-acres
Permit Numbers:	N/A
Keywords:	positive, inventory, cultural resources, solar, imperial county

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Management Summary

Dudek conducted a Phase I cultural resources inventory study for the Big Rock 2 Energy Project (Project). The Project is located in unincorporated Imperial County, California, south of Interstate Highway 8 and west of the town of El Centro, California. The Project proposes to develop a PV solar energy generation and battery energy storage system (BESS) facility on approximately 1,849-acres of agricultural land. The entire 1,849-acre area will be developed and disturbed by Project implementation. The cultural resources Project area (Project area) is composed of the following 24 Assessor's Parcel Numbers (APNs): 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300-035, 051-300-36, 051-300-037, 051-310-027, 051-310-028,051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350-007, and 051-350-008 (Figure 1, Project Location). This study included a records search, an archival information and literature review, a cultural resources pedestrian survey of the 1,849-acre Project area, and the preparation of this cultural resources technical report.

This study was completed under the provisions of local regulations as well as the California Environmental Quality Act (CEQA). Public Resources Code (PRC) Section 5024.1, Title 14 California Code of Regulations (CCR) Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1 were also used as basic guidelines for this cultural resources study (Governor's Office of Planning and Research 1998). PRC Section 5024.1 requires the identification and evaluation of cultural resources to determine their eligibility for the California Register of Historical Resources (CRHR).

Dudek conducted a records search of the proposed Project area and surrounding one-mile radius at the South Coastal Information Center (SCIC). The records search identified seven (7) previously recorded cultural resources within the Project area (P-13-003403, P-13-012688, P-13-012689, P-13-012693, P-13-013758, P-13-014263, and P-13-014975), and eighteen (18) previously recorded cultural resources within the one-mile radius. The previously recorded cultural resources within the Project area are all considered historic-era built environment resources and include a wagon road, four (4) canal/water conveyance systems, and two (2) single-family residences. All built environment resources identified as part of this Project are addressed in the *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California*, prepared by Dudek in 2024 (Brisentine et al. 2024). In addition to a discussion of the previously recorded cultural resources within the Project area, the built environment report also discusses five (5) additional historic-era built environment resources (Map ID 3, Map ID 8, Map ID 17, Map ID 18, and Map ID 19) that were identified during the built environment pedestrian survey for the Project.

No prehistoric or historic-era archaeological resources were identified as part of the cultural resources pedestrian survey in support of this Project. A review of historic topographic maps and historic aerial imagery indicate the Project area and the surrounding properties were used primarily for agricultural and residential purposes throughout recorded history.

Dudek's Phase I inventory of the Project area suggests that there is a moderate potential for the inadvertent discovery of cultural resources during Project implementation. Based on available archival information, the presence of archaeological resources adjacent to the Project area, and in consideration of the topography, and the Project's vicinity to the New River; there is a moderate potential for the inadvertent discovery of archaeological resources during earth moving activities that will occur within the agricultural fields. Dudek recommends full time archaeological and Native American monitoring during initial ground disturbance for the

PC ORIGINAL PKG

Project. If disturbed sediments (e.g., fill) or other sediments and formations are identified that do not have the potential to contain archaeological resources, then monitoring may be reduced or terminated.

The Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California (Brisentine et al. 2024) determined that the Project would have no impact on historical resources as defined by CEQA and no further consideration of historic-era built environment resources is necessary prior to Project implementation (Brisentine et al. 2024). In addition, paleontological resources were evaluated for the Project and addressed in the Paleontological Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California (Siren and Williams 2024) was prepared by Dudek for the Project. The paleontological resources survey did not observe in situ fossils within the Project area, however, the Project area is underlain by ancient Lake Cahuilla sediments that have high paleontological resource sensitivity or potential when not disturbed by agricultural activities. Surficial sediments that have been disturbed by agricultural activities or other man-made disturbances have low paleontological resource sensitivity or potential and do not require paleontological monitoring. A paleontological monitoring program was recommended during grading within previously undisturbed sedimentary deposits within the Project area (Siren and Williams 2024). Appended to this cultural resources inventory study are the Project's Built Environment Inventory and Evaluation Report (Appendix C) and the Paleontological Resources Inventory Report (Appendix D).

PC ORIGINAL PKG

1 Introduction

Dudek conducted a Phase I cultural resources inventory study for the Big Rock 2 Cluster Solar and Storage Project (Project). The Project is located in unincorporated Imperial County, California, south of Interstate Highway 8 and west of the town of El Centro, California. The Project proposes to develop a PV solar energy generation and battery energy storage system (BESS) facility on approximately 1,849-acres of agricultural land. The entire 1,826-acre area will be developed and disturbed by Project implementation. The cultural resources Project area (Project area) is composed of the following 24 Assessor's Parcel Numbers (APNs): 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300-035, 051-300-036, 051-300-037, 051-310-027, 051-310-028, 051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350-007, and 051-350-008 (Figure 1, Project Location). This study included a records search, an archival information and literature review, a cultural resources pedestrian survey of the 1,849-acre Project area, and the preparation of this cultural resources technical report.

This study was completed under the provisions of local regulations as well as the California Environmental Quality Act (CEQA). Public Resources Code (PRC) Section 5024.1, Title 14 California Code of Regulations (CCR) Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1 were also used as basic guidelines for these cultural resources study (Governor's Office of Planning and Research 1998). PRC Section 5024.1 requires the identification and evaluation of cultural resources to determine their eligibility for the California Register of Historical Resources (CRHR).

Dudek conducted a records search of the proposed Project area and surrounding one-mile radius at the South Coastal Information Center (SCIC). The records search identified seven (7) previously recorded cultural resources within the Project area (P-13-003403, P-13-012688, P-13-012689, P-13-012693, P-13-013758, P-13-014263, and P-13-014975), and eighteen (18) previously recorded cultural resources within the one-mile radius. The previously recorded cultural resources within the Project area are all considered historic-era built environment resources and include a wagon road, four (4) canal/water conveyance systems, and two (2) single-family residences. All built environment resources identified as part of this Project are addressed in the *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California*, prepared by Dudek in 2024 (Brisentine et al. 2024). In addition to a discussion of the previously recorded cultural resources within the Project area, the built environment report also discusses five (5) additional historic-era built environment resources (Map ID 3, Map ID 8, Map ID 17, Map ID 18, and Map ID 19) that were identified during the built environment pedestrian survey for the Project.

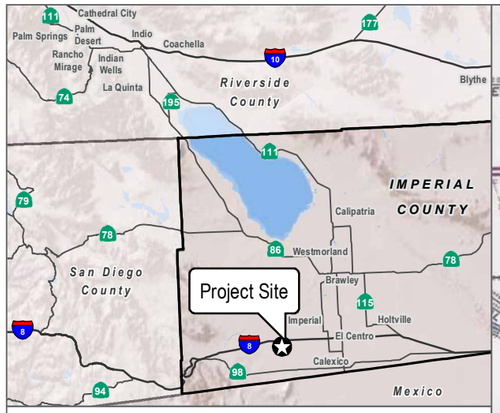
No prehistoric or historic-era archaeological resources were identified as part of the cultural resources pedestrian survey in support of this Project. A review of historic topographic maps and historic aerial imagery indicate the Project area and the surrounding properties were used primarily for agricultural and residential purposes throughout recorded history.

Dudek Archaeological Principal Investigator Angela Pham, M.A., and Registered Professional Archaeologist (RPA) managed the Project and co-authored this report with Dudek archaeologists Roshanne Bakhtiary M.A.; Keshia Montifolca, MA, RPA, and Micah Hale, PhD, RPA. Dudek archaeologists Javier Hernandez and Jason Collins, BA, served as field directors for the cultural resources field effort. Archaeologists Graham Plantz, Seth Bruck, Abigale Macias, Mark Abelon, Zachery Clow, and Norman Dimmick acted as field crew members.

PC ORIGINAL PKG

Dudek also conducted built environment resources and paleontological resources investigation for the Project. Appended to this cultural resources inventory study are the *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California* (Brisentine et al. 2024 included in Appendix C) and *Paleontological Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California* (Siren and Williams 2024 included in Appendix D).

PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line

Township 16S Range 12E Section 13
Township 16S Range 12E Section 14
Township 16S Range 12E Section 15
Township 16S Range 12E Section 16
Township 16S Range 12E Section 17
Township 16S Range 12E Section 18
Township 16S Range 12E Section 19
Township 16S Range 12E Section 20
Township 16S Range 12E Section 21
Township 16S Range 12E Section 22
Township 16S Range 12E Section 23
Township 16S Range 12E Section 24
Township 16S Range 12E Section 25
Township 16S Range 12E Section 26
Township 16S Range 12E Section 27
Township 16S Range 12E Section 28
Township 16S Range 12E Section 29
Township 16S Range 12E Section 30
Township 16S Range 12E Section 31
Township 16S Range 12E Section 32
Township 16S Range 12E Section 33
Township 16S Range 12E Section 34
Township 16S Range 12E Section 35
Township 16S Range 12E Section 36

SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Project Description and Location

Dudek conducted a Phase I cultural resources inventory study for the Big Rock 2 Cluster Solar and Storage Project (Project). The Project is located in unincorporated Imperial County, California, south of Interstate Highway 8 and west of the town of El Centro, California. The Project proposes to develop a PV solar energy generation and battery energy storage system (BESS) facility on approximately 1,849-acres of agricultural land. The entire 1,849-acre area will be developed and disturbed by Project implementation. The cultural resources Project area (Project area) is composed of the following 24 Assessor's Parcel Numbers (APNs): 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300-035, 051-300-036, 051-300-037, 051-310-027, 051-310-028, 051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350-007, and 051-350-008. Specifically, the project is located in Township 16 South, Range 12 East, in Sections 14, 15, 16, 20, 21, 22, 23, 26, 27, 28, 29, 33, 34 of the Seeley, Plaster City, and Mount Signal, California USGS 7.5 Minute Series Quadrangles (Figure 1).

The Project includes the construction and operation of a 500-megawatt (MW) utility-scale photovoltaic solar energy generation and a 500MW battery energy storage system (BESS). The Project's permanent facilities would include service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, energy storage system(s), and operations and maintenance (O&M) facilities. Power generated by the Project would be collected using up to 66-kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead gen-tie line would then link the Project substation to the planned Liebert Switchyard, which will be connected via an overhead 230-kilovolt gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation.

2.1 Regulatory Context

This Project is subject to state and local regulations regarding cultural resources. The following section provides a summary of the applicable regulations, policies, and guidelines relating to the proper management of cultural resources for this project.

2.1.1 State Level Regulations

The California Register of Historic Resources (Public Resources Code section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code section 5020.1(j)). In 1992, the California legislature established CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following National Register of Historic Places (NRHP) criteria:

- Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

PC ORIGINAL PKG

- Associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

(California Public Resources Code section 5024.l).) Resources less than 50 years old are not considered for listing in the CRHR but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR, section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

2.1.2 Native American Historic Cultural Sites (California Public Resources Code section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NRHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

2.1.3 California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, required all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

2.1.4 California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological and historic resources:

1. California Public Resources Code section 21083.2(g): Defines “unique archaeological resource.”
2. California Public Resources Code section 21084.1 and CEQA Guidelines section 15064.5(a): Define historical resources. In addition, CEQA Guidelines section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource;” it also defines the circumstances when a project would materially impair the significance of a historical resource.

PC ORIGINAL PKG

3. California Public Resources Code section 5097.98 and CEQA Guidelines section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated cemetery.
4. California Public Resources Code sections 21083.2(b)-(c) and CEQA Guidelines section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code section 21084.1; CEQA Guidelines section 15064.5(b)). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code section 21084.1; CEQA Guidelines section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code section 21084.1; CEQA Guidelines section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines section 15064.5(b)(1); California Public Resources Code section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

2.1.5 California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

PC ORIGINAL PKG

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (California Health and Safety Code Section 7050.5[b]). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (California Health and Safety Code Section 7050.5[c]). In accordance with California Public Resources Code Section 5097.98(a), the NAHC will notify the Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. Within 48 hours of being granted access to the site, the MLD may recommend means of treatment or disposition, with appropriate dignity, of the human remains and associated grave goods.

2.1.6 Assembly Bill 52

California Assembly Bill 52 (AB 52), which took effect July 1, 2015, establishes a consultation process between California Native American Tribes and lead agencies in order to address tribal concerns regarding project impacts and mitigation to "tribal cultural resources" (TCR). Public Resources Code section 21074(a) defines TCRs and states that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A TCR is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either:

1. listed or eligible for listing in the CRHR or a local register of historical resources, or
2. determined by a lead agency to be a TCR.

2.1.7 Traditional Cultural Properties

Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

Also, potentially relevant to prehistoric archaeological sites is the category termed Traditional Cultural Properties in discussions of cultural resource management (CRM) performed under federal auspices. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;

PC ORIGINAL PKG

3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

A Traditional Cultural Property, then, can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

2.1.8 County of Imperial

Section III(B) of the Imperial County Conservation and Open Space Element describes the cultural resources, goals and objectives to protect such resources (County of Imperial 2016). The planning goals and objectives are described below.

Goal 3 of the goals and objectives section of the Imperial County Conservation and Open Space Element addresses the preservation of cultural resources. Goal 3 states that the County will "preserve the spiritual and cultural heritage of the diverse communities of Imperial County." (County of Imperial 2016). Three objectives are enumerated to assist in implementation of the goal:

- **Objective 3.1:** Project and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.
- **Objective 3.2:** Develop management strategies to preserve the memory of important historic periods, including Spanish, Mexican, and early American settlements of Imperial County.
- **Objective 3.3:** Engage all local Native American Tribes in the protection of tribal cultural resources, including prehistoric trails and burials sites.

2.2 Project Personnel

Dudek Archaeological Principal Investigator Angela Pham, M.A., and Registered Professional Archaeologist (RPA) managed the Project and co-authored this report with Dudek archaeologists Roshanne Bakhtiary M.A.; Keshia Montifolca, MA; RPA; and Micah Hale, PhD, RPA. Dudek archaeologists Javier Hernandez and Jason Collins, BA, served as field directors for the cultural resources field effort. Archaeologists Graham Plantz, Seth Bruck, Abigale Macias, Mark Abelon, Zachery Clow, and Norman Dimmick acted as field crew members.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

3 Setting

3.1 Natural Setting

The Big Rock 2 Energy Project is located in California's Colorado Desert. The topography of the Project area is very flat, given its agricultural nature. Various earthen and concrete slab irrigation canals run on a north to south, east to west axis within and along the boundaries of the Project area. These are the only portions of the Project area with varying topographic relief. Current land use of the Project area includes active irrigated and dryland cropland, idle cropland, and developed land with agricultural and other rural infrastructure.

For detailed discussion relating to the environmental context of this area, please consult the biological, visual, and other technical studies prepared for The Big Rock 2 Energy Project.

3.2 Cultural Setting

The Project area is within California's Colorado Desert, a small part of the larger Sonoran Desert. The Colorado Desert encompasses Imperial County, and includes parts of San Diego County, Riverside County, and a small section of San Bernardino County, California. The general cultural sequence for the Colorado Desert can be viewed in terms of three or more time periods based on the evolutionary stages proposed by Willey and Phillips (1958). Among contemporary archaeologists and cultural resource managers, the Paleoindian and Archaic evolutionary stages of Willey and Phillips (1958) have evolved into time periods and, in southern California, their Formative stage became the Late Prehistoric time period. For this report, actual geological time periods and the evolutionary stage labels intended by Willey and Phillips will be employed. Within the time periods, various archaeological complexes occur on a regional basis. Various labels such as horizon, pattern and culture have been used, but the more universal term "complex" is preferred for this effort.

3.2.1 Late Pleistocene

Several researchers posit a Pre-Projectile Point Period that occurred in the late Pleistocene prior to the much better documented Clovis, San Dieguito, and Lake Mojave complexes (e.g., Begole 1974; Childers 1980; Hayden 1976). Archaeological material from the Greater Southwest dating to this posited Pre-Projectile Point Period is often called the Malpais Complex. Malpais is a term that was adapted from the early work of Malcolm Rogers, who used it to refer to what is now the first portion of the San Dieguito Lake Mojave Complex. The term was resurrected by Hayden (1976) to refer to a tool assemblage including choppers, scrapers, and other crude, core-based tools typically found on old desert pavements in the Sonoran Desert and in the Sierra Pinacate. These materials generally are heavily weathered, very darkly patinated and found deeply embedded in desert pavements. Lacking subsurface deposits, Hayden depended to a large degree upon the amount of patination and relative dates of geological formations to obtain relative dates. He argued that most of the Malpais Complex dates to some time prior to an altithermal that occurred about 20,000 years ago. At a shell scatter on a sand dune near Adair Bay on the Gulf of California, he was able to obtain, through radiocarbon dating, two subsurface dates on shell that were greater than 37,000 years before present (B.P.). He also obtained a surface date there of approximately 33,950 B.P. (corrected) (Hayden 1976). These very early dates are rather troubling to traditional "Clovis First" archaeologists and many are skeptical of the existence of this period (e.g., Schaefer 1994). Obtaining corroborating radiocarbon dates to support or refute this very early age for the Malpais continues to prove elusive.

PC ORIGINAL PKG

3.2.2 Terminal Pleistocene-Very Early Holocene

The earliest well-documented sites in the southern Alta California desert region belong to the San Dieguito Complex, which is thought to date from approximately 11,000 to 9,300 B.P. to perhaps as late as 7,500 B.P. (Justice 2002; Warren et al. 1998). Beginning in 1924, Malcolm Rogers, of the San Diego Museum of Man, conducted surveys in the Colorado Desert during which he noted what became known as the San Dieguito Complex. Eventually, Rogers documented San Dieguito materials in the Mojave Desert, in Arizona, and as far south as San Quintin, in Baja California. The Project area is within Roger's Central Aspect for the San Dieguito (Rogers 1966).

Closely related to the San Dieguito are materials that have been identified in the Mojave Desert and in the Great Basin called the Lake Mojave Complex (Warren and Crabtree 1986; Warren et al. 1998). No San Dieguito radiocarbon dates have been published for the Colorado Desert, although many surface sites have been reported (Schaefer 1994).

Elsewhere, materials associated with human bone excavated on Santa Rosa Island were dated to 11,500 years B.P. (Johnson et al. 1999). Materials at Daisy Cave on San Miguel Island were also radiocarbon dated from approximately 11,600 to 11,000 B.P. (Erlandson 2007). Radiocarbon dated cultural deposits going back to approximately 15,000 B.P. have just been reported from the Debra L. Friedkin Site in Texas by Michael Waters (Ehrenberg 2011). While these scholars have substantiated the notion of terminal Pleistocene occupations in the American West, the relationships among these early sites and the San Dieguito Lake Mojave complex in the Colorado Desert are not yet understood.

The San Dieguito assemblage is typically dominated by finely flaked scrapers, planes, choppers and leaf-shaped projectile points made of slate-green felsite of the Santiago Peak Formation or fine-grained basalt. Evidence of seed grinding technology (manos and metates) is scarce or absent. Desert assemblages often contain Lake Mojave and Silver Lake projectile points that are rare along the coast. These points appear in the California deserts from about 11,000 to about 7,000 B.P. (Justice 2002:91; Warren and Crabtree 1986:184). San Dieguito sites in the deserts are typically found around dry Pleistocene playas and above ancient stream channels, not modern water sources. Rogers and many others have found numerous trails and cleared circles that they attribute to the San Dieguito in the Colorado Desert. The cleared circles are typically somewhat circular, but ovals and rectangles are also noted. These are also known as sleeping circles. Despite the problem with geometry, the terms 'cleared circles' and 'sleeping circles' are very well established in the archaeological literature. They are commonly interpreted as house or windbreak remains or just a smooth place to sleep. The desert site locations and assemblages suggest a subsistence emphasis on lacustrine resources, but the coastal San Dieguito sites seem to reflect a more generalized hunting and gathering economy with a special emphasis on marine resources, especially shellfish (Erlandson and Colten 1991; Warren et al. 1998).

3.2.3 Mid-Holocene

During the early and mid-Holocene, a generalized hunting and gathering economy, based to a large degree on collecting and grinding grasses and other hard seeds, appeared in the California deserts and along the coast. Beginning at approximately 8,500 years ago in southern Alta California, the assemblage is dominated by portable basin metates, manos, and crudely-fashioned core-based scrapers, choppers, and hammerstones. In the California deserts, Pinto series projectile points appear at about 8,000 B.P. and continue to about 4,000 B.P.

PC ORIGINAL PKG

(Justice 2002:135). Gypsum series points begin to appear in desert sites at approximately 4,000 B.P. with the Elko series appearing shortly thereafter (Justice 2002: 294, 304). This assemblage suggests the mid-Holocene economy was more diversified and focused on gathering hard seeds and grasses, and on hunting small and big game. Near the Project area, McDonald (1992) found mid-Holocene cultural deposits in her excavation of Indian Hill rock shelter. Located in the Jacumba Mountains northwest of the current Project area, this is the only published excavation of a mid-Holocene archaeological site in the Colorado Desert. McDonald posits that the site was first occupied at about 5,000 B.P. She recovered 21 Elko dart points, one Gypsum Cave point, and four dart points that she was unable to type. She suggests that Indian Hill rock shelter functioned as a hunting camp for the mid-Holocene occupants (McDonald 1992).

3.2.4 Late Holocene

Around 2,000 B.P., patterns begin to emerge that suggest cultural links to the peoples found in the Colorado Desert at the time of the Spanish explorers (e.g., Alarcón and Diaz, in 1540 A.D.). This Late Holocene period is often referred to as the Late Prehistoric. The archaeological complex at this time in the Colorado Desert is referred to as the Yuman or Patayan Complex. It is recognized archaeologically by the presence of smaller projectile points, signaling the advent of the bow and arrow, the replacement of flexed inhumations with cremations, the introduction of ceramics, and an emphasis on plant food collection and processing, especially acorns and mesquite (Kroeber 1925; Schaefer 1994; Schaefer and Laylander 2007). Semi-sedentary rancherias were established along the Colorado River and around springs. These rancherias were not compact villages, but loose collections of residences and agricultural plots. Surrounding desert and mountain areas were seasonally occupied to exploit mesquite, acorns, and pinyon nuts. Mortars for mesquite and acorn processing become common for the first time in the area and bedrock milling features (slicks, basins, and mortars) first appear (Schaefer and Laylander 2007).

The highest frequency of archaeological resources in the Imperial Valley date to the Late Holocene. Most sites are small processing loci, associated with the grinding of plant resources. Larger habitation sites were less common, but displayed a wider range of activities and longer periods of occupation (Jefferson 1974; Schaefer and Laylander 2007). The typical Late Prehistoric assemblage includes Desert Side-Notched series and Cottonwood Triangular arrow points and Lower Colorado Buffware and Tizon Brownware ceramics. In the vicinity of the Project area, Salton Brownware ceramics are also found (Schaefer and Laylander 2007). Lithic artifacts are typically made from chert, volcanics, metavolcanics, or quartz materials (Jefferson 1974). The economy along the Colorado River and its sloughs, the Alamo River and New River, was based on mesquite collecting and flood plain horticulture. Corn, beans, and squash were the primary crops, but mesquite was the mainstay of the Kamia diet, even in years of good horticultural production (Castetter and Bell 1951; Gifford 1931).

During the Late Holocene, there were four or more events when Lake Cahuilla filled the Salton Sink up to the 40-foot elevation. As noted previously, Lake Cahuilla occurred periodically when the Colorado River filled up its river bed with silt in the area south of Pilot Knob. At these times the river changed course out of its silt-elevated channel and, instead of flowing into the Upper Gulf of California, flowed west down the Alamo River and New River, then north into the Salton Sink (Schaefer 1994; Singer 2011).

When Lake Cahuilla was full or filling, the entire flow of the Colorado River was probably diverted and the area from Pilot Knob south to the Gulf was dry. Since Alarcón estimated (or overestimated) about 20,000 people living south of Pilot Knob in 1540, it was presumably densely populated during the Late Prehistoric as well

PC ORIGINAL PKG

(Forbes 1965). These people had to migrate when the Colorado River flowed into Lake Cahuilla, and they may have been the people who left the huge number of archaeological sites around the southern shore of Lake Cahuilla (Schaefer and Laylander 2007; Underwood 2007, 2008). The southwestern shoreline of Lake Cahuilla lies approximately 12 miles east of Ocotillo. Although the shoreline of this huge freshwater lake was outside the Project area, the lake would have had a profound influence on prehistoric Indians within the Project area.

3.2.5 Ethnohistoric Period

According to early ethnographers (e.g., Gifford 1931, Kroeber 1925) the Project area was in the traditional territory of the Kamia or Desert Kumeyaay. Their neighbors to the north are the Cahuilla whose territory extended to meet the Kamia at the San Felipe or Scissors Crossing area (where CR-S2 meets State Route 78). To the east of the Project area are the Quechan who live along the Colorado River just west of Yuma (Forde 1931). The traditional territory of the Cocopah, their neighbors to the southeast, lies at the head of the Gulf of California (Gifford 1931, Kelly 1977); to the west are the Kumeyaay proper.

It is important to understand that the Kamia did not occupy all of their traditional territory at one time. They tended to occupy a few farming rancherias or camping places within their territory at any given time, based largely on the availability of water. The Kamia were quite friendly with the Quechan, who lived in the vicinity of Yuma, and some bands occasionally lived with them on the Colorado River. They also were very closely related to the Kumeyaay and shared clans or lineages with them (Gifford 1931). The Kumeyaay rancheria of Jacum, near the town of Jacumba today, was perhaps the easternmost Kumeyaay settlement. Jacumba is about 19 miles southwest of Ocotillo. Ethnographic sources indicate that the cold season was a favorite time for the Kumeyaay who lived in the mountains bordering the desert to visit the Kamia (Gifford 1931:17). Kroeber noted that Diegueno (Kumeyaay) clans spent winter “in mixed groups in the eastern foothills, at the desert’s edge” (Kroeber 1925”720). Also, the Indians who lived in the Mount Laguna area wintered in the desert around Vallecitos, Agua Caliente, and Mason Valley (Cline 1979).

The Kamia lived primarily along the Alamo River and new River and along other sloughs of the Colorado River in what is now Mexico as far south as Volcano Lake. The nearest documented Kamia rancheria was Xachupai. This was a loose collection of farmsteads scattered along the north-south trending New River for several miles. Xachupai extended both north and south of where I-8 intersects the river today (Gifford 1931; Forbes 1965; Kroeber 1925; Shipek 1982).

3.2.6 Historic Period

The first Spanish exploration of what is now Imperial County occurred in 1540, when Hernando de Alarcón ascended the Colorado River probably up to where Yuma and Winterhaven are today. Juan Cabrillo was the first Spanish explorer to visit coastal southern Alta California, when he anchored in what would become known as San Diego Bay in 1542. Both explorers claimed Alta California for the king of Spain, thus initiating the Spanish Period in Alta California. Spanish explorers visited what was to become Imperial Valley on a sporadic basis from that time on. Travel in the vicinity of the Project area began when Juan Bautista de Anza of the Spanish Army and Francisco Garcés of the Franciscan Order established what became known as the Anza Trail in 1774 during the first Anza Expedition. Their guide was Sebastian Taraval, an Indian from Baja California who also served as translator. Captain Juan Bautista de Anza was the commanding officer of the presidio at Tubac, south of Tucson. The Anza Trail passed east of the Project area from Yuha Wells onward to San Francisco. The Yuha Wells were used by

PC ORIGINAL PKG

Anza, who called them Santa Rosa de las Lajas (Flat Rocks) (Bolton 1930). They are on the southwest side of Dunaway Road about 12 miles east of Ocotillo. Anza's observations establish the fact that prehistoric wells were dug by the Kamia, at least in the Yuha Desert. This suggests that other wells may also have been dug in washes to support prehistoric Indian camps in the Project area.

In 1770, Pedro Fages was appointed military governor of California Nueva, which later became known as Alta California. In 1772, he discovered an Indian trail in the mountains of eastern San Diego County near Cuyamaca State Park. It passed down Oriflamme Canyon and then connected with a north trending trail. This trail went north through the Warner's Springs area. Fages continued on to Mission San Gabriel de Arcangel, founded in 1771 in what is now the San Gabriel Valley. Later, a trail was discovered that split from the Anza Trail in the vicinity of Yuha Wells and passed north through Vallecito and Agua Caliente. This linked up with the Fages Trail at the foot of Oriflamme Canyon, southeast of where the town of Julian is today. This combined Fages and Anza Trail became the principal route linking Sonora and Alta California in the late 18th and early 19th centuries. This route, followed today by CR-S2, became known as the Sonora Trail (Guerrero 2006).

In addition to the well-known Franciscan missions along the coast of Alta California, missions were also founded at Concepción, in the vicinity of present-day Yuma and San Pablo near Pilot Knob in 1780. A number of Spanish settlers accompanied the Franciscans and a small number of Spanish Army personnel; however, no presidio was established. Friction between the Spanish and the Quechan rapidly developed. The missions and settlements were destroyed in the successful Quechan Revolt of 1781. Padre Garcés and some 50 Spanish settlers were killed in that revolt. The dead included Fernando Rivera y Moncada, who led the first overland party of the Portolá Expedition to reach San Diego in 1769 and had been the military governor of Alta California in 1777 (Forbes 1965:185-202).

The Mexican people chafed under Spanish rule in the late 1700s and early 1800s. After a long struggle, the Spanish were expelled from Mexico in 1821. The Mexican Republic retained many Spanish institutions and laws, but they were very concerned about the abuses of the Catholic Church. Several reforms were passed, including the secularization of the mission system in 1834. Large tracts of former church land were granted to individuals and families and the Alta California rancho system flourished. Cattle ranching dominated the economy. The hide and tallow trade with Yankee ships increased during the 1830s. The Pueblo of Los Angeles, established in 1781, began to grow rapidly during this period and Native American influence and control greatly declined (Starr 2007).

The Mexican Republic had encouraged Americans to settle in Tejas in the 1820s and by the 1830s, the Americans greatly outnumbered the Mexicans. Friction developed between the two cultures and in 1835, Texas fought and won its independence. Disputes continued over the placement of the border and Mexico never recognized the legitimacy of the new Texas Republic. The US Congress admitted Texas to the Union in 1845 and provoked Mexico into a disastrous war. Many Americans, including Abraham Lincoln and John Quincy Adams, denounced the rush to war as a Southern ploy to expand slavery.

Early in the war, Colonel Stephen Watts Kearney was dispatched to take charge of what became known as the Army of the West. After taking Santa Fe without a shot, Kearney headed west at the head of a column of dragoons. Captain Philip St. George Cook took charge of the Mormon Battalion, whose task was to follow behind Kea'ney's column and build a wagon road from Santa Fe to San Diego (Starr 2007; Guerrero 2006).

The dragoons under Kearney and the Mormon Battalion under Cook both used the Old Sonora Trail in 1846. The war ended with the Treaty of Guadalupe Hidalgo on February 2, 1848 and as part of the treaty, Mexico ceded

PC ORIGINAL PKG

Alta California to the US. At that time, the Mexican territory of Alta California also included southern Nevada, southern Utah, and most of Arizona. By the time Alta California was admitted to the Union in 1850 as the State of California, it was only a small fraction of its former self. Gold had been discovered in what is now known as the Mother Lode of California prior to the end of the war. However, it was not made public until March 1848, when the Americans were firmly in control. The sudden influx of American and Europeans quickly drowned out much of the old Californio culture of the Spanish-speaking Catholics born in California prior to 1848.

Tens of thousands of gold seekers ("49ers") flooded into California over the Old Sonora Trail and through passes in the Sierra Nevada to the north. The Old Sonora Trail became known as the Southern Emigrant Trail during this period. This influx of gold-seekers and adventurers hastened the decline of the Indians, particularly in the Mother Lode area (Phillips 1996). In southern California, the rancho system prospered for several years by supplying beef to the tens of thousands of "49ers" flooding the Mother Lode (Starr 2007:111). These little known California cattle drives preceded the better known Texas drives by about 15 years.

In the 1850s, communication and trade between California and the other states remained expensive, time-consuming, and difficult. In 1857, congress authorized the first transcontinental mail, known as the San Antonio and San Diego Mail. Today, it is sometimes called the Birch Overland Mail after its founder James E. Birch (Lake 1957; Van Wormer et al. 2007). The Birch Overland Mail used the Southern Emigrant Trail (formerly the western reach of the Santa Fe Trail) through the Project area along what is now CR-S2. It branched off of the Southern Emigrant Trail at Oriflamme Canyon and headed west to San Diego. In the next year, a bigger mail contract was awarded to the Butterfield Overland Mail. This bypassed San Diego and continued north through Los Angeles and on to San Francisco. These historic mail and stage lines used the same route in this area passing through the Ocotillo vicinity (Van Wormer et al. 2007).

As mentioned previously, Yuha Wells were first noted by Anza, who called them Santa Rosa de las Lajas. These wells are sometimes confused with Coyote Wells, southeast of Ocotillo. Coyote Wells were "discovered" by James E. Mason of the Birch Overland Mail in 1857 (Lake 1957; Van Wormer et al. 2007). It is highly likely that these wells were originally dug by the Kumeyaay. Coyote Wells is not listed as a stage stop and presumably was used as an auxiliary water source by the mail lines and packers.

During the American Period, the homestead system rapidly increased American settlement beyond the coastal plain, which subsequently accelerated the decline of the California Indians (Philips 1996). Under Mexican rule, full property and civil rights were provided for women and people of color including Indians. The Treaty of Guadalupe Hidalgo preserved these rights, although the American and California state governments ignored these provisions completely in the case of the Indians and forced the Californio land holders to abandon their vast landholdings through lengthy, expensive, and complicated legal proceedings. In less than 20 years, very few ranchos in Alta California remained intact (Starr 2007:104-105). However, Spanish remained one of the two official languages of California until 1879 (Starr 2007: 93).

The Colorado Desert area remained largely unaffected by the transition to American control until after 1904, when the Imperial Canal brought water to the Imperial Valley. A small boom in farming and homesteading began, but in 1905, the Colorado River breached the head gate of the Imperial Canal and began to fill the Salton Sink. This created the Salton Sea and threatened to fill the entire valley, re-creating Lake Cahuilla. The river was brought under control in 1907 after a heroic effort led by the Southern Pacific Railroad. In 1935, Hoover Dam was completed finally ending the dramatic floods, and containing the Colorado River which paved the way for other dams and more dependable canal systems.

PC ORIGINAL PKG

U.S. Route 80 (US-80) linked El Centro and San Diego in 1915, and the portion of the San Diego Eastern and Arizona Railroad between these towns was completed in 1919. US-80 and the railroad facilitated the transport of farm products from Imperial Valley and were a benefit to the local economy.

No factor contributed more to the development of the Imperial Valley than irrigation. The following historical information is summarized from IID: The First 40 Years (Dowd 1956). This manuscript presents the history of the Imperial Irrigation District and the subsequent development of the Imperial Valley from early development to the 1940's, and identified important periods, events, and patterns of development for Imperial Valley.

It was on one of the railroad corridor expeditions in 1853, led by Lieutenant R. S. Williamson of the U.S. Topographical Engineers, that geologist Dr. W. P. Blake discovered the possibility of irrigating Imperial Valley from the Colorado River. Blake observed a region of fertile soil capable of sustaining agriculture but lacking in water. He measured the dry bed of the Salton Sea at below sea level, a fact that made feasible the cutting of a canal from the Colorado River to the interior of the desert which would bring with it a constant supply of water. Dr. Oliver Wozencraft, a proponent of irrigating Imperial Valley, lobbied support from the California legislature, who, in turn, asked Congress to convey six million acres to Wozencraft. He endeavored to secure action by Congress on his plan to bring potable water to the desert for over thirty years without success. Despite Wozencraft's failed attempts at reclamation, by his death in 1887, settlers and developers alike were eager to bring water to Imperial Valley (Dowd 1956).

Preliminary investigations into the feasibility of irrigating the Colorado Desert began in 1893 with the Colorado River Irrigation Company, but inability to procure financing quickly led to the company's demise. In 1896, the California Development Company was organized, under the direction of Charles Rockwood and George Chaffey, to take hold of the project. The proposed canal route would run from the diversion point at the Colorado River through lower California, Mexico, and back into the United States in order to reach Imperial Valley. To gain title to the Mexican lands, the California Development Company organized a Mexican subsidiary company in 1898 known as La Sociedad de Yrrigacion y Terrenos de la Baja California, S. A. With plans to colonize the region, the California Development Company divided Imperial Valley into districts of varying size, each with its own mutual water company (Dowd 1956).

By August 1900, construction of the first diversion canal and irrigation system was underway. The canal was excavated from the point of diversion from the Colorado River south about 4 miles into Mexico where it swung west and connected for forty miles within the Alamo River channel until it reached Sharp's Heading and turned north to the Salton Sea. A series of main canals was constructed to divert from Sharp's Heading into various stretches of Imperial Valley: Central Main, Boundary, West Side Main, and East Side Main. The Central Main Canal continued from the international boundary line and traveled north through the present cities of Brawley and Imperial; the Boundary Canal diverted west towards Calexico; the West Side Main Canal traveled west towards Calexico then north; and the East Side Main Canal traveled east then north to the eastern Salton Sea. Water delivery reached Calexico through the Boundary Canal less than one year after the start of construction. That same year, nearly 1,500-acres of land was put under crops (Dowd 1956).

Few natural resources existed for potable water prior to the construction of the irrigation system. Domestic use water had to be hauled to the Valley via the Southern Pacific Railroad. Once considered a barren wasteland, Imperial Valley was making good progress with colonization by the early 1900's. The Imperial Land Company, under the direction of the California Development Company, began laying out townsites in Imperial Valley based primarily on the density of purchased water stock. The town of Imperial was the first to be laid out with settlement commencing in 1901. Over a period of ten years from 1901 to 1911, irrigable land in Imperial Valley jumped from 1,500-acres to 220,000-acres. As the water flowed into the Valley, so did the people. In 1902, a year after the

PC ORIGINAL PKG

first water reached Calexico, nearly 2,000 settlers came to Imperial Valley. The population grew to seven times that amount within four years. To accommodate the growing population, the Southern Pacific Railroad constructed the Niland to Calexico branch rail. At the same time, the newly developed Imperial Valley broke apart from San Diego County to form its own government as Imperial County, with El Centro being designated as the County Seat (Dowd 1956).

The rapid colonization of Imperial Valley in the early 1900's strained the relationship between settlers and the California Development Company. Initial land and soil surveys were inaccurate leading to discrepancies with land titles, and water rights held by the California Development Company were called into question. The Reclamation Act was proposed in 1902 to take the Imperial Valley project from the California Development Company and organize it under Government control. Further dissatisfaction with California Development Company arose after hurried and negligible attempts to correct the heavily silt laden waters of the Colorado River ultimately led to grave damage to Imperial Valley following the massive flooding events of 1905 and 1906. The River break destroyed nearly 12,000-acres of cultivated land and over 30,000-acres of irrigable land, caused immense damage to Southern Pacific Company railroad lines; and severed the ties between settlers and the California Development Company. The River break took two years to repair, during which time the Salton Sea filled and expanded to a length of 50 miles and a width of 10 to 15 miles (Dowd 1956).

Preceding litigation brought to the California Development Company following the flood ultimately resulted in bankruptcy. In 1911, a petition for formation of an irrigation district was presented to the Imperial County Board of Supervisors. The IID was formed to acquire properties of the bankrupt California Development Company and its Mexican subsidiary. Over the span of a decade, IID completed improvements and repairs to the canal and distribution system, rebuilt the entire Westside Main Canal, received deeds to all of the properties of the California Development Corporation, and acquired 13 mutual water companies. Within a few years of acquiring the mutual companies, IID was delivering water to nearly 550,000-acres of Imperial Valley. Over a century later, IID is still servicing communities of the Imperial Valley. IID is the largest irrigation district in the nation and Imperial County ranks among the top ten agricultural counties in the nation. Ninety-eight percent of the water IID transports is used for agriculture and the remaining two percent is treated potable and delivered to the nine Imperial Valley cities (Dowd 1956)

PC ORIGINAL PKG

4 Methods

4.1 South Coastal Information Center Records Search

An examination of existing maps, records, and reports was conducted by Dudek to determine if the Project could potentially impact previously recorded cultural resources. Dudek archaeologist Makayla Murillo conducted an in-person records search of the Project area at the South Coastal Information Center (SCIC) at San Diego State University (SDSU) on March 31, 2023. The search encompassed the entire Project area and a one-mile search radius round the Project area. The purpose of the records search is to identify any previously recorded cultural resources that may be located in or adjacent to the Project area and to identify previous studies in the Project vicinity. In addition to a review of previously prepared site records and reports, the records search also included a review of historical maps of the Project area, ethnographies, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility.

4.2 Native American Consultation

As the lead agency under CEQA, the County is responsible for and will be performing formal government-to-government consultation with Native American Tribes under California AB 52. The County will conduct formal consultation. Assuming details related to consultation are provided, Dudek will include a summary of tribal consultation and associated information provided in subsequent drafts of this report.

4.3 Pedestrian Survey

Dudek archaeologists conducted an intensive-level cultural resources pedestrian survey of the entire Project area from April 10, 2023, to April 14, 2023, and from April 4, 2024 to April 5, 2024, using standard archaeological procedures and techniques (Figure 2, Project Area). All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory (NPS 2018). Intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects spaced no more than 15 meters apart over entire portions of the Project area, when appropriate. Several fields were densely vegetated by agricultural crops/grasses and ground visibility was between 0-30% (poor visibility). Though physically feasible, the complete intensive-level survey of these fields using formal parallel transects was determined unproductive as these areas are considered to have a low potential for containing significant cultural resources. Instead, a sample of each of these fields was surveyed using formal parallel transects. An opportunistic/reconnaissance survey approach was also utilized, selectively examining exposed ground surface areas (canals, drainages, dirt roads, low lying vegetation) where possible. In summary, 88.9% of the Project area (1,662-acres) consisted of active agricultural fields with ground visibility ranging from 0% to 30% (poor visibility). Dudek surveyed a 5% sample of each of these fields. The remaining 11.1% of the Project area (165-acres) had moderate to excellent visibility (40-60%, and 70-100%, respectively) and was subject to 50% to 100% survey using formal 15 meter parallel transects. The proposed generation intertie (gen-tie) corridor location was also surveyed within a 100' corridor measured from the center line.

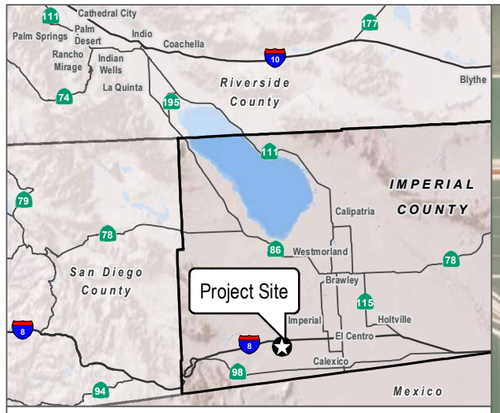
Within each transect, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire- affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of

PC ORIGINAL PKG

structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials.

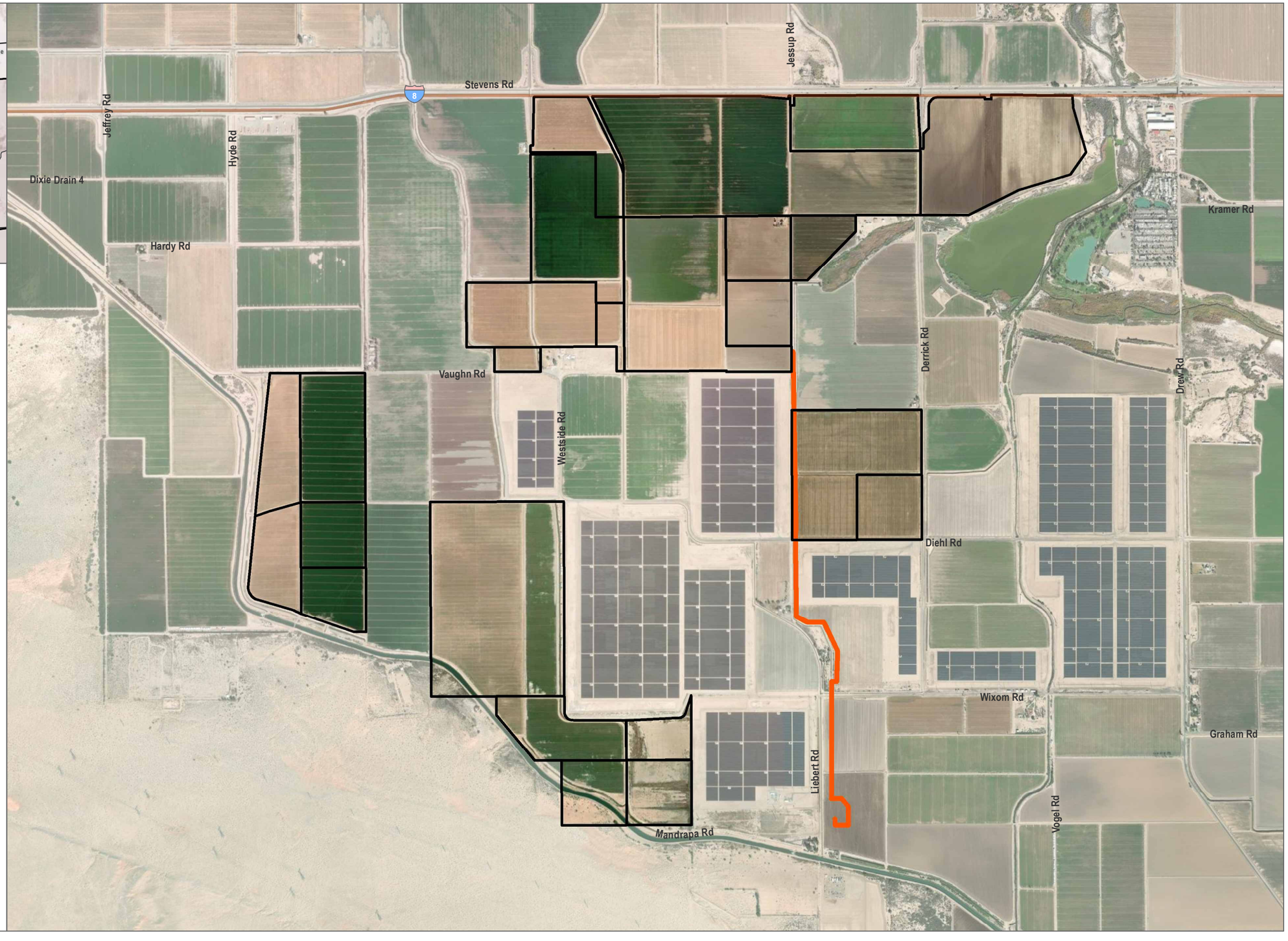
All fieldwork was documented using field notes and iPad technology with close-scale field maps and aerial photographs. Location-specific photographs were taken using an Apple iPad equipped with eight (8) mega-pixel (MP) 1080p resolution and georeferenced PDF maps of the Project area. Accuracy of this device ranged between 3 and 10 meters. All field notes, photographs, and records related to the current study are on file at Dudek's Encinitas, California office.

PC ORIGINAL PKG



Project Boundary

100-ft Linear Corridor



SOURCE: Maxar 2023; Imperial County 2023

DUDEK 0 1,000 2,000 Feet

FIGURE 2

Study Area

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

5 Results

5.1 South Coastal Information Center Records Search

Dudek archaeologist, Makayla Murillo, conducted an in-person records search of the Project area at the South Coastal Information Center (SCIC) at San Diego State University (SDSU) on March 31, 2023. The search included a review of previously recorded cultural resources and previously conducted studies within a one-mile radius of the Project area. The CHRIS records search also included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. Confidential Appendix A provides the records search results maps and a complete list of all previously recorded cultural resources and prior cultural resources studies occurring within one-mile of the Project area.

5.1.1 Previously Conducted Cultural Resources Studies

Fifty-one (51) cultural resources studies have been previously conducted within a one-mile radius of the Project area. Seven (7) of those studies intersect the Project area (Table 1). All seven studies were conducted between 1979 to 2006 and include two Class II cultural resources inventories, two archaeological assessments, two environmental studies, and a management plan. Although approximately 30% of the Project area overlaps with previous study areas, none of the studies are considered adequate according to the Secretary of Interior's standards and guidelines for a cultural resources inventory. The results of the records search are attached as part of Confidential Appendix A.

Table 1. Previous Cultural Resources Studies within the Project area

SCIC Report ID	Author	Year	Report Title
IM-00203	Gallegos, Dennis	1979	Class II Cultural Resources Inventory East Mesa and West Mesa Regions, Imperial Valley, California, Volume I
IM-00207	Davis, Emma Lou	1980	Class II Cultural Resources Inventory East Mesa and West Mesa Regions, Imperial Valley, California
IM-00210	Von Werlhof, Jay and Karen McNitt	1980	Archaeological Examinations of the Republic Geothermal Field, East Mesa, Imperial Valley County
IM-01306	Wirth Associates, Inc.	1980	APS/SDG&E Interconnection Project Environmental Study Phase II Corridor Studies – Native American Cultural Resources Appendices
IM-01388	Olech, Lilliana	1981	Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan
IM-00512	RTP Environmental Associates, Inc.	1994	Conditional Use Permit and Environmental Information for the Hazard Area Exploration Wells
IM-00993	Wlodarski, Robert J.	2006	Nextel Wireless Communications Site CA899IC (Sunbeam: Kuhn 2)

PC ORIGINAL PKG

5.1.2 Previously Recorded Cultural Resources

The SCIC records search indicates that seven (7) previously recorded cultural resources are located within the Project area (Table 2). These six (6) resources consist of an historic wagon road (P-13-003403), three (3) canal/water conveyance systems for agricultural use (P-13-012688, P-13-12689, P-13-12693, and P-13-014975), and two single-family residences (P-13-013758 and P-13-014263). The recorded sections of three canal/water conveyance systems (P-13-012689, P-13-012693 and P-13-014975), and the two single-family residences have all been recommended not eligible for listing on the CRHR and the NRHP. The historic wagon road and portions of one water-conveyance system (P 13-012688) have not been formally evaluated for listing on the CRHP and the NRHP. The SCIC records search also indicates that an additional eighteen (18) cultural resources have been recorded within the one-mile radius of the Project area (Table 2).

Table 2 provides brief descriptions and CRHR/NRHP eligibility for each resource identified, within and outside of the Project area, in the SCIC records search. The results of the records search and all DPR forms for resources located within and outside the Project area are attached as part of Confidential Appendix A.

Table 2. Previously Recorded Cultural Resources Within One-Mile of the Project area

Primary Number	Trinomial	Age	Type	Recorded By/Date	CRHR/NRHP Status
Within the Project area					
P-13-003403	CA-IMP-3403/H	Historic	AH7; Wagon Road from Fort Yuma to Warner's Ranch	R.C. Matthewson/ 1856	Unevaluated
P-13-012688	—	Historic	HP20; Dixie Drains 2, 3, and 4 and Dixie Lateral 1	URS Corporation/ 2009	Dixie Drain 3 and Lateral 1 recommended not eligible; Dixie Drains 2 and 4 unevaluated
P-13-012689	—	Historic	HP20; Fern Canal and Drain System	URS Corporation/ 2009	Recommended not eligible
P-13-012693	—	Historic	HP20; Fig Canal	URS Corporation/ 2009	Recommended not eligible
P-13-013758	CA-IMP-11759/H	Historic	HP2; 1651 Westside Road	KP Environmental/ 2011	Recommended not eligible
P-13-014263	—	Historic	HP2; Preece Residence	Chambers Group/ 2012	Recommended not eligible
P-13-014975	—	Historic	HP20; Wixom Drain	ASM Affiliates/2011	Recommended not eligible
Outside of the Project area					
P-13-014260	—	Historic	HP2, HP4; Farmhouse and Barn	Chambers Group/ 2012	Recommended not eligible
P-13-014261	—	Historic	HP4; Barn	URS Corporation/2010	Recommended not eligible
P-13-014262	—	Historic	HP2; Bryant Residence	URS Corporation/2010	Recommended not eligible

PC ORIGINAL PKG

Table 2. Previously Recorded Cultural Resources Within One-Mile of the Project area

Primary Number	Trinomial	Age	Type	Recorded By/Date	CRHR/NRHP Status
P-13-014264	—	Historic	HP15; Westside Elementary School	Chambers Group/ 2012	Recommended not eligible
P-13-014265	—	Historic	HP3; Multiple Residence Compound	Chambers Group/ 2012	Recommended not eligible
P-13-014266	—	Historic	HP2; Black Residence	Chambers Group/ 2012	Recommended not eligible
P-13-017714	CA-IMP-13040	Prehistoric	AP2, AP11; Lithic scatter and hearth	Power Engineers/ 2018	No formal recommendation
P-13-017729	—	Prehistoric	Lithic debitage isolate	RECON/2018	Not eligible
P-13-017730	—	Prehistoric	Lithic debitage isolate	RECON/2018	Not eligible
P-13-017731	—	Prehistoric	Lithic utilized flake tool isolate	RECON/2018	Not eligible
P-13-017732	—	Prehistoric	Lithic debitage isolate	RECON/2018	Not eligible
P-13-017733	—	Prehistoric	Lithic assayed cobble isolate	RECON/2018	Not eligible
P-13-017734	—	Prehistoric	Lithic debitage isolate	RECON/2018	Not eligible
P-13-017735	—	Prehistoric	Lithic debitage isolate	RECON/2018	Not eligible
P-13-017736	—	Prehistoric	Lithic retouched flake tool	RECON/2018	Not eligible
P-13-017737	—	Prehistoric	Lithic core fragment and debitage isolate	RECON/2018	Not eligible
P-177740	—	Prehistoric	Colorado Buff Ceramic body fragment	RECON/2018	Not eligible

P-13-003403/CA-IMP-3403/H (AH7; Wagon Road from Fort Yuma to Warner's Ranch)

P-13-003403 is a wagon road that historically connected Fort Yuma in Imperial County to Warner's Ranch in San Diego County. It was first recorded in 1956 in United States Geological Survey (USGS) notes by R.C. Matthewson. The historic placement of P-13-003403 crosses the Project area on a roughly east to west axis, although there is no current evidence to indicate this resource still exists with the integrity it was first recorded.

P-13-012688 (HP20; Dixie Drains 2, 3, and 4, and Dixie Lateral 1)

P-13-012688 consists of Dixie Drains 2, 3, and 4 and Dixie Lateral 1. Dixie Drain 3 was first recorded by URS Corporation (URS) in 2009 and given the primary number P-13-012688. In 2011, DPR forms for P-13-012688 were updated by ASM Affiliates, Inc. (ASM) to include a larger section of Dixie Drain 3, as well as Dixie Drains 2 and 4, and Dixie Lateral 1. The Dixie Drain Irrigation System is a part of a larger water conveyance system that

PC ORIGINAL PKG

includes Westside Drain, Forget-Me-Not Drain, and Salt Creek Drain that all empty into the New River. Dixie Lateral 1 dates back to before 1914, while Dixie Drains 2, 3, and 4 were likely constructed ca. 1940. In 2009, URS recommended Dixie Drain 3 as not eligible for listing on the CRHR or NRHP due to its loss of integrity from the regular dredging and widening of the canals and drains over time. In 2011, ASM recommended in addition to Dixie Drain 3, Dixie Lateral 1 as not eligible for listing on the CRHR or NRHP for similar reasons. ASM did not conduct a formal evaluation or provide a recommendation of eligibly for Dixie Drains 2 and 4. The Dixie Drains run along the boundaries of the southwestern portion of the Project area on a north to south axis, while Lateral 1 runs through the Project area on an east to west axis.

P-13-012689 (HP20; Fern Canal and Drain System)

P-13-012689 consists of a section of the Fern Canal and an associated section of the Fern Side Main. This resource was first recorded in 2009 by URS. Updates to include additional sections of the Fern Canal were completed in 2010 by Chambers Group, in 2011 by KP Environmental and ASM, and in 2017 by ASM. The Fern Canal was constructed ca. 1909 as is approximately 10 miles long. Modifications were made to the canal in the 1960s, and at present, the canal is lined with concrete. URS, Chamber Group, KP Environmental and ASM have all recommended that the recorded portions of the Fern Canal are not eligible for listing on the CRHR or NRHP due to a lack of integrity. The Fern Canal runs through the middle of the northern portion of the Project area, on a north to south axis.

P-13-012693 (HP20; Fig Canal)

P-13-012693 consists of a concrete-lined section of the Fig Canal that was constructed ca. 1912 and spans over 4 miles on a north to south axis through the easternmost portion of the Project area. The Fig Canal was first recorded in 2009 by URS. DPR form updates to include additional portions of the Fig Canal were conducted in 2011 by KP Environmental and ASM. URS, KP Environmental, and ASM have all recommended that the recorded portions of the Fig Canal are not eligible for listing on the CRHR or NRHP due to a lack of integrity.

P-13-013758/CA-IMP-11759 (1651 Westside Road)

1651 Westside Road is a one-story ranch style house constructed as a single-family residence ca. 1955. The residence was first recorded by KP Environmental in 2011 and again in 2011 by ASM. The building is wood-framed and rectangular in plan with a concrete foundation. The exterior is clad in stucco, and the roof is a low-pitched side gable with a front gable projection on the south section of the building and clad in asphalt roll. 1651 Westside Road was recommended not eligible for listing on the NRHP and the CRHR due to not meeting any of the criteria for inclusion in the national or state register. This resource sits along the northwestern portion of the Project boundary on the west side of Westside Road, approximately 0.2 miles south of Interstate Highway 8.

P-13-014263 (2396 Vaughn Road)

2396 Vaughn Road is a modern style ranch house with a low-pitch gable roof and composite roofing, a pedimented front gable entry with full-length porch, and stucco cladding on the exterior. This resource was recorded in 2009 by Chambers Group. P-13-014263 was recommended not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. This single-family residence sits along Vaugh Road, directly west of Dixie Drain 3 and within the western-central portion of the Project area.

PC ORIGINAL PKG

P-13-014975 (HP20; Wixom Drain)

P-13-014975 (Vaughn and Jessup Roads) is an earthen-dug irrigation drainage ditch constructed ca. 1940. It is approximately 10–20 feet wide, about 10–15 feet deep, and about 2 miles long. This resource was recorded in 2011 by ASM. P-13-014975 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. The drain is located east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixom Road.

5.1.3 Historic Archival Research

Dudek conducted an online review of Bureau of Land Management (BLM) General Land Office Records, historical topographic maps, and historic aerial photographs to understand the historic development of the Project area and vicinity. The Project area was first subdivided into Township 16 South, Range 12 East in an 1857 original survey for the BLM by John C. Hays. The Plat image of the original survey shows the Project area as undeveloped with the exception of a dirt wagon road (connecting "Warner's Rancho" to "Fort Yuma") bisecting the parcel on an east to west axis (BLM 2023). U.S. Geological Survey historical topographic maps (historic topos) depicting the Project area are available from 1940 to 1989 (USGS 2023). The earliest available historic topo from 1940 shows robust roadway and agricultural canal development throughout the project area. U.S. Route 80 (re-named as Interstate Highway 8 in 1964) appears along the northern boundary of the Project area, Fox Glove Canal and Westside Canal appear along the western boundary of the Project area, and Fig Canal appears along the eastern boundary of the Project area. In addition to these manmade water conveyance features, there are several additional unnamed perennial and seasonal streams and sloughs that run through the Project area on a north to south axis. The historic topo from 1940 also shows several additional unnamed canals and roadways throughout the Project area, as well as several unnamed structures (likely single-family residences and agricultural buildings) and a primary school (USGS 2023).

Historic aerial photographs (historic aerials) for the Project area are available from 1953 to 2020 and give more detail on the land use and development not depicted in the historic topos (NETR 2023). The historic aerial from 1953 shows that the Project area was utilized mainly for agricultural purposes, as evidenced by the many delineated agricultural cropland parcels. In 1953, much of the eastern portion of the Project area appears to be a part of the New River wetlands system and floodplains. By 1984, the New River had been channelized, and its surrounding wetlands and floodplains were replaced by irrigated cropland parcels, some containing agricultural structures and other rural infrastructure. There is little change in the aerial depiction of the Project area from 1984 to 2012; irrigated cropland parcels persist. By 2014, the Campo Verde Solar Farm first appears directly adjacent to the Project area among the still present actively irrigated and dryland cropland parcels (NETR 2023).

Overall, the Project area appears to have been used primarily for agricultural and residential purposes throughout recorded history. As indicated in the historic topos and historic aerial photographs, there are several historic-age built environment cultural resources within and adjacent to the Project area. These include several canal/water conveyance systems, roadways, historic residences, and a primary school. All built environment resources identified as part of this Project are addressed in the *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California*, prepared by Dudek in 2023 (Brisentine et al. 2024).

PC ORIGINAL PKG

5.2 Survey Results

The Project area encompasses active irrigated and dryland cropland, idle cropland, and developed land with various agricultural buildings, single family residences, and other rural infrastructure. There are also several water conveyance canals and established roads throughout the Project area. Ground surface visibility was poor (0-30%) in areas with dense vegetation present (non-native grasses, hayfield, and grain crops) and within paved roads (Figure 3). Areas of poor visibility accounted for approximately 88.9% of the Project area. Visibility was moderate to excellent (40-60% and 70-100%, respectively) within fields that had been recently planted or with sparce vegetation (row crops) and within dirt access roads (Figure 4 and Figure 5). Areas of moderate to excellent visibility accounted for approximately 11.1% of the Project area. Overall, archaeologists observed that the Project area has been heavily disturbed by years of agricultural activities as evidenced by plow scars, irrigation canals and drainages, and the presence of active irrigated cropland, dryland cropland, and idle cropland. Irrigation canals and drainages are considered as built environment resources and are addressed in the *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California*, prepared by Dudek in 2024 (Brisentine et al. 2024).

PC ORIGINAL PKG

Figure 3. Example of poor ground visibility (0-30%). Photo taken from northeast corner of APN 051-300-037, view facing south.



PC ORIGINAL PKG

Figure 4. Example of moderate ground visibility (40-60%). Photo taken from northern boundary of APN 051-270-036, view facing south.



PC ORIGINAL PKG

Figure 5. Example of excellent ground visibility (70-100%). Photo taken from northeast corner of APN 051-280-054, view facing south.



PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

6 Summary and Recommendations

No newly identified prehistoric or historic-era archaeological resources were recorded as part of this Phase 1 Cultural Resources Inventory of the Big Rock 2 Cluster Solar and Storage Project. Based on available archival information, the presence of archaeological resources adjacent to the Project area, and in consideration of the topography, and the Project's vicinity to the New River; there is a moderate potential for the inadvertent discovery of archaeological resources during Project implementation. Dudek recommends full-time archaeological and Native American monitoring during initial ground disturbance for the Project. If disturbed sediments (e.g., fill) or other sediments and formations are identified that do not have the potential to contain archaeological resources, then monitoring may be reduced or terminated. Management recommendations to reduce potential impacts to unanticipated archaeological resources and human remains during construction activities are provided below.

The previously recorded cultural resources (P-13-003403, P-13-012688, P-13-012689, P-13-012693, P-13-013758, P-13-014263, and P-13-014975) that are located within the Project area are all considered built environment resources. All built environment resources identified as part of this Project are addressed in the *Built Environment Cultural Resources Constraints Memorandum for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California*, prepared by Dudek in 2024 (Brisentine et al. 2024) along with five (5) additional historic-era built environment resources (Map ID 3, Map ID 8, Map ID 17, Map ID 18, and Map ID 19) that were identified during the built environment pedestrian survey for the Project (See Appendix B for Cultural Resources Overview Map).

Unanticipated Discovery of Archaeological Resources

In the event that an archaeological or Native American monitor identifies cultural resources (sites, features, or artifacts) during construction activities for the Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the significance of the find and determine whether or not additional study is warranted. If the discovery is clearly not significant (e.g., and isolate) the archaeologist may simply record the find and allow work to continue. If the discovery proves potentially significant under CEQA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

Unanticipated Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD shall complete inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

PC ORIGINAL PKG

Dudek also conducted built environment resources and paleontological resources investigations for the Project. Appended to this cultural resources inventory study is the *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California* (Brisentine et al. 2024 included in Appendix C) and *Paleontological Resources Inventory Report for the Big Rock 2 Energy Project, Imperial County, California* (Siren and Williams 2024 included in Appendix D).

The *Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California* (Brisentine et al. 2024) found 18 historic-age properties within the Project's area of potential impacts (API). Thirteen properties: 2396 West Vaughn Road (APN 051-300-031); Westside Elementary (APN 051-300-010); 1651 Westside Road (APN 051-270-038); Property at the Intersection of Liebert Road and Mandrapa Road (APN 051-350-017); 2094 Wixom Road (APN 051-330-024); 1905 Wixom Road (APN 051-360-038); the Wixom Drain (multiple APNs); the Fig Canal (multiple APNs); the Fern Canal (multiple APNs); and the Dixie Drains and Laterals (multiple APNs), Westside Main Canal and Drain (multiple APNs); Fox Glove Canal (multiple APNs); and the Crossed Wagon Road from Fort Yuma to Warners Ranch (multiple APNs) were previously recorded and recommended as and ineligible for the NRHP and Dudek concurred with these findings. In addition, Dudek inventoried and evaluated the following newly recorded properties: 2250 West Vaughn Road (APN 051-300-027); 2104 West Wixom Road (APN 051-330-021); Cattle Corral Shelter (051-310-026); the Diehl Drain (multiple APNs); and the Fig Drain (multiple APNs). The Built Environment Report determined that the Project would have no impact on historical resources as defined by CEQA and no further consideration of historic-era built environment resources is necessary prior to Project implementation (Birsentine et al. 2024).

The *Paleontological Resources Inventory Report for the Big Rock 2 Energy Project, Imperial County, California* (Siren and Williams 2024) did not observe in situ fossils within the Project area during the paleontological survey, however, the Project area is underlain by ancient Lake Cahuilla sediments that have high paleontological sensitivity when not disturbed by agricultural activities, and surficial sediments that have been disturbed by agricultural activities or other man-made disturbances have low paleontological determined that the Project area is underlain by ancient Lake Cahuilla sediments that have high paleontological sensitivity when not disturbed by agricultural activities, and surficial sediments that have been disturbed by agricultural activities or other man-made disturbances have low paleontological resource sensitivity and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments, would be considered a potentially significant impact, therefore, a paleontological monitoring program is recommended during grading within previously undisturbed sedimentary deposits within the Project area (Siren and Williams 2024).

PC ORIGINAL PKG

7 References

Arter, S. 2013. Vertebrate Fauna from Western Otay Mesa Sites CA-SDI-7455 and CA-SDI-19712. Submitted to Dudek.

Arter, S., and M. Roeder. 2010. Big Birds, Frogs, Sea Otters, and Lots of Wrasses: Vertebrate Remains Spanning 8,900 Years of Occupation at the Spindrift Village Site, La Jolla, California. Society for California Archaeology Annual Meetings. Riverside, California: Society for California Archaeology.

Basgall, M.E., and M. Hall. 1990. "Adaptive Variation in the North-Central Mojave Desert." Paper presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas, Nevada.

Basgall, M.E., and M. Hall. 1993. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Basgall, M.E., L. Johnson, and M.J. Hale. 2002. "An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California." Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Bean, L.J., and F.C. Shipek. 1978. "Luiseño." In Handbook of North American Indians, Vol. 8, California, edited by R.F. Heizer, 550–563. Washington, D.C.: Smithsonian Institution.

Becker, M., and D.R. Iverson, 2006. "Lithic Techno-Typology and Function in the Las Pulgas Corridor, Camp Pendleton, and the Implications for Prehistoric Occupation of Coastal Southern California." In From the Coast to the Inland: Prehistoric Settlement Systems along the Las Pulgas Corridor, Camp Pendleton, California, edited by M.J. Hale and M. Becker, 459–497. Carlsbad, California: ASM Affiliates.

BLM. 2023. Bureau of Land Management General Land Office Records for Imperial County, California, Dating to 1857. Accessed: Apr 2023. https://glorecords.blm.gov/search/

Boscana, G. 1846. "Chinigchinich: A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California." In Life in California, edited by A. Robinson, 227–341. New York, New York: Wiley & Putnam.

Brisentine, E., Jones, E.J, and K. Ahmanson. 2024. Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California. On file at Dudek.

Byrd, B.F., and S.N. Reddy. 2002. "Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms." In Cultural Complexity on the California Coast: Late Holocene Archaeological and Environmental Records, edited by J.M. Erlandson and T.L. Jones, 41–62. Los Angeles, California: University of California–Los Angeles Press.

City of San Diego. 2011. "California Environmental Quality Act: Significance Determination Thresholds." Development Service Department. San Diego, California.

City of San Diego. 2014. City of San Diego's Scoping Letter for the Pure Water Program.

PC ORIGINAL PKG

County of San Diego. 2007. Ordinance No. 9890 (N/S). County of San Diego Board of Supervisors. San Diego, California.

CSP (California State Parks). 2009. "Preservation Matters." The Newsletter of the California Office of Historic Preservation 2(3):3–21.

Davis, E.L. 1978. The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country. Los Angeles, California: Natural History Museum of Los Angeles County.

Dowd, M. J. 1956. IID: The First 40 Years. Imperial Irrigation District. Unpublished manuscript on file at IID. March 2015. Accessed November 12, 2021. https://www.iid.com/home/showpublisheddocument/6000/635648001335730000

Eerkens, J.W. 2001. "The Origins of Pottery among Late Prehistoric Hunter-Gatherers in California and the Western Great Basin." PhD dissertation; University of California, Santa Barbara.

Fages, P. 1937. A Historical, Political, and Natural Description of California (1775). Translated by Herbert Ingram Priestly. Berkeley, California: University of California Press.

Flenniken, J., J. Eighmey, and M. McDonald, 2004. "Comparative Technological Lithic Analysis of Selected Temporally Diagnostic San Diego Sites." In Prehistoric and Historic Archaeology of Metropolitan San Diego: An Historic Properties Background Study. Report on file at the South Coastal Information Center.

Gallegos, D.R. 1987. "San Dieguito-La Jolla: Chronology and Controversy." San Diego County Archaeological Society, Research Paper No. 1.

Gallegos, D., and C. Kyle. 1988. Five Thousand Years of Maritime Subsistence at Ballast Point Prehistoric Site SDI-48 (W-164), San Diego, California. San Diego, California: WESTEC Services.

Gallucci, K. 2004. "Ceramic Analysis at Wikalokai, San Diego County (CA-SDI-4787)." Society of California Archaeology 14:119–123.

Geiger, M., and C.W. Meighan. 1976. As The Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813–1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. "Linguistic Prehistory." In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Griset, S. 1996. "Southern California Brown Ware." Unpublished PhD dissertation; University of California, Riverside.

Hale, M.J. 2001. "Technological Organization of the Millingstone Pattern in Southern California." Master's thesis; California State University, Sacramento.

Hale, M.J. 2009. "San Diego and Santa Barbara: Socioeconomic Divergence in Southern California." PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California." Smithsonian Miscellaneous Collections 92(4).

PC ORIGINAL PKG

Hector, S.M. 1984. "Late Prehistoric Hunter-Gatherer Activities in Southern San Diego County." PhD dissertation; University of California, Los Angeles.

Hector, S.M. 2007. Archaeological Investigations at University House Meeting Center and Chancellor Residence, CA-SDI-4669 (SDM-W-12), University of California at San Diego, La Jolla, California. ASM Affiliates.

Hildebrand, J.A., T. Gross, J. Schaefer, and H. Neff. 2002. "Patayan Ceramic Variability: Using Trace Elements and Petrographic Analysis to Study Brown and Buff Wares in Southern California." In Ceramic Production and Circulation in the Greater Southwest, edited by D.M. Glowacki and H. Neff, 121–139. Monograph No. 44. Los Angeles, California: Cotsen Institute of Archaeology.

Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." Journal of California and Great Basin Anthropology 26:33–64.

Kroeber, A. 1925. Handbook of the Indians of California. Washington D.C.: Smithsonian Institution.

Laylander, D. 1985. "Some Linguistic Approaches to Southern California's Prehistory." San Diego State University Cultural Resource Management Center Casual Papers 2(1): 14-58.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Laylander, D. 2010. "Linguistic Prehistory." Research Issues in San Diego Prehistory. Accessed August 31, 2012. http://www.sandiegoarchaeology.org/Laylander/Issues /index.htm

Lightfoot, K.J. 2005. "Indians, Missionaries, and Merchants." Berkeley, California: University of California Press.

Luomala, K. 1978. "Tipai and Ipai." In California, edited by Robert F. Heizer, 592–609. Handbook of the North American Indians, Vol. 8, William C. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution.

McDonald, M., C. Serr, and J. Schaefer. 1993. "Phase II Archaeological Evaluation of CA-SDI-12,809: A Late Prehistoric Habitation Site in the Otay River Valley, San Diego County, California." Prepared for Caltrans, District 11. San Diego, California: Brian F. Mooney Associates.

Meighan, C.W. 1959. "California Cultures and the Concept of an Archaic Stage." American Antiquity 24:289–305.

NETR. 2023. Historic Aerial Photographs of Imperial County, California dating from 1953 to 2020. Accessed: Apr 2023. https://www.historicaerials.com/viewer

NPS (National Park Service). 2018. "Archaeological and Historic Preservation: Secretary of the Interior's Standards and Guidelines." Accessed November 2021. https://www.nps.gov/history/local-law/arch_stnds_7.htm

Office of Historic Preservation. 1995. "Instructions for Recording Historical Resources." California State Parks, Office of Historic Preservation. March 1995. http://ohp.parks.ca.gov/pages/1054/files/manual95.pdf

Owen, R.C. 1965. "The Patrilineal Band: A Linguistically and Culturally Hybrid Social Unit." American Anthropologist 67:675–690.

PC ORIGINAL PKG

Pigniolo, A.R. 2004. "Points, Patterns, and People: Distribution of the Desert Side-Notched Point in San Diego." Proceedings of the Society for California Archaeology 14:27–39.

Pigniolo, A.R. 2005. "Subsistence, Settlement, and Environmental Change at San Diego Bay." Proceedings of the Society for California Archaeology 18:255–259.

Preston, W.L. 2002. "Portents of Plague from California's Protohistoric Period." Ethnohistory 49:69–121.

Rogers, M.J. 1929. "The Stone Art of the San Dieguito Plateau." American Anthropologist 31:454–467.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." Southwestern Journal of Anthropology 1:167–198.

Ryon, R. 1985. "Estate of Scripps' Daughter Purchased." Los Angeles Times. June 30, 1985.

Shipek, F.C. 1982. "Kumeyaay Socio-Political Structure." Journal of California and Great Basin Anthropology 4:296–303.

Shipek, F.C. 1985. "Kuuchamaa: The Kumeyaay Sacred Mountain." Journal of California and Great Basin Anthropology 7(1): 67–74.

Shipek, F.C. 1991. Delphina Cuero: Her Autobiography: An Account of her Last Years and Her Ethnobotanic Contributions. Menlo Park, California: Ballena Press.

Siren, S. and M. Williams. 2024. Paleontological Resources Inventory Report for the Big Rock 2 Energy Project, Imperial County, California. On file at Dudek.

Spier, L. 1923. "Southern Diegueño Customs." University of California Publications in American Archaeology and Ethnology 20:295–358.

True, D.L. 1966. "Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California." PhD dissertation; University of California, Los Angeles.

True, D.L. 1980. "The Pauma Complex in Northern San Diego County: 1978." Journal of New World Archaeology 3(4):1–39.

USGS. 2023. Historic Topographic Maps of Imperial County, California, Dating from 1940 to 1989. Accessed: Apr 2023. https://livingatlas.arcgis.com/topoexplorer/

Wallace, W.J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." Southwestern Journal of Anthropology 11:214–230.

Wallace, W.J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." Southwestern Journal of Anthropology 11:214–230.

Warren, C.N. 1964. "Cultural Change and Continuity on the San Diego Coast." PhD dissertation; University of California, Los Angeles.

PC ORIGINAL PKG

Warren, C.N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In Archaic Prehistory in the Western United States, edited by C. Irwin-Williams, 1–14. Portales, New Mexico: Eastern New Mexico University Contributions in Anthropology.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. "Paleoindian and Early Archaic Periods." In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Wilken, M.A. 2012. "An Ethnobotany of Baja California's Kumeyaay Indians." Master's thesis; San Diego State University.

Yohe, R., and P. Chace. 1995. "The Archaeology of Las Montanas (CA-SDI-10246): A Paleo-economic Interpretation of a Millingstone Horizon Site, San Diego County, California." Coyote Press Archives of California Prehistory 42. Edited by G. Breschini and T. Haversat.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix A

SCIC Records Search Results (Confidential)

PC ORIGINAL PKG

PC ORIGINAL PKG

Appendix B

Cultural Resources Overview Map (Confidential)

PC ORIGINAL PKG

PC ORIGINAL PKG

Appendix C

Built Environment Inventory and Evaluation Report for the Big Rock 2 Cluster Solar and Storage Project

PC ORIGINAL PKG

PC ORIGINAL PKG

FINAL

Built Environment Inventory and Evaluation Report

Big Rock 2 Cluster Solar and Storage Project, Imperial County, California

MAY 2024

Prepared for:

90FI 8ME LLC
Jennifer Jackson
4370 Town Center Boulevard, Suite 110
El Dorado Hills, California 95762

Prepared by:
Evan Brisentine, MSHP
EJ Jones, MA
Katie Ahmanson, MHC

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Adrienne Donovan-Boyd
adonovanboyd@dudek.com
503-201-3592

PC ORIGINAL PKG

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Acknowledgments

Primary Report Authors: This report was primarily prepared by Secretary of the Interior qualified Architectural Historians EJ (Erin) Jones, MA, and Evan Brisentine, MSHP.

Report Contributions: The report was also prepared with contributions from Katie Ahmanson, who completed sections in Chapter 3, and Senior Architectural Historians Adrienne Donovan-Boyd, MSHP, and Monte Kim, PhD, who provided a senior-level review of the report.

Team Support: Jason Greenstein, GIS Analyst, managed the geographic information system data and created the figures in the report.

Intended Use: This report is intended for the Client's and its representatives' exclusive use. Based on the results of Dudek's investigation, it contains professional conclusions and recommendations concerning the potential for project-related impacts on cultural resources. It should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the Project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate federal, state, and local review agencies for their comments prior to the commencement of the Project.

PC ORIGINAL PKG

INTENTIONALLY LET BLANK

PC ORIGINAL PKG

Executive Summary

90FI 8me LLC retained Dudek to prepare a built environment inventory and evaluation report for the proposed Big Rock 2 Cluster Solar and Storage Project (Project) in Imperial County, California. The Project is in unincorporated Imperial County, California (Figure 1, Project Location), south of Interstate Highway 8 and west of El Centro, California. The Project proposes to develop a photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of agricultural land (Figure 2, Built Environment Area of Potential Impact). Dudek completed this report under the provisions of local regulations and the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 5024.1, Title 14 California Code of Regulations (CCR) Section 15064.5 of the CEQA Guidelines, and PRC Sections 21084.1 (OHP 2005).

This report documents Dudek's efforts to identify and evaluate built environment resources 45 years of age or older (historic era) that may be subject to direct or indirect impacts under the CEQA as a result of the construction and operation of the proposed Project. These efforts included developing an Area of Potential Impacts (API), a records search of the California Historical Resources Information System (CHRIS), an intensive-level survey of the API for built resources of historic age (45 years of age or older); building development and archival research, the creation of an appropriate historic context, and recordation and evaluation of historic-era properties located in the API under National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) designation criteria.

Dudek's archival research and field survey found 18 historic-age properties within the API. Thirteen properties were previously recorded and recommended as ineligible for the NRHP. Dudek concurred with these findings and completed Department of Parks and Recreation (DPR) updates for the following properties: 2396 West Vaughn Road (Assessor's Parcel Number [APN] 051-300-031); Westside Elementary (APN 051-300-010); 1651 Westside Road (APN 051-270-038); Property at the Intersection of Liebert Road and Mandrapa Road (APN 051-350-017); 2094 Wixom Road (APN 051-330-024); 1905 Wixom Road (APN 051-360-038); the Wixom Drain (multiple APNs); the Fig Canal (multiple APNs); the Fern Canal (multiple APNs); and the Dixie Drains and Laterals (multiple APNs), Westside Main Canal and Drain (multiple APNs); and the Fox Glove Canal (multiple APNs). Dudek inventoried and evaluated the following newly recorded properties: 2250 West Vaughn Road (APN 051-300-027); and 2104 West Wixom Road (APN 051-330-021), Cattle Corral Shelter (APN 051-310-026), the Diehl Drain (multiple APNs), and the Fig Drain (multiple APNs).

Dudek concludes that the properties evaluated within the API do not appear eligible for listing in the NRHP or CRHR due to a lack of significance. As such, no properties within the API are considered to be historical resources under CEQA. In conclusion, this study finds that the Project would have no impact on historical resources as defined by CEQA. No further consideration of historic era-built environment resources is necessary prior to Project implementation.

PC ORIGINAL PKG

INTENTIONALLY LET BLANK

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

Acknowledgments i

Executive Summary iii

Acronyms and Abbreviations ix

1 Introduction 1
- 1.1 Project Location 1
- 1.2 Project Description 1
- 1.3 Project Personnel 1
- 1.4 Regulatory Setting 2
  - 1.4.1 Federal Regulations 5
  - 1.4.2 State Regulations 6
  - 1.4.3 Local Regulations 7
- 1.5 Area of Potential Impacts 7
  - 1.5.1 Area of Potential Impacts for Built Environment Properties 8

2 Literature Review and Background Research 13
- 2.1 CHRIS Records Search 13
  - 2.1.1 Previously Conducted Cultural Resource Studies 13
  - 2.1.2 Previously Recorded Built Environment Cultural Resources in the API 14
  - 2.1.3 Previously Recorded Built Environment Resources in the API 15
- 2.2 Additional Records Reviewed 18
  - 2.2.1 Imperial Irrigation District Archival Research 19
  - 2.2.2 Imperial Valley Desert Museum 20
- 2.3 Review of Historical Maps and Aerial Photographs 20
  - 2.3.1 Historical Topographic Maps 20
  - 2.3.2 Historical Aerial Photographs 20
- 2.4 Interested Party Correspondence 21

3 Historic Context 23
- 3.1 Land Acknowledgment 23
- 3.2 Historic Period 23
  - 3.2.1 Non-Native Exploration and Settlement in Imperial County 23
  - 3.2.2 Water Conveyance in Imperial Valley 25
  - 3.2.3 Bringing Irrigation to Imperial Valley 25
  - 3.2.4 Drainages and Laterals 27
  - 3.2.5 Agriculture Development in Imperial County 28

PC ORIGINAL PKG

3.2.6 Early Educational Development in Imperial County (1901–1950) 29

4 Field Survey Methods and Results 31
4.1 Methods 31
4.2 Survey Results 31

5 Results of Identification and Evaluation Efforts 33
5.1 Previously Recorded Properties 33
5.1.1 Map ID 1. 2396 West Vaughn Road (051-300-031) 33
5.1.2 Map ID 2. Westside Elementary School, 2294 West Vaughn Road (051-300-010) 37
5.1.3 Map ID 4. 1651 Westside Road (051-270-038) 39
5.1.4 Map ID 6. Property at the Intersection of Liebert Road and Mandrapa Road (No Situs Address; 051-350-017) 41
5.1.5 Map ID 7. 2094 West Wixom Road (051-330-024) 42
5.1.6 Map ID 9. 1905 Wixom Road (051-360-038) 44
5.1.7 Map ID 10. Wixom Drain 45
5.1.8 Map ID 11. Fig Canal 47
5.1.9 Map ID 12. Fern Canal 49
5.1.10 Map ID 13. Dixie Drains and Laterals 50
5.1.11 Map ID 14. Westside Main Canal and Drain 53
5.1.12 Map ID 15. Fox Glove Canal 55
5.1.13 Map ID 16. Crossed Wagon Road from Fort Yuma to Warners Ranch 57
5.2 Newly Identified Properties 59
5.2.1 Map ID 3. 2250 West Vaughn Road (051-300-027) 59
5.2.2 Map ID 8. 2104 West Wixom Road (051-330-021) 62
5.2.3 Map ID 17. Cattle Corral Shelter (051-310-026) 64
5.2.4 Map ID 18. Diehl Drain 67
5.2.5 Map ID 19. Fig Drain 69

6 Findings and Conclusions 73

7 References 75

TABLES

1 Historic Era Properties Identified in the API During Background Research and Field Survey 10
2 Previous Cultural Resources Studies within the API 13
3 Previously Recorded Built Environment Cultural Resources within the API 14
4 Built Environment Properties Recorded and Evaluated in the API 31
5 Summary of Significance Evaluations and Findings 73

PC ORIGINAL PKG

EXHIBITS

1 Main (north) elevation of the residence at 2396 West Vaughn Road, view looking northeast. Photograph taken on April 11, 2023. 34

2 Primary (south) and east elevations of the Westside Elementary School building, view looking northwest. Photograph taken on April 11, 2023. 38

3 Primary (south) and west elevations of the ancillary building, view looking northeast. Photograph taken on April 11, 2023. 38

4 Overview of the Westside Elementary School campus, including four of the seven extant buildings, view looking north. Photograph taken on April 11, 2023. 39

5 Overview of the property addressed as 1651 Westside Road, view looking northwest. Photograph taken on April 11, 2023. 40

6 View of the existing building, looking north. 41

7 Overview of the first single-family residence located at 2094 West Wixom Road, view looking east. Photograph taken on April 11, 2023. 43

8 The main (south) elevation of the second single-family residence located on the property, view looking north. Photograph taken on April 11, 2023. 44

9 Overview of the property located at 1905 Wixom Road, view looking northeast. Photograph taken on April 11, 2023. 45

10 North section of Wixom Drain, view looking south. Photograph taken on April 11, 2023. 46

11 The north section of Fig Canal, view looking south. Photograph taken on April 11, 2023. 48

12 North section of Fern Canal, view looking south. Photograph taken on April 11, 2023. 50

13 West side of Dixie Lateral Drain 1, view looking east. Photograph taken on April 11, 2023. 52

14 North side of Dixie Lateral Drain 3, view looking south. Photograph taken on April 11, 2023. 52

15 Photo taken from bridge to substation, looking southeast toward the Fern Check Bridge..... 53

16 View of the Fox Glove Canal on the corner of Hyde Road and West Vaughn Road, facing east. 55

17 Previously recorded site form map (P-13-003403). 57

18 Aerial view of a GLO overlay from 1857 and Google Earth 2023. 58

19 View from the right-of-way of Westside Elementary School at Mobile Home A (green arrow) and Outbuilding 1 (red arrow) looking northeast. 59

20 View from right-of-way with Mobile Home A (left) and Mobile Home B (right), looking north. 60

21 View from dirt road between Wixom Drain and Fern Canal of residential farmstead, looking northwest... 62

PC ORIGINAL PKG

22 View from the elevated dirt road between Derrick Road and the Fig Canal, facing west..... 64
23 View from the southeast corner of the Cattle Corral Shelter near the Fig Canal, facing northwest. 65
24 View from southern end of Diehl Drain, facing north..... 67
25 View of Diehl Drain and its connection to the Fig Drain, facing east. 68
26 View of the Fig Drain and an intact concrete weir near Diehl Road, facing south. 70
27 View of Fig Drain near W Wixom Road, facing north..... 70

FIGURES

1 Project Location 3
2 Built Environment Area of Potential Impact 11
3 Built Environment Historic Era Properties Identified 35

APPENDICES

A Preparers' Qualifications
B Interested Party Correspondence
C Previously Recorded Resources/DPR Updates
D Newly Recorded Resources/DPR Form Sets

PC ORIGINAL PKG

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ACHP	Advisory Council on Historic Preservation
API	Area of Potential Impacts
APN	Assessor's Parcel Number
ASM	ASM Affiliates, Inc.
BESS	battery energy storage system
BLM	Bureau of Land Management
ca.	circa
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
County	Imperial County
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
gen-tie line	generation transmission line
GLO	General Land Office
IID	Imperial Irrigation District
kV	kilovolts
MW	megawatts
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	Public Resources Code
Project	Big Rock 2 Cluster Solar and Storage Project
PV	photovoltaic
SCIC	South Coastal Information Center
SDG&E	San Diego Gas & Electric
SHPO	State Historic Preservation Officer
URS	URS Corporation
USBR	U.S. Bureau of Reclamation

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

1 Introduction

This Built Environment Inventory and Evaluation Report aims to identify previously identified and unidentified built environment cultural resources within or adjacent to the proposed Big Rock 2 Cluster Solar and Storage Project (Project) that might require additional analysis for compliance under the California Environmental Quality Act (CEQA) regarding historical resources. This report includes the following components: (1) an introduction including project location, description, the Area of Potential Impacts (API), and the regulatory context; (2) background research, which includes the review of the California Historical Resources Information System (CHRIS) records search conducted for the Project, specifically looking at built environment resources, a review of historical maps and aerial photographs; and the field methodology and the reconnaissance-level survey of the API; (3) the development of an applicable historic context for the project area; (4) an evaluation of significance for all properties within the API; and (5) recommendations.

1.1 Project Location

Dudek conducted a Phase I cultural resources inventory study for the Big Rock 2 Cluster Solar and Storage Project (Project). The Project is located in unincorporated Imperial County, California, south of Interstate Highway 8 and west of the town of El Centro, California. The Project proposes to develop a photovoltaic (PV) solar energy generation and battery energy storage system (BESS) facility on approximately 1,849 acres of agricultural land. The entire 1,849-acre area will be developed and disturbed by Project implementation. The cultural resources Project area (Project area) is composed of the following 24 Assessor's Parcel Numbers (APNs): 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300-035, 051-300-036, 051-300-037, 051-310-027, 051-310-028, 051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350-007, and 051-350-008. Specifically, the project is located in Township 16 South, Range 12 East, in Sections 14, 15, 16, 20, 21, 22, 23, 26, 27, 28, 29, 33, and 34 of the Seeley, Plaster City, and Mount Signal, California USGS 7.5 Minute Series Quadrangles (Figure 1).

1.2 Project Description

The Project includes the construction and operation of a 500-megawatt (MW) utility-scale PV solar energy generation and a 500 MW BESS. The Project's permanent facilities would include service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, energy storage system(s), and operations and maintenance facilities. Power generated by the Project would be collected using up to 66-kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead generation transmission line (gen-tie line) would then link the Project substation to the planned Liebert Switchyard, which will be connected via an overhead 230-kV gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation.

1.3 Project Personnel

This report, associated fieldwork, and property significance evaluation were prepared by Dudek Architectural Historians EJ Jones, MA, and Evan Brisentine, MSHP. The report was reviewed by Senior Architectural Historians

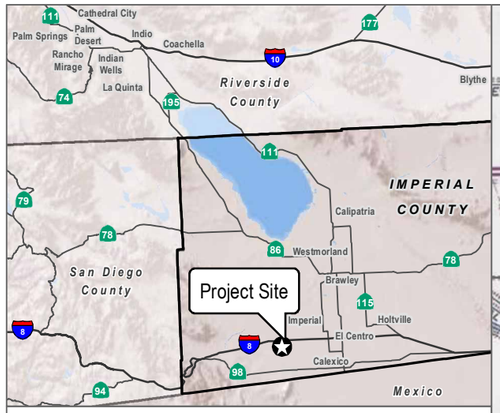
PC ORIGINAL PKG

Adrienne Donovan-Boyd, MSHP, and Monte Kim, PhD. Resumes for key personnel are provided in Appendix A, Preparers' Qualifications.

1.4 Regulatory Setting

While the Project, as planned, is subject only to state and local regulatory conditions, federal regulations are also provided here for reference should they be relevant in the future. The following sections provide a brief overview of the federal and state regulatory framework by which historic properties and historical resources are identified and evaluated, as well as the rubric by which significant impacts under CEQA are assessed.

PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line

Township 16S Range 12E Section 13
Township 16S Range 12E Section 14
Township 16S Range 12E Section 15
Township 16S Range 12E Section 16
Township 16S Range 12E Section 17
Township 16S Range 12E Section 18
Township 16S Range 12E Section 19
Township 16S Range 12E Section 20
Township 16S Range 12E Section 21
Township 16S Range 12E Section 22
Township 16S Range 12E Section 23
Township 16S Range 12E Section 24
Township 16S Range 12E Section 25
Township 16S Range 12E Section 26
Township 16S Range 12E Section 27
Township 16S Range 12E Section 28
Township 16S Range 12E Section 29
Township 16S Range 12E Section 30
Township 16S Range 12E Section 31
Township 16S Range 12E Section 32
Township 16S Range 12E Section 33
Township 16S Range 12E Section 34
Township 16S Range 12E Section 35
Township 16S Range 12E Section 36

SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

1.4.1 Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act (NHPA) established the National Register of Historic Places (NRHP) and the President's Advisory Council on Historic Preservation (ACHP), and provided that states may establish State Historic Preservation Officers (SHPOs) to carry out some of the functions of the NHPA. Most significantly, for federal agencies responsible for managing cultural resources, Section 106 of the NHPA directs that "[t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP." Section 106 also affords the ACHP a reasonable opportunity to comment on the undertaking (54 USC 306108).

36 Code of Federal Regulations, Part 800 (36 CFR 800) implements Section 106 of the NHPA. It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Native American tribes to identify resources with important cultural values; to determine whether or not they may be adversely affected by a proposed undertaking; and the process for eliminating, reducing, or mitigating the adverse effects.

The provisions of 36 CFR 60.4 include eligibility criteria for listing properties in the NRHP. The significance of cultural resources identified during an inventory must be formally evaluated for historic significance in consultation with the California SHPO to determine if the resources are eligible for inclusion in the NRHP. Cultural resources are eligible for listing in the NRHP if they possess both significance and the requisite quality of those features necessary to convey their significance. The NRHP criteria recognize seven aspects that define integrity in various combinations, including a property's integrity of location, design, setting, materials, workmanship, feeling, and association. The NRHP criteria for evaluation thus consider the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or
B. are associated with the lives of persons significant in our past; or
C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. have yielded or may be likely to yield, information important in prehistory or history [36 CFR 60.4].

The current cultural resources inventory is not designed to generate enough data to make eligibility recommendations on previously recorded cultural resources that are outside of the API or newly discovered cultural resources; such determinations are typically made during a subsequent evaluation phase (e.g., excavations at prehistoric sites). However, the survey was designed to generate enough information to provide informal assessments of eligibility to help guide management considerations.

PC ORIGINAL PKG

1.4.2 State Regulations

California Environmental Quality Act

Public or private projects funded or approved by public agencies are required to comply with regulations outlined under CEQA to assess the impacts of the project on historical resources. Under CEQA, historical resources are defined as buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. Should a project result in a substantial adverse change to a historical resource, CEQA requires that consideration of project modifications or measures to mitigate impacts be considered. As such, significance of cultural resources must be determined. The following steps are typically required under CEQA for cultural resources investigations:

- Identification of cultural resources.
- Evaluation of the significance of resources.
- Assessment of the impacts of the project on CEQA historical resources.
- If the project will result in significant impacts to historical resources, then create, outline, and implement measures to mitigate impacts.

Under CEQA, a cultural resource may qualify as a significant historical resource if it falls within the following three categories:

- The resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR).
- The resource is included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code (PRC), or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Section 15064.5[a]).

The ways of qualifying as a CEQA historical resource are related to the eligibility criteria outlined in the CRHR (PRC 5020.1[k], 5024.1, 5024.1[g]). A property may be considered a CEQA historical resource if it meets one of the following CRHR criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

NRHP listed or eligible properties are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC Section 5024.1[d][1]).

PC ORIGINAL PKG

1.4.3 Local Regulations

Imperial County

Section III(B) of the Imperial County (County) Conservation and Open Space Element describes the cultural resources, goals, and objectives to protect such resources (County of Imperial 2016). The planning goals and objectives are described below.

Goal 3 of the goals and objectives section of the Conservation and Open Space Element addresses the preservation of cultural resources. Goal 3 states that the County will "preserve the spiritual and cultural heritage of the diverse communities of Imperial County" (County of Imperial 2016). Three objectives are enumerated to assist in the implementation of the goal:

- Objective 3.1: Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.
- Objective 3.2: Develop management strategies to preserve the memory of important historic periods, including Spanish, Mexican, and early American settlements of Imperial County.
- Objective 3.3: Engage all local Native American Tribes in the protection of tribal cultural resources, including prehistoric trails and burial sites.

1.5 Area of Potential Impacts

The API is the study area delineated to assess potential impacts from the construction and operation of the Project on both archaeological and historic built environment resources. The built environment API encompasses the geographic area or areas within which the Project may directly or indirectly cause a substantial adverse change in the significance of a known or unknown historical resource. A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource is materially impaired (14 CCR Section 15064.5[b][1]). Under CEQA, material impairment of a historical resource is considered a significant impact (or effect), which can be direct, indirect, or cumulative.[1]

A direct or primary effect on a historical resource is one that is caused by the Project and occurs at the same time and place (14 CCR Section 15358[a][1]). Examples of direct effects that are caused by, and immediately related to, the Project include, but are not limited to, demolition, destruction, relocation, and alteration of a historical resource as a result of ground disturbance and other construction activities. Direct effects, however, are not limited to physical effects and, in certain circumstances, can be visual, vibratory, auditory, or atmospheric in nature if the effect is immediate and results in the material impairment of the significance of a historical resource. Visual intrusions within the viewshed of a historical resource, for example, could result in the material impairment of the resource's integrity of setting if an unencumbered view of the surrounding area or a specific area is a characteristic that contributes to the significance of the resource. Similarly, operational noise that exceeds the ambient level of a sensitive noise receptor can cause material impairment to a historical resource that derives part or all its

[1] As used in the CEQA Guidelines and 14 CCR Section 15358, the terms "effects" and "impacts" are synonymous in this report.

PC ORIGINAL PKG

significance from an inherently quiet auditory setting.[2] Finally, atmospheric intrusions, such as those caused by the introduction of high levels of fugitive dust emissions or chemical pollutants, can result in adverse effects that directly and physically affect biological landscape features that have been identified as historical resources for the purposes of CEQA. Overall, while direct effects clearly include physical effects, they may also include other types of effects that are visual, vibratory, auditory, or atmospheric in nature if the effect is caused by and occurs at the same time and place as the Project and there is no other intervening cause between the activities or components of the Project and the historical resource.

By contrast, an indirect or secondary effect is a reasonably foreseeable effect caused by the Project that occurs later in time or is farther removed in distance. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems (14 CCR Section 15358[a][2]). Because these types of effects are not immediately related to the Project, they are considered secondary effects.

Cumulative impacts refer to two or more individual effects that, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (14 CCR Section 15355[a]-[b]). The API for cumulative impacts, if any exist, would be coincident with the API for direct effects, indirect effects, or both because in order for a cumulative impact to exist, a historical resource must first be directly or indirectly affected by the Project.

1.5.1 Area of Potential Impacts for Built Environment Properties

Delineation of the API considered the proposed Project activities in conjunction with historic-era built resources that are 45 years of age or older (those built in or before 1979) that may sustain impacts due to the construction or operation of the Project.[3] The horizontal limits of the API include the legal parcels included in the Project Description; because of the size and height of the proposed solar array, the API was expanded to include adjacent parcels, as

[2] Construction noise that exceeds the ambient level of a sensitive noise receptor is not analyzed because it is considered a temporary impact that would not have an adverse effect on historical resources because it would not cause physical damage and would not permanently alter or diminish the integrity of such resources. Temporary construction noise would not result in a substantial adverse change in the significance of a historical resource and, therefore, would not cause a significant impact under CEQA.

[3] While the 50-year threshold is generally used for listing resources in the NRHP and the CRHR, the Office of Historic Preservation's (OHP) Instructions for Recording Historical Resources recommends recording "any physical evidence of human activities over 45 years . . . for the purposes of inclusion in the OHP's filing system." It also allows for the "documentation of resources less than 45 years . . . if those resources have been formally evaluated, regardless of the outcome of the evaluation." Further, the guidance notes that the 45-year threshold recognizes that there is commonly a 5-year lag between resource identification and the date that planning decisions are made, and thus it explicitly encourages the collection of data about resources that may become eligible for the NRHP or CRHR within that planning period. More restrictive criteria must be met before the resources included in OHP's filing system are listed, found eligible for listing, or otherwise determined to be important in connection with federal, state, and local legal statuses and registration programs (OHP 1995: 2).

PC ORIGINAL PKG

delineated in Figure 2, Built Environment Area of Potential Impact. Additional considerations used to justify the delineation of the API include the following:

- The API includes an area of direct physical effect, encompassing the 1,848-acre Project site. The area of direct physical effect occupies the following 24 APNs: 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300-035, 051-300-036, 051-300-037, 051-310-027, 051-310-028, 051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350-007, and 051-350-008. These parcels include all areas where ground disturbance, grading, and site preparation associated with the Project would occur.
- The API also includes the adjacent parcels where there are buildings or structures that are more than 45 years of age. These were included in the API and area of direct effect out of consideration for any potential visual impacts the Project may have on the surrounding setting.
- The area south of the Westside Main Canal was removed from the proposed Project API because these properties are vacant.
- The API excludes any properties north of Kumeyaay Highway (Interstate 8) as the four-lane divided highway, constructed in circa (ca.) 1970, creates a substantial visual barrier. Any properties north of the transportation corridor are spatially removed from the proposed Project, making significant adverse impacts unlikely.
- The API also excludes the area to the east of the lake adjacent to the Rio Bend Golf Course in the northeast corner of the API. The lake creates a formidable barrier to the solar array, providing a buffer between the Project and any potential historic properties.
- The API currently contains no geographic areas of indirect effect since no reasonably foreseeable Project activities occurring later in time or farther removed in distance have been identified, nor have any of the newly identified resources in the API been evaluated yet to determine their potential significance. Consequently, there are currently no historical resources in the API that would be indirectly affected by the Project.

The properties that were found to have historic-era components within the API were each assigned a Map ID number, and each building and structure observed on each Map ID property was assigned a corresponding alphabetical label. Map IDs 1 through 19 were given ID numbers. As a result of the initial research conducted on properties within API, the Imperial Valley Substation appeared to have built environment components over 45 years of age and was assigned Map ID 5. However, archival research showed that it did not meet the age threshold for the survey as it is not yet 45 years of age. As such, this property was excluded from the analysis of this report. The remaining Map IDs were addressed in detail throughout this report and evaluated for historic significance under NRHP and CRHR criteria to assess potential impacts as the result of this Project. Detailed analysis of these properties is presented in Chapter 5, Results of Identification and Evaluation Efforts. Table 1 summarizes the properties located within the API. The table includes the Map ID, property type, address (if available), APN(s), the approximate year built, and primary numbers from the South Coastal Information Center (SCIC), if previously recorded.

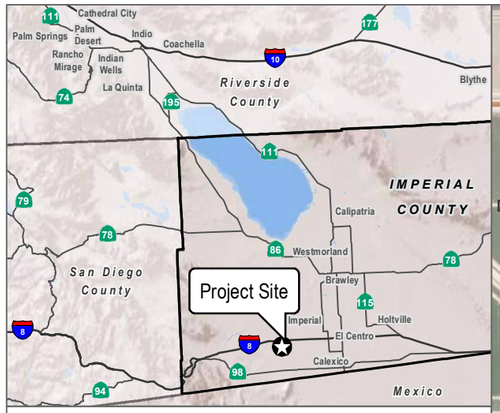
PC ORIGINAL PKG

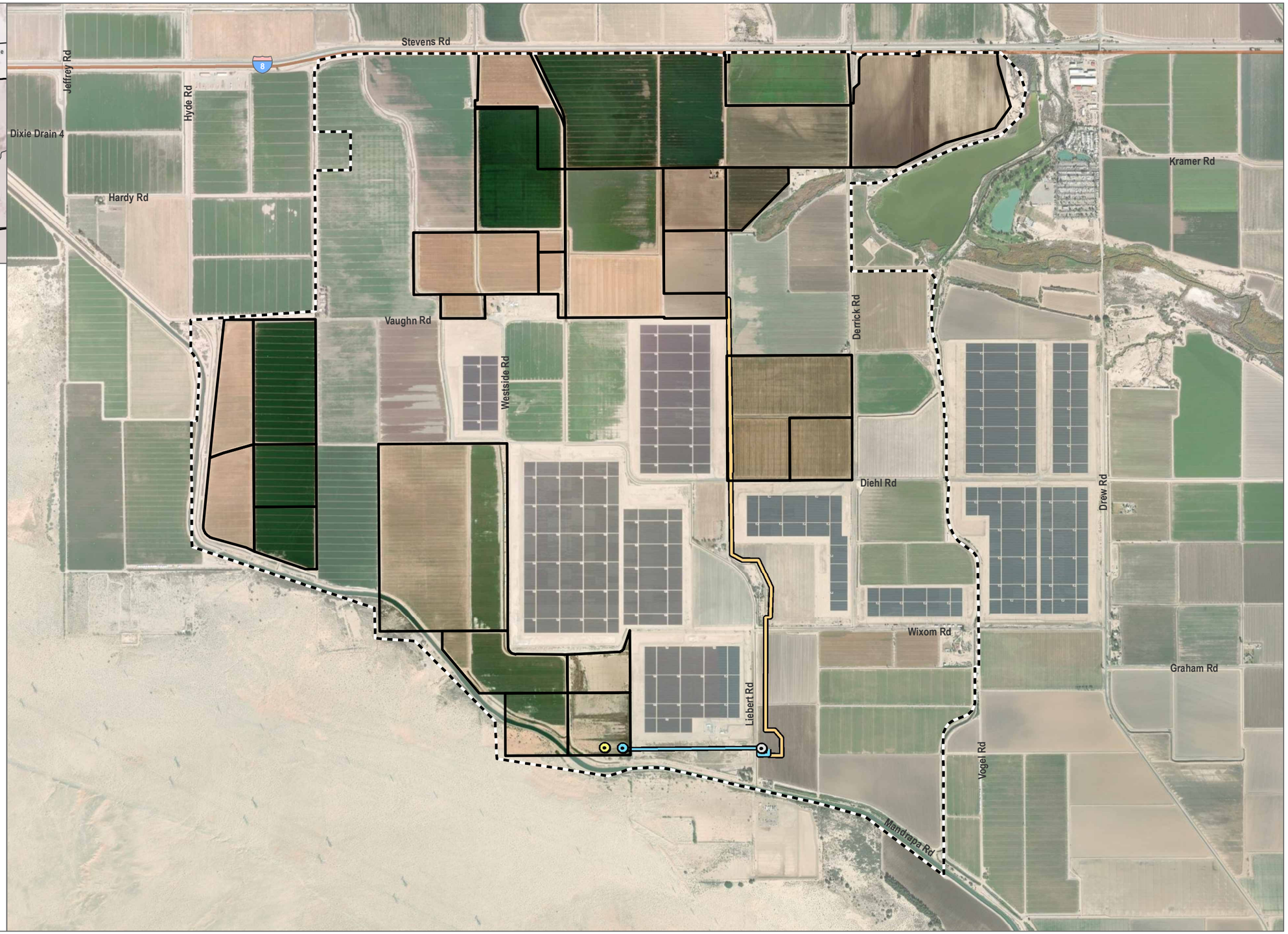
Table 1. Historic Era Properties Identified in the API During Background Research and Field Survey

Figure 3 Map ID	Property Type	Address/APN	Year Built	Evaluation Status
Previously Recorded within the API				
1	Residential	2396 West Vaughn Road (051-300-031)	ca. 1960	P-13-014263
2	Education	2294 West Vaughn Road (051-300-010)	ca. 1965	P-13-014264
4	Residential	1651 Westside Road (051-270-038)	ca. 1955	P-13-013758
6	Residential	No Situs Address (previously associated with 1105 Liebert Road) (051-350-017)	ca. 1974	P-13-012700
7	Residential	2094 Wixom Road (051-330-024)	ca. 1945	P-13-014265
9	Residential	1905 Wixom Road (051-360-038)	ca. 1970	P-13-014266
10	Water Conveyance	Wixom Drain (Linear Resource)	ca. 1940	P-13-014975
11	Water Conveyance	Fig Canal (Linear Resource)	ca. 1912	P-13-012693
12	Water Conveyance	Fern Canal (Linear Resource)	ca. 1909	P-13-012689
13	Water Conveyance	Dixie Drains and Laterals (Linear Resource)	1911/ ca. 1940	P-13-012688
14	Water Conveyance	Westside Main Canal and Drain (Linear Resources)	1908	P-13-008334
15	Water Conveyance	Fox Glove Canal (Linear Resource)	ca. 1912	P-13-009880
16	Road	Wagon Road (Linear Resource)	ca. 1850	P-13-003403
Newly Recorded within the API				
3	Residential	2250 West Vaughn Road (051-300-027)	ca. 1976	Previously unevaluated
5	Substation	2104 West Wixom Road (051-330-021)	ca. 1982	Previously unevaluated
8	Residential	2104 West Wixom Road/051-330-021	1940	Previously unevaluated
17	Agricultural	No Situs Address (APN 051-310-026)	ca. 1956	Previously unevaluated
18	Water Conveyance	Diehl Drain (Linear Resource)	ca. 1950	Previously unevaluated
19	Water Conveyance	Fig Drain (Linear Resource)	ca. 1940	Previously unevaluated

Notes: APN = Assessor's Parcel Number; API = Area of Potential Impacts; ca. = circa.

PC ORIGINAL PKG





- Project Boundary
- Built Environment Area of Potential Impact
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line

SOURCE: Maxar 2023; Imperial County 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 2

Built Environment Area of Potential Impact

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

2 Literature Review and Background Research

Background research was conducted for the API in an effort to establish a thorough and accurate understanding of associated historic properties. The records search aims to identify any previously recorded built environment resources that may be located in the API. Below is a summary of the research conducted by the staff at the SCIC, which included an examination of the records search at San Diego State University and a review of previously prepared site records and reports, historical maps, ethnographies, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks and California Points of Historical Interest.

2.1 CHRIS Records Search

Dudek personnel defined a records search area that included the maximum extent of the proposed Project site boundary and a 1-mile record search buffer. The large records search area helps to ensure the identification of previously recorded resources and cultural reports. On March 31, 2023, Dudek archaeologist Makayla Murillo conducted an in-person records search of the API and a 1-mile search radius at the SCIC, which houses cultural resources records for Imperial County. Upon further review, Dudek returned to SCIC in June 2023 to retrieve three resource reports that were not recovered from the initial records search. The search included previously recorded prehistoric and historic-age archaeological resources, historic-age built-environment resources, Department of Parks and Recreation (DPR) site records, technical reports, archival resources, and ethnographic references. The following summary focuses on records that include built environment resources and reports. The complete confidential records search results are presented in the Cultural Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California, prepared by Dudek in 2024 (Bakhtiary et al. 2024).

2.1.1 Previously Conducted Cultural Resource Studies

Fifty-one cultural resources studies have been previously conducted within a 1-mile radius of the Project site. Seven of those studies intersect the API (Table 2). All seven studies were conducted between 1979 and 2006. None of the seven studies identified built environment historic resources in the API. Although approximately 30% of the API overlaps with previous study areas, none of the studies are considered adequate according to the Secretary of Interior's standards and guidelines for cultural resource inventories. These studies were reviewed as part of background research conducted for this project.

Table 2. Previous Cultural Resources Studies within the API

SCIC Report ID	Author	Year	Report Title
IM-00203	Gallegos, Dennis	1979	Class II Cultural Resources Inventory East Mesa and West Mesa Regions, Imperial Valley, California, Volume I
IM-00207	Davis, Emma Lou	1980	Class II Cultural Resources Inventory East Mesa and West Mesa Regions, Imperial Valley, California
IM-00210	Von Werlhof, Jay, and Karen McNitt	1980	Archaeological Examinations of the Republic Geothermal Field, East Mesa, Imperial Valley County

PC ORIGINAL PKG

Table 2. Previous Cultural Resources Studies within the API

SCIC Report ID	Author	Year	Report Title
IM-01306	Wirth Associates, Inc.	1980	APS/SDG&E Interconnection Project Environmental Study Phase II Corridor Studies – Native American Cultural Resources Appendices
IM-01388	Olech, Lilliana	1981	Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan
IM-00512	RTP Environmental Associates, Inc.	1994	Conditional Use Permit and Environmental Information for the Hazard Area Exploration Wells
IM-00993	Wlodarski, Robert J.	2006	Nextel Wireless Communications Site CA899IC (Sunbeam: Kuhn 2)

Notes: API = Area of Potential Impacts; SCIC = South Coastal Information Center.

2.1.2 Previously Recorded Built Environment Cultural Resources in the API

After conducting two record searches (March and June 2023), the SCIC records indicate that 13 previously recorded built environment resources are within the API (P-13-003403, P-13-012688, P-13-012689, P-13-012693, P-13-013758, P-13-014263, P-13-014264, P-13-014265, P-13-014266, P-13-014975, P-13-008334, P-13-009880, and P-13-012700) (Table 3). These 13 resources consist of four canal/water conveyance systems for agricultural use, one road, two drainage systems, a school, a multiple-residence complex, and four residences, which are discussed below. One resource, P-13-003403, has not been evaluated, and 12 (P-13-012688, P-13-012689, P-13-012693, P-13-013758, P-13-014263, P-13-014264, P-13-014265, P-13-014266, P-13-014975, P-13-008334, and P-13-009880, and P-13-12700) have been determined not eligible for listing on the CRHR and the NRHP (Table 3).

Table 3. Previously Recorded Built Environment Cultural Resources within the API

Primary Number/ Trinomial	Resource Type	Description	Recorded By/Date	CRHR/NRHP Status
Within the API				
P-13-003403/ CA-IMP-3403/H	Historic Road	AH7; Wagon Road from Fort Yuma to Warner's Ranch	Unknown/ 2009	Unevaluated
P-13-012688	Historic Water Infrastructure	HP20; Dixie Drains 2, 3, and 4 and Dixie Lateral 1	URS Corporation/ 2009	Dixie Drain 3 and Lateral 1 were recommended as not eligible; Dixie Drains 2 and 4 were unevaluated per DPR 523
P-13-012689	Historic Water Infrastructure	HP20; Fern Canal and Drain System	URS Corporation/ 2009	Recommended not eligible

PC ORIGINAL PKG

Table 3. Previously Recorded Built Environment Cultural Resources within the API

Primary Number/ Trinomial	Resource Type	Description	Recorded By/Date	CRHR/NRHP Status
P-13-012693	Historic Water Infrastructure	HP20; Fig Canal	URS Corporation/ 2009	Recommended not eligible
P-13-013758/ CA-IMP-11759/H	Historic Residential	HP2; 1651 Westside Road	ASM Affiliates/2011	Recommended not eligible
P-13-014263	Historic Residential	HP2; Preece Residence	Chambers Group/2012	Recommended not eligible
P-13-014264	Historic School	HP15; Westside Elementary School	Chambers Group/2012	Recommended not eligible
P-13-014265	Historic Residential	HP3; Multiple Residence Compound	Chambers Group/2012	Recommended not eligible
P-13-014266	Historic Residential	HP2; Black Residence	Chambers Group/2012	Recommended not eligible
P-13-014975	Historic Water Infrastructure	HP20; Wixom Drain	ASM Affiliates/2011	Recommended not eligible
P-13-008334	Historic Water Infrastructure	HP20; Westside Main Canal	ASM Affiliates/ 2017	Recommended not eligible
P-13-009880	Historic Water Infrastructure	HP20; Fox Glove Canal	ASM Affiliates/ 2011	Recommended not eligible
P-13-012700	Historic Residential	HP2; 1105 Liebert Road	URS/2010	Recommended not eligible

Notes: API = Area of Potential Impacts; CRHR = California Register of Historical Resources; NRHP = National Register of Historic Places.

2.1.3 Previously Recorded Built Environment Resources in the API

The following previously recorded resources were located in the API and are described below. These are described in detail in Chapter 5; this information was compiled as part of background research and to inform the field survey.

P-13-003403 (AH7; Wagon Road from Fort Yuma to Warner's Ranch); CA-IMP-3403/H

P-13-003403 is a wagon road that historically connected Fort Yuma in Imperial County to Warner's Ranch in San Diego County. It was first recorded in 2009. The historic placement of P-13-003403 crosses the API on a roughly east-to-west axis, although no current evidence indicates this resource still exists.

PC ORIGINAL PKG

P-13-012688 (HP20; Dixie Drains 2, 3, and 4 and Dixie Lateral 1)

P-13-012688 consists of Dixie Drains 2, 3, and 4 and Dixie Lateral 1. Dixie Drain 3 was first recorded by URS Corporation (URS) in 2009 and given the primary number P-13-012688. In 2011, DPR forms for P-13-012688 were updated by ASM Affiliates, Inc. (ASM) to include a larger section of Dixie Drain 3, as well as Dixie Drains 2 and 4 and Dixie Lateral 1. The Dixie Drain Irrigation System is part of a more extensive water conveyance system that includes the Westside Drain, Forget-Me-Not Drain, and Salt Creek Drain, which all empty into the New River. Dixie Lateral 1 dates back to before 1914, while Dixie Drains 2, 3, and 4 were likely constructed in ca. 1940. In 2009, URS recommended Dixie Drain 3 as not eligible for listing on the CRHR or NRHP due to its loss of integrity from the regular dredging and widening of the canals and drains over time. In 2011, ASM recommended Dixie Lateral 1 as not eligible for listing on the CRHR or NRHP for similar reasons. ASM did not conduct a formal evaluation or provide a recommendation of eligibility for Dixie Drains 2 and 4. The Dixie Drains run along the boundaries of the southwestern portion of the API on a north-to-south axis, while Lateral 1 runs through the API on an east-to-west axis.

P-13-012689 (HP20; Fern Canal and Drain System)

P-13-012689 consists of a section of the Fern Canal and an associated section of the Fern Side Main. This resource was first recorded in 2009 by URS. Updates to include additional sections of the Fern Canal were completed in 2010 by Chambers Group, in 2011 by KP Environmental and ASM, and in 2017 by ASM. The Fern Canal was constructed ca. 1909 and is approximately 10 miles long. Modifications were made to the canal in the 1960s, and the canal is currently lined with concrete. URS, Chamber Group, KP Environmental, and ASM have all recommended that the recorded portions of the Fern Canal are not eligible for listing on the CRHR or NRHP due to a lack of integrity. The Fern Canal runs through the middle of the northern portion of the API on a north-to-south axis.

P-13-012693 (HP20; Fig Canal)

P-13-012693 consists of a concrete-lined section of the Fig Canal that was constructed ca. 1912 and spans over 4 miles on a north-to-south axis through the easternmost portion of the API. The Fig Canal was first recorded in 2009 by URS. DPR form updates to include additional portions of the Fig Canal were conducted in 2011 by KP Environmental and ASM. URS, KP Environmental, and ASM have all recommended that the recorded portions of the Fig Canal are not eligible for listing on the CRHR or NRHP due to a lack of integrity.

P-13-013758 (HP2; 1651 Westside Road); CA-IMP-11759/H

1651 Westside Road is a one-story, ranch-style house constructed as a single-family residence ca. 1955. The residence was first recorded by KP Environmental in 2011 and again in 2011 by ASM. The building is wood-framed and rectangular in plan with a concrete foundation. The exterior is clad in stucco, and the roof is a low-pitched side gable with a front gable projection on the south section of the building, which is clad in asphalt roll. 1651 Westside Road was recommended as not eligible for listing on the NRHP and the CRHR due to not meeting any criteria for inclusion in the national or state register. This resource sits along the northwestern portion of the Project boundary on the west side of Westside Road, approximately 0.2 miles south of Interstate 8.

P-13-014263 (HP2; Preece Residence)

P-13-014263 (2396 Vaughn Road) is a modern-style ranch house with a low-pitch gable roof and composite roofing, a pedimented front gable entry with a full-length porch, and stucco cladding on the exterior. This resource was

PC ORIGINAL PKG

recorded in 2012 by Chambers Group. P-13-014263 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. This single-family residence sits along Vaughn Road, directly west of Dixie Drain 3 and within the western-central portion of the API.

P-13-014264 (HP15; Westside Elementary School)

P-13-014264 (2394 Vaughn Road) is a one-story school building with an irregular plan, designed in the modern style, and constructed with concrete blocks. The roof is flat and covered with rolled asphalt. This resource was recorded in 2012 by Chambers Group. P-13-014264 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. This elementary school sits along Vaughn Road, directly east of Fox Glove Canal and within the western-central portion of the API.

P-13-014265 (HP3; Multiple Residence Compound)

P-13-014265 (2094 W Wixom Road) consists of two single-story residences, an ancillary building, and some shade structures. The first building is a Minimal Traditional style single-story residence with a rectangular and composite tile side-gable roof. The second residence is a single-story English Cottage style residence with an irregular plan that was constructed with river rocks clad in a rough daubed stucco and a cross-gabled roof. This resource was recorded in 2012 by Chambers Group. P-13-014265 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. The multiple-residence compound sits along Wixom Road, directly east of Fern Canal and within the western-central portion of the API.

P-13-014266 (HP2; Black Residence)

P-13-014266 (1905 Wixom Road) is a Spanish Colonial Style one-story, single-family residence with a rectangular plan on 1.86 acres. The building contains an arched gallery on the exterior and an interior courtyard but has elements of the French Colonial style, such as the dual-pitched pavilion roof. This resource was recorded in 2012 by Chambers Group. P-13-014266 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. This single-family residence sits along Wixom Road, southeast of Fig Canal and within the eastern-central portion of the API.

P-13-014975 (HP20; Wixom Drain)

P-13-014975 (Vaughn and Jessup Roads) is an earthen-dug irrigation drainage ditch constructed ca. 1940. It is approximately 10–20 feet wide, about 10–15 feet deep, and about 2 miles long. This resource was recorded in 2011 by ASM. P-13-014975 was recommended as not eligible for listing on the NRHP and CRHR due to it not meeting any of the criteria for inclusion in the national or state register. The drain is east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixom Road.

P-13-014260 (HP2 and HP4; Farmhouse and Barn)

P-13-014260 is an abandoned farmhouse and barn located on the southeast corner of the Albert and Margaret Studer farm, near the intersection of Vogel Road and Mandrapa Road, north of the Westside Main Canal. The subject property was last documented in 2012 by the Chambers Group. P-13-014260 was recommended as not eligible for listing on the NRHP and CRHR due to not meeting any of the criteria for inclusion in the national or state

PC ORIGINAL PKG

register. The subject property was demolished ca. 2015. After the CHRIS records search, the subject property was found to be outside of the project API.

P-13-008334 (HP20; Westside Main Canal)

P-13-008334 is an irrigation canal that runs approximately 40 miles throughout agricultural land in the Imperial Valley section of Imperial County. The canal was first documented in 1999 and most recently recorded in 2017. Portions of the canal have been recommended as eligible for listing in the NRHP/CRHR under Criterion A/1 for its significance in developing the Imperial Valley and its association with the All-American Canal. In addition, segments of the canal have been recommended as not eligible for the NRHP due to lack of integrity.

P-13-009880 (HP20; Fox Glove Canal)

P-13-009880 is an irrigation canal that runs parallel to the Westside Main Canal between Hyde Road and the intersection of Westmoreland and W. Hetzel Road. The concrete-lined canal is approximately 12 feet wide, about 6 feet deep, and 9 miles long. In 2009, URS recommended the Fox Glove Canal as not eligible for the NRHP or the CRHR for the loss of integrity and because it does not convey a strong theme of early irrigation systems of the Imperial Valley. The canal runs parallel along the western boundary of the Project area.

P-13-012700 (HP2; 1105 Liebert Road)

1105 Liebert Road consists of two parcels (APN 051-350-012 and APN 051-350-017) located at Liebert Road and Mandrapa Road along the Westside Main Canal. The subject property was recorded in 2010 by URS. The property included a two-story house, a two-car garage, and a storage shed on APN 051-350-012. APN 051-350-017 contained a single-story, storage-like structure and appeared to be vacant. P-13-012700 was recommended as not eligible for listing on the NRHP and CRHR due to not meeting any criteria for inclusion in the national or state register.

2.2 Additional Records Reviewed

The following sources provide additional information regarding the potential of built environment resources located within the API. This information was used to understand the history of the area and how the landscape has changed and developed over time.

Built Environment Resource Directory

The California Office of Historic Preservation (OHP) maintains the Built Environment Resource Directory, an inventory of built environment cultural resources that are processed through OHP's office. In April 2024, search of the Built Environment Resource Directory for Imperial County did not reveal any new information pertaining to the project.

Calisphere

Calisphere provides access to 2,000 collections contributed by more than 300 cultural heritage organizations in California, including universities, libraries, archives, museums, and historical societies. Dudek searched for subject properties' addresses and other keywords on Calisphere in April 2024. This search identified multiple historic

PC ORIGINAL PKG

photographs of the Imperial Valley Irrigation efforts held at multiple institutions, but the search did not identify any additional materials pertaining to the subject properties.

Online Archive of California

The Online Archive of California provides free public access to detailed descriptions of primary resource collections maintained by more than 300 contributing institutions, including libraries, special collections, archives, historical societies, and museums throughout California and collections maintained by the 10 University of California campuses. Dudek searched for historical tenants and addresses associated with the subject properties on the Online Archive of California on April 20, 2024, and did not identify any relevant materials.

Imperial County Assessor

Dudek obtained assessor data from the Imperial County Assessor's GIS map for the subject properties between April 2023 and April 2024. These assessor data, along with the ParcelQuest database, provided information about construction dates, square footage, tract numbers, and limited information on deed transfers.

Historical Aerials

A review of historical aerial photographs was conducted as part of the archival research effort for the proposed project. The aerial photographs provided a general idea of growth in the farmlands, neighborhoods, and on the subject properties (NETR 2024a).

Historical Map

Historic maps, including General Land Office (GLO) and U.S. Coast and Geodetic Survey maps, county plat maps, and U.S. Geological Survey topographic maps, were examined to determine the growth in the area and how the properties developed over time (NETR 2024b).

Historical Newspapers

Dudek reviewed historical newspapers from the California Digital Newspaper Collection and Newspapers.com covering the surrounding communities to understand the development of El Centro and the subject properties. These documents were used in the preparation of Chapter 3, Historic Context, and Chapter 5, Results of Identification and Evaluation Efforts.

2.2.1 Imperial Irrigation District Archival Research

The Imperial Irrigation District (IID) maintains a webpage of previously prepared historic content related to the broad-scale water distribution and irrigation systems attributed to the development of Imperial Valley. The IID History webpage was used to prepare the historic context provided in this report. Of relevance to the current Project was Dowd's 1956 manuscript, which details the historical development of the IID and the subsequent rise of the City of Imperial. This manuscript was used as a baseline source for developing the historic context.

PC ORIGINAL PKG

Dudek also emailed IID Records Management on April 25, 2023, to inquire about the original construction dates for all irrigation components within the API. The IID Records Management did not provide any information by the time this report was completed in October 2023.

2.2.2 Imperial Valley Desert Museum

On April 13, 2023, Dudek visited the Imperial Valley Desert Museum located in Ocotillo, California. Material from the museum's general exhibits, including information on irrigation and early water conveyance systems, was used in the preparation of Chapter 3, Historic Context. Dudek spoke with a museum representative who stated that the museum does not hold archival collections other than a handful of books about the general area.

2.3 Review of Historical Maps and Aerial Photographs

Dudek consulted historical topographic maps and aerial photographs to understand the development of the API and its surrounding area. Important to note is that while topographic maps are informative, they do not show the minute changes to a landscape over time and, at times, are inconsistent with what is depicted year to year. Nevertheless, the information gathered contributes to the understanding of the chronological development of the API.

2.3.1 Historical Topographic Maps

Dudek conducted an online review of Bureau of Land Management (BLM) GLO Records, historical topographic maps, and historical aerial photographs to understand the historic development of the API and vicinity. The API was first subdivided into Township 16 South and Range 12 East in an 1857 original survey for BLM by John C. Hays. The plat image of the original survey shows the API as undeveloped with the exception of a dirt wagon road (connecting "Warner's Rancho" to "Fort Yuma") bisecting the parcel on an east-to-west axis (BLM 2024). U.S. Geological Survey historical topographic maps depicting the API are available from 1940 to 1989 (USGS 2024). The earliest available historical topographic map from 1940 shows robust roadway and agricultural canal development throughout the API. U.S. Route 80 (re-named as Interstate 8 in 1964) appears along the northern boundary of the API, Fox Glove Canal and Westside Main Canal appear along the western boundary of the API, and Fig Canal appears along the eastern edge of the API. In addition to these man-made water conveyance features, several additional unnamed perennial and seasonal streams and sloughs run through the API on a north-to-south axis. The historical topographic map from 1940 also shows several additional unnamed canals and roadways throughout the API, several unnamed structures (likely single-family residences and agricultural buildings), and a primary school (USGS 2024).

2.3.2 Historical Aerial Photographs

A review of historical aerial photographs was conducted as part of the archival research effort from the following years: 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020 (NETR 2024a). The first historical aerial photograph available in 1953 shows the API as gridded agricultural parcels with the same configuration as today. Much of the eastern portion of the API appears to be a part of the New River wetlands system and floodplains. The Westside Main Canal and Mandrapa Road are visible west of the API. However, Interstate 8 has yet to be developed. By 1984, Interstate 8 had been developed north of the API, and development was visible northeast of the API. The New River and its surrounding wetlands and floodplains were replaced by

PC ORIGINAL PKG

irrigated cropland parcels, some with structures. There are no discernible changes to the API or surrounding area from 1984 to 1985.

In 1996, industrial development was visible on the south side of West Evan Hewes Highway, northwest of the API; however, there are no discernible changes to the API, and irrigated cropland parcels persist. By 2002, more development is visible on the south side of West Evan Hewes Highway, northwest and east of the API. The surrounding area and the API continue to consist primarily of agricultural properties. No discernible API or surrounding area changes occurred between 2002 and 2012. By 2014, the Campo Verde Solar Farm first appeared directly adjacent to the API among the actively irrigated cropland parcels. No discernible changes to the API or surrounding area exist between 2016 and 2020 (NETR 2024a).

2.4 Interested Party Correspondence

Dudek architectural historian EJ Jones, MA, emailed the Imperial Valley Desert Museum, the Pioneers' Park Museum, and the Imperial County Historical Society. The correspondence briefly described the proposed Project and requested information about cultural resources in or near the direct API. Ms. O'Lear from the Imperial Valley Desert Museum responded on September 29, 2023, suggesting a monitor from the members of the local Kumeyaay and Quechan nations during any ground-disturbing activities. The correspondence can be found in Appendix B of this report.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

3 Historic Context

This context is provided to ascertain what significant themes are present. Dudek provides this context to better understand the context of any of the identified previously recorded or newly documented resources in the API. This context provides an overview of the historic themes and the building types that were documented as part of this study.

3.1 Land Acknowledgment

Historically, the land in and around the API was inhabited for more than 9,000 years by several bands of Native Americans, including the Kumeyaay, Paipai, Cocopah, Quechan, Cahuilla, and Ancient Lake Cahuilla peoples. Native Americans migrated seasonally across the Imperial Valley between the mountains and the lake. Their villages were primarily settled along the coast and the shore of the lake, where food and trees were abundant. Coastal dwellings consisted of huts made of tule, while inland huts were made with brush or branches. Native Americans prospered until the Spanish settled the region in the sixteenth century (Imperial Valley Museum 2023). For a complete discussion of the cultural resources and the cultural setting of the project area, the reader is directed to the Cultural Resources Inventory Report for the Big Rock 2 Cluster Solar and Storage Project, Imperial County, California, prepared by Dudek in 2024 (Bakhtiary et al. 2024).

3.2 Historic Period

3.2.1 Non-Native Exploration and Settlement in Imperial County

The Spanish colonization of Alta California began in 1769 with the founding of Mission San Diego de Alcalá by Father Junípero Serra. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers, and missionaries to occupy and secure the northwestern borderlands of New Spain through the establishment of a Presidio, Mission, and Pueblo (Smythe 1908: 58). The site for the Mission was chosen because of its proximity to Kumeyaay villages, which were known to be a reliable source of fertile land and water. Members of the local tribes were gathered from the surrounding area and were required to build the Mission San Diego and a Presidio structure on the hill near the river. Additionally, they cultivated wheat, barley, corn, and beans in the fields and maintained orchards and vegetable gardens at the Mission with more than 50,000 acres of land cultivated by 1797 (NPS 2023). Spanish soldiers primarily garrisoned the forts and guarded the Mission and its resources. They lived on small lots in houses made from wood, rushes, tule, and adobe with garden plots; by 1821, their residences spread to the base of the Presidio Hill and across Mission Valley (Smythe 1908: 47–59).

In 1822, the political situation changed as Mexico won its independence from Spain, and the Imperial County region became part of the Mexican Republic. The Mexican government opened California to foreign trade and began issuing private land grants, creating the rancho system of large agricultural estates throughout the Southern California area (City of San Diego 2007: 16). Although the region was plentiful with fertile soil capable of sustaining agriculture, it lacked water for irrigation, so the area of Imperial County remained largely undeveloped until the late nineteenth century (Frisby 1992: iv).

PC ORIGINAL PKG

The American Period began in 1846 when United States military forces occupied San Diego; this period continues today. By 1848, America assumed formal control of California with the Treaty of Guadalupe-Hidalgo and introduced Anglo culture and society (Smythe 1908: 282). In 1848, a temporary camp was established in the valley when American settlers investigated the terrain for agricultural potential. Dr. Oliver M. Wozencraft was the first to try to develop the land with an attempt to create an irrigation system in 1849, but this ultimately failed. On a railroad corridor expedition led by Lieutenant R.S. Williamson of the U.S. Topographical Engineers in 1853, geologist Dr. W.P. Blake discovered the possibility of irrigating Imperial Valley from the Colorado River. Blake measured the elevation of the dry bed of the Salton Sea at below sea level, a technique that would later aid in the creation of a canal from the Colorado River to the interior of the desert to support a constant supply of water (Frisby 1992: 1–2).

In 1896, the California Development Company was formed to research the possibility of irrigating the valley under the direction of Charles Rockwood and George Chaffey. The company proposed a route from the Colorado River to Mexico, then back to the United States, where it would reach the Imperial Valley. By August 1900, construction of the irrigation system had started, and water delivery reached the region of Imperial County through the Boundary Canal less than 1 year after the start of construction. Additionally, the arrival of water brought more people to the area. That same year, the Imperial Land Company plotted townsites in Imperial Valley based on the amount of water stock that had been purchased. By 1902, about 2,000 settlers had arrived, so the Southern Pacific Railroad Company constructed the Niland to Calexico branch rail to accommodate the growing population (Frisby 1992: 29, 35–38).

After severe flooding in November 1905, about 12,000 acres of cultivated land and more than 30,000 acres of irrigable land were destroyed, causing immense damage to Southern Pacific Railroad Company railroad lines. Likewise, tension increased between settlers and the California Development Company because of their inability to mitigate the risk of flooding. As a result, the Southern Pacific Railroad Company took over management of the California Development Company in 1906 to ensure the protection of their railroads and establish protective measures against flooding. However, the California Development Company became bankrupt after litigations proceeding the flood. By 1911, IID was formed to acquire properties of the bankrupt California Development Company and its Mexican subsidiary. During the next decade, IID improved the County's irrigation system, rebuilt the entire Westside Main Canal, and obtained 13 mutual water companies. As such, IID delivered water to nearly 550,000 acres of Imperial Valley and continues to provide water to Imperial County today (Frisby 1992: 66–74).

Before 1907, the region of Imperial County was part of San Diego County until the residents petitioned to create Imperial Valley County. The San Diego Board of Supervisors came to a vote on August 6, 1907, and proposed the division be between two mountains within the San Bernardino Mountains. Imperial County was composed of 4,000 square miles and had a population of 20,320. The county continued growing throughout the early twentieth century but maintained an agricultural identity (Farr 1918).

During the Great Depression, the County attracted migrating farm workers from across the country. Agriculture continued to drive the economy, expanding with America's entry into World War II in 1941. The war effort stimulated the need for higher crop yields and led to the development of the All-American Canal. The canal was completed in 1951 and brought water from the Colorado River to the Imperial Valley. The 1950 census reveals that more than 50,000 residents lived in the county, with an increase in residents during the winter when migrant laborers from Mexico would come for work. The farms substantially supported the economy with crops such as alfalfa, cotton, sugar beets, and livestock until the 1960s. The winter of 1960 was the "worst frost onslaught in a decade," leading

PC ORIGINAL PKG

to severe crop loss in Imperial County (SBS 1960). Additionally, the water arriving in the Imperial Valley during this period had high salinity levels, further reducing crop yields and increasing unemployment. During the 1970s, steps were taken to correct the drainage of the canals so the water would contain less salt (Finley 1974).

In the 1980s, the County reinvigorated its agricultural industries and introduced the cattle raising and animal feed industries. The economy's focus on agriculture continues, with the County producing nearly half of the nation's winter vegetables. As of 2023, there are approximately 180,000 residents within the County's seven cities: Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial, and Westmorland (Imperial County 2023).

3.2.2 Water Conveyance in Imperial Valley

The rapid development and sustainability of Imperial Valley rests solely on water conveyance systems. Dowd (1956) states, "There are few, if any, other areas in the United States which are so dependent upon the importation of water for all their requirements." Historically, the Imperial Valley was considered an inhospitable place. It is located within the large, enclosed basin of the Colorado Desert and confined between the western Coast Range Mountains and the eastern Chocolate Mountains. The area's high temperatures and low average rainfall proved to many of the first European explorers that the Imperial Valley was worthless and irreclaimable land (Farr 1918). Although the first European exploration of what is now Imperial County was accomplished by the Spanish in 1540, when Hernando de Alarcón ascended the Colorado River likely up to present-day Yuma and claimed Alta (upper) California for the king of Spain, the area remained largely unexplored for the two centuries that followed (Lawton 1976; Warren 1984).

It was not until the 1770s that travel through Imperial Valley resumed with the onset of the de Anza expedition. In 1774, Captain Juan Bautista de Anza of the Spanish Army sought to provide a major land use route for the Spanish colonization of California. His overland route departed from Sonora, Mexico (south of present-day Arizona), to the future city of Los Angeles. The epic expedition successfully crossed the Colorado River from the west, traveled along the modern California/Mexico border, passed through Imperial Valley, and ended at its destination at the Mission San Gabriel Arcángel. The expedition brought with it achievement, which other Spanish and Mexican settlers followed. Subsequent use of the Anza Trail was interrupted by the 1781 Quechan revolt but resumed in the early nineteenth century (Lawton 1976; Warren 1984).

This overland route was the first of many historic events that brought interest to Imperial Valley over the coming century. The Mexican-American War of 1846–1848, the Gold Rush in Northern California, the development of the Butterfield Stage route, and explorations of potential railroad routes through the Colorado Desert opened the region up to possibilities of its development (Schonfeld 1968). However, none of these events had as much impact on the development of Imperial Valley as did the possibility of harnessing water for the arid yet potentially fertile region.

3.2.3 Bringing Irrigation to Imperial Valley

The following historical information is summarized from IID: The First 40 Years (Dowd 1956), which was prepared by M.J. Dowd, Consulting Engineer and Executive Officer to the Board of Directors for IID. This manuscript presents IID's history and the Imperial Valley's subsequent development. It identifies important periods, events, and development patterns for the Imperial Valley.

PC ORIGINAL PKG

On one of the railroad corridor expeditions in 1853, led by Lieutenant R.S. Williamson of the U.S. Topographical Engineers, geologist Dr. W.P. Blake discovered the possibility of irrigating Imperial Valley from the Colorado River. Blake observed a region of fertile soil capable of sustaining agriculture but lacking in water. He measured the elevation of the dry bed of the Salton Sea at below sea level, a fact that made feasible the cutting of a canal from the Colorado River to the interior of the desert, which would bring with it a constant supply of water. Dr. Oliver Wozencraft, a proponent of irrigating Imperial Valley, lobbied for support from the California legislature, who, in turn, asked Congress to convey 6 million acres to Wozencraft. He endeavored to secure action by Congress on his plan to bring potable water to the desert for more than 30 years without success. Despite Wozencraft's failed attempts at reclamation, by his death in 1887, settlers and developers alike were eager to bring water to Imperial Valley.

Preliminary investigations into the feasibility of irrigating the Colorado Desert began in 1893 with the Colorado River Irrigation Company, but an inability to procure financing quickly led to the company's demise. In 1896, the California Development Company was organized to take charge of the project under the direction of Charles Rockwood and George Chaffey. The proposed canal route would run from the diversion point at the Colorado River through lower California, Mexico, and back into the United States to reach Imperial Valley. To gain title to the Mexican lands, the California Development Company organized a Mexican subsidiary company in 1898, La Sociedad de Yrrigacion y Terrenos de la Baja California, S.A. With plans to colonize the region, the California Development Company divided Imperial Valley into districts of varying size, each with its own mutual water company.

By August 1900, the construction of the first diversion canal and irrigation system was underway. The canal was excavated from the point of diversion from the Colorado River south about 4 miles into Mexico, where it swung west and connected for 40 miles within the Alamo River channel until it reached Sharp's Heading and turned north to the Salton Sea. A series of main canals were constructed to divert from Sharp's Heading into various stretches of Imperial Valley: Central Main, Boundary, West Side Main, and East Side Main. The Central Main Canal continued from the international boundary line and traveled north through the present cities of Brawley and Imperial; the Boundary Canal diverted west toward Calexico; the West Side Main Canal traveled west toward Calexico then north; and the East Side Main Canal traveled east then north to the eastern Salton Sea. Water delivery reached Calexico through the Boundary Canal less than 1 year after construction. That same year, nearly 1,500 acres of land were put under crops.

Few natural resources existed for potable water prior to the construction of the irrigation system. Domestic use water had to be hauled to the valley via the Southern Pacific Railroad Company. Once considered a barren wasteland, Imperial Valley was making good progress with colonization by the early 1900s. The Imperial Land Company, under the direction of the California Development Company, began laying out townsites in Imperial Valley based primarily on the density of purchased water stock. The town of Imperial was the first to be laid out, with settlement commencing in 1901. Over 10 years, from 1901 to 1911, irrigable land in Imperial Valley jumped from 1,500 to 220,000 acres. As the water flowed into the valley, so did the people. In 1902, a year after the first water reached Calexico, nearly 2,000 settlers came to Imperial Valley. The population grew to seven times that amount within 4 years. The Southern Pacific Railroad Company constructed the Niland to Calexico branch rail to accommodate the growing population. At the same time, the newly developed Imperial Valley broke apart from San Diego County to form its government as Imperial County, with El Centro being designated as the county seat.

The rapid colonization of Imperial Valley in the early 1900s strained the relationship between settlers and the California Development Company. Initial land and soil surveys were inaccurate, leading to discrepancies with land titles, and water rights held by the California Development Company were called into question. The Reclamation

PC ORIGINAL PKG

Act was proposed in 1902 to take the Imperial Valley project from the California Development Company and organize it under government control. Further dissatisfaction with the California Development Company arose after hurried and negligible attempts to correct the Colorado River's heavily silt-laden waters, ultimately leading to grave damage to Imperial Valley following the massive flooding events of 1905 and 1906. The Colorado River break destroyed nearly 12,000 acres of cultivated land and more than 30,000 acres of irrigable land, caused immense damage to the Southern Pacific Railroad Company lines, and severed the ties between settlers and the California Development Company. The Colorado River break took two years to repair, during which time the Salton Sea filled and expanded to a length of 50 miles and a width of 10 to 15 miles.

Preceding litigation brought to the California Development Company following the flood resulted in bankruptcy. In 1911, a petition to form an irrigation district was presented to the Imperial County Board of Supervisors. IID was formed to acquire properties of the bankrupt California Development Company and its Mexican subsidiary. Over a decade, IID completed improvements and repairs to the canal and distribution system, rebuilt the entire Westside Main Canal, received deeds to all the properties of the California Development Corporation, and acquired 13 mutual water companies. Within a few years of acquiring the mutual companies, IID was delivering water to nearly 550,000 acres of Imperial Valley. Over a century later, IID is still servicing communities of the Imperial Valley. IID is the largest irrigation district in the nation, and Imperial County ranks among the top 10 agricultural counties in the nation. Of the water IID transports, 98% is used for agriculture, and the remaining 2% is treated potable water and delivered to the nine current Imperial Valley cities (Dowd 1956; IID 2024).

3.2.4 Drainages and Laterals

Around the mid-1910s, there was a growing realization that drainage of the land in Imperial Valley was becoming necessary. High water tables were developing in several areas, and crop production was at a loss due to inundation and saturation. Some mutual water companies started constructing miles of shallow ditches at the lower end of fields to drain surplus irrigation water; however, the surface waste ditches were considered a quick fix for a much larger drainage problem.

By the 1920s, investigations into groundwater drainage solutions were sorely needed. IID hired a consulting drainage engineer to plan the drainage system. A grid system of north–south and east–west lines were developed, spaced at 1-mile intervals, and laid out over the entire valley. Included in the design were observation wells used to note the elevation of the groundwater table with required monthly checks of the wells. A comprehensive system of main drain outlets was installed in areas with a high water table. While 234 miles of deep drains were constructed by 1929, the drainage problem continued partly because the water table was perched on a compact and impervious geological stratum in select portions of the valley.

IID implemented an intensive program to initiate the development of a lateral drain system. The system consisted of deepening existing surface drains to 6 or 8 feet and constructing additional deep drains to serve as outlets. The drain systems were tailored to meet the needs of individual landowners following a survey and examination of their land. The use of farm tile drains was also implemented. The intensive program paid off; within 1 year, IID had added 740 miles of lateral drains and 10 miles of tile drains to the drainage system (Dowd 1956; IID 2024).

After the major flooding in the Imperial Valley in 1905–1906, the California Development Company decided to reconstruct a wooden flume conveyance system located in Mexico named the Encina Canal. This system would extend into the United States and become the Westside Main Canal. The Westside Main Canal was completed

PC ORIGINAL PKG

through Imperial County in 1908. Contractors for the construction of the Westside Main Canal include the Hollywood Realty, Building and Grading Company and W.K. Peasley (IVP 1908: 2). In 1911, Imperial Valley voters approved the organization of the IID. Farmers and settlers were drawn to the Imperial Valley by the federal government's Desert Entry Land Program, which allowed individuals to apply for 160 acres of desert ground or 320 acres for a married couple. The Westside Main Canal was used to irrigate land throughout the Imperial Valley and became the center of farming communities such as Dixieland, Seeley, and Calexico. By the 1920s, IID delivered water to more than 500,000 agricultural lands (IID 2024).

The passing of the Boulder Canyon Act in 1928 authorized a canal system that would travel across the majority of the United States and connect diversion dam systems to Imperial and Coachella Valleys. In 1929, the United States Contracted the IID to estimate the cost of a canal that would connect the Yuma Project to the proposed All-American Canal by using the already existing water conveyance systems such as the Westside Main Canal. in 1932, the IID and the Bureau of Reclamation would enter into a contract to build the dam, canals, and structures, and the delivery of water for $38.5 million (Stene 2009:5-8). The construction of the Boulder Dam in 1935 brought immediate hydroelectric power to the valley. The All-American Canal began construction in 1934 and was completed in 1941. The Westside Main Canal was incorporated into the All-American Canal upon its completion. The All-American Canal brings water from the Colorado River at Imperial Dam to the farmland of the Imperial Valley. The three main canals that make up the All-American Canal include the East Highline Central Main and the Westside Main Canal, which divert water from the All-American Canal (Wlodarski 2006: 3; Johnson 2012e; URS 2009e; IID 2024).

During the Great Depression and severe droughts of the 1930s, Imperial Valley farmers struggled with unemployment and financial hardships like the rest of the country. The IID requested one million dollars for the force account of labor in part of the Canal in the Imperial Valley. More than 250 men were hired through the Federal Re-employment Office in El Centro (Stene 2009:8).

3.2.5 Agriculture Development in Imperial County

The Imperial Valley has been one of the most successful farm areas in the United States since the early twentieth century. Agricultural production was slowly introduced to the valley after the first canal was created in 1901. Nutrient-rich soil varied throughout the valley and included heavy clay and loose sand. The soil type determined the type of crop grown in each region. Fruits were often grown in sands and sandy loams, while grains were cultivated in clays and clay loams. However, most of the valley was devoted to grain and alfalfa. Alfalfa was grown to supply the soil with organic matter and proved crucial during the valley's early agricultural industry. The land used to grow alfalfa was worth more than raw land and was in great demand for the growth of cotton and fruit. Additionally, the crops varied by season, with barley and wheat grown in the winter and corn in the summer (Farr 1918; Schonfeld 1968).

Early farming techniques involved planting in newly leveled ground, discing it, and irrigating it before harvesting. Farmers relied on volunteer crop growth for 3 to 4 years following this establishment period. Such methods did not result in a high crop yield but produced a profit for little investment. Early County settlers did not have much wealth and depended on crop yields. Barley provided the highest crop yield and was the main crop grown during winter. Alfalfa grew during the spring so that barley could be planted in its nutrient-rich soil by the fall and produce a winter pasture. This practice is still used today in barley cultivation in the Imperial Valley. Most of the barley is produced today to support the livestock and dairy industries as cow feed (Farr 1918).

PC ORIGINAL PKG

While large areas of clay are still devoted to the growth of barley, the acreage of other crops has increased throughout the County's history. By 1909, when 300 acres and a cotton gin were established, cotton became an important crop in the valley. By 1910, the acreage increased to 1,400 acres, and by 1911, the valley supported 14,000 acres of cotton, reaching a peak of 70,000 acres in 1917. Likewise, cotton and oil mills were constructed to produce the crop (Farr 1918).

The production of agricultural products continued to increase throughout the twentieth century due to the area's temperate climate. Low humidity and high temperatures have created a stable environment for the growth of crops supported by the region's extensive irrigation system (Schonfeld 1968). During the area's development, cantaloupe and lettuce became popular summer crops, and cabbage, onions, asparagus, and peas were plentiful during winter (VRIC 2023). Although the cattle industry surpassed the agricultural industry during the twenty-first century, the County's agricultural production remains significant. As of 2019, alfalfa, lettuce, broccoli, carrots, sugar beets, and spinach have dominated agricultural production in the County (Office of Agricultural Commissioner 2019).

3.2.6 Early Educational Development in Imperial County (1901–1950)

Mr. J.E. Carr established the first school in the Imperial Valley in 1901. The school was built with an arrow-weed roof supported by eight poles; 50 children enrolled when the school opened on September 8, 1901. Most of the children lived in the nearby rural communities and walked about 4 to 5 miles through the desert to attend school. By 1903, John E. Shenk opened a second school, a tent containing a board floor with a canvas top and walls, in the newly organized Calexico School District. When the second school opened, about 15 students enrolled from the surrounding area, with Schenk commenting that (Farr 1918):

> The pupils came on burros, on horseback, and on foot from habitations not as a rule visible from the school. Two or three ranch tents in the distance and the California Development Company's building and water tank at the international boundary line were the only signs of civilization apparent to the eye. The pupils were earnest and eager, with but an occasional infraction of the arbitrary rules prescribed by the schoolmaster. Corporal punishment was seldom resorted to and when it was used it was, with the full approval of the parents, obtained after the incident was closed.

Additionally, Mr. L.E. Cooley opened a third school in 1903 in the Van Horn community that was described as a "rag knowledge box" (Farr 1918). These three schools served the Imperial Valley community until Imperial County was established in 1907, and the following school districts were created: Adair, Alamo, Brawley, Calexico, Central, Colorado, Eastside, El Centro, Elder, Eucalyptus, Heber, Holtville, Imperial, Jasper, Picacho, Silsbee, and Sunset Springs. Carr became the first Superintendent of Schools in the County. In total, the County contained about 34 elementary schools that enrolled 1,067 students and employed 38 teachers. However, the Imperial Valley Union High School was the only high school in the County from 1907–1908 and enrolled only 48 students with three teachers (Farr 1918).

In 1911, Superintendent Carr was succeeded by Cooley during a period of rapid growth in the County. At this time, the elementary schools enrolled 1,700 students, while the five high schools enrolled 400 students. Enrollment continued to increase through Cooley's retirement in 1915. By 1918, the County included 50 elementary schools with 4,000 students, and the high school enrolled 500 students (Farr 1918).

PC ORIGINAL PKG

During the 1920s, the Imperial County schools continued to grow, "keeping pace with the agricultural development" (IVP 1920). Enrollment increased by 108% in 1920, with about 12,000 students enrolled in the County schools (IVP 1920). However, daily attendance by 1927 was recorded at just over half the enrollment rate, with only 7,355 students (IVP 1927). By 1930, efforts were made within the school system to change the education format to be more "child-centered, instead of teaching and subject-matter centered" (IVP 1930). The change was made to encourage students to engage with subject matter through meaningful experiences that would promote increased attendance (IVP 1930). However, the Great Depression led to budget cuts that saw the County school system decrease teachers' wages and school budgets (IVP 1932a). The Works Progress Administration also created a program to serve free hot lunches to children in poverty (IVP 1936).

Attendance within the County school system remained stable until the beginning of World War II. In 1942, the schools saw a decrease in attendance as Japanese students were evacuated (IVP 1942). By 1943, elementary school enrollment was down to 5,857 students, and high school enrollment was down to 1,586 students (IVP 1943). The war continued to affect attendance and population rates throughout the County until its end in 1945. In January of 1945, 366 Japanese students under the age of 16 returned to the County school system, and attendance began to increase slowly (IVP 1945). By 1950, more than 50,000 residents lived in the County, and the school system continued to grow with the increasing population (U.S. Census Bureau 1950).

PC ORIGINAL PKG

4 Field Survey Methods and Results

4.1 Methods

Dudek built environment resources specialists conducted a reconnaissance-level survey of the API from April 10–13, 2023, and April 4 and 5, 2024. The specialists drove along access roads that circle each field. Upon encountering a historic-era feature, the specialists measured elements of the feature, took photographs, took detailed notes, and recorded the GPS coordinates. The specialists then drove the extent of each component and recorded any additional elements, such as drainage ditches or water gates. For clarity, the subject properties discussed below were each assigned a Map ID number associated with the API map (see Figure 3, Built Environment Historic Era Properties Identified), and each building and structure observed on each Map ID property was assigned a corresponding number label. On April 13, 2023, Dudek's architectural historian visited the Imperial Valley Desert Museum in Ocotillo, California, for in-person archival research for information on the area. All fieldwork was documented using field notes and iPad technology with close-scale field maps and aerial photographs. Location-specific photographs were taken using an Apple 3rd Generation iPad equipped with 8-megapixel resolution, ArcGIS systems, and georeferenced PDF maps of the API. All field notes, photographs, and records related to the current study are on file at Dudek's Portland, Oregon, office. This survey data will be utilized should subsequent built environment work be required.

Map ID 5, the Imperial Valley Substation (APN 051-380-024, 2626 West U.S. Hwy 98), was visible on a 1984 aerial, but archival research revealed that it did not meet the age threshold for the survey, as it is not yet 45 years of age. SDG&E owns the substation. They partnered with IID to construct the substation in 1982 (CC 1982). The property was not reported on further.

4.2 Survey Results

Dudek identified the following built environment components as being more than 45 years old in the API through records search and field survey information. Initial research found that there were 18 historic resources located in the API (Table 4); Dudek recorded each resource with a Map ID that corresponds to Figure 3. Upon further research, Map ID 5, Imperial Valley Substation, was found to have a construction date of 1982; therefore, it does not fulfill the age requirement of recordation and evaluation for listing on the NRHP. The Map IDs' APNs were found using Imperial County Assessor Data and the ParcelQuest Database (see Figure 3 for locational information).

Table 4. Built Environment Properties Recorded and Evaluated in the API

Map ID	Property Type	Address/APN	Year Built	Primary Numbers (if previously Evaluated)
Previously Recorded within the API				
1	Residential	2396 West Vaughn Road (051-300-031)	ca. 1960	P-13-014263
2	Education	2294 West Vaughn Road (051-300-010)	ca. 1965	P-13-014264
4	Residential	1651 Westside Road (051-270-038)	ca. 1955	P-13-013758
6	Residential	No Situs Address (previously associated with 1105 Liebert Road) (051-350-017)	ca. 1974	P-13-012700

PC ORIGINAL PKG

Table 4. Built Environment Properties Recorded and Evaluated in the API

Map ID	Property Type	Address/APN	Year Built	Primary Numbers (if previously Evaluated)
7	Residential	2094 Wixom Road (051-330-024)	ca. 1945	P-13-014265
9	Residential	1905 Wixom Road (051-360-038)	ca. 1970	P-13-014266
10	Water Conveyance	Wixom Drain (Linear Resource)	ca. 1940	P-13-014975
11	Water Conveyance	Fig Canal (Linear Resource)	ca. 1912	P-13-012693
12	Water Conveyance	Fern Canal (Linear Resource)	ca. 1909	P-13-012689
13	Water Conveyance	Dixie Drains and Laterals (Linear Resource)	1911/ca. 1940	P-13-012688
14	Water Conveyance	Westside Main Canal and Drain (Linear Resources)	1908	P-13-008334
15	Water Conveyance	Fox Glove Canal (Linear Resource)	ca. 1912	P-13-009880
16	Wagon Road	Wagon Road (Linear Resource)	ca. 1850	P-13-003403
Newly Recorded within the API				
3	Residential	2250 West Vaughn Road (051-300-027)	ca. 1976	
8	Residential	2104 West Wixom Road (051-330-021)	1940	
17	Agricultural	Cattle Coral Shelter (051-310-026)	ca. 1956	
18	Water Conveyance	Diehl Drain (Linear Resource)	ca. 1950	
19	Water Conveyance	Fig Drain (Linear Resource	ca. 1940	

Note: APN = Assessor's Parcel Number.

PC ORIGINAL PKG

5 Results of Identification and Evaluation Efforts

This section provides a physical description and an evaluation of each of the subject properties located in the API under the NRHP and CRHR designation criteria. To assess the historical significance and integrity of each property located within the API, the subject properties were recorded and evaluated in consideration of NRHP and CRHR criteria and integrity requirements. A physical description of each property and its development history are also provided below. The significance evaluations were prepared by Dudek Architectural Historians EJ Jones, MA, and Evan Brisentine, MSHP, who both meet the Secretary of the Interior's Professional Qualification Standards for architectural history. The preparers' qualifications are included in Appendix A, the previously recorded DPR Update sets are located in Appendix C, and the complete DPR 523 form set for each newly recorded property is provided in Appendix D of this report.

5.1 Previously Recorded Properties

5.1.1 Map ID 1. 2396 West Vaughn Road (051-300-031)

Description

The subject property, sited at 2396 West Vaughn Road (APN 051-300-031), consists of a modern-style ranch house with a low-pitch gable roof and composite roofing, a pedimented front gable entry with a full-length porch, and stucco cladding on the exterior. This single-family residence was initially recorded in 2012 by Chambers Group, and there do not appear to be any notable changes since the original recordation in 2012 (Exhibit 1).

Statement of Significance

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. In the original recordation, the property was incorrectly addressed as 2396 Vaughn Road. However, the property's legal address is 2396 W Vaughn Road. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that Jerry Preece developed the subject property in 1952, although historical aerials show no development had occurred by that time. Historical aerials indicate that the property was developed in ca. 1960 (Johnson 2012d: 1–3; ParcelQuest 2024; NETR 2024a).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for NRHP/CRHR Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under NRHP/CRHR Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under NRHP/CRHR Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

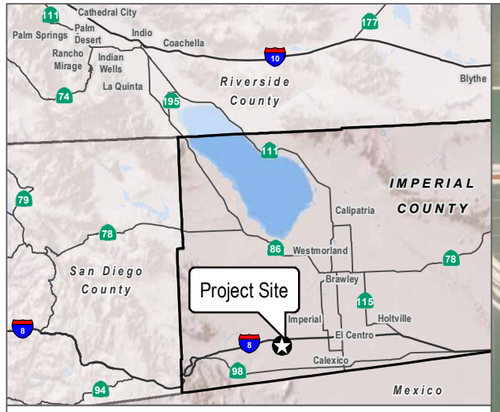
PC ORIGINAL PKG

On August 14, 2023, Dudek revisited the residential property at 2396 W Vaughn Road and did not observe any noticeable alterations since the last recordation in 2012. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

Exhibit 1. Main (north) elevation of the residence at 2396 West Vaughn Road, view looking northeast. Photograph taken on April 11, 2023.



PC ORIGINAL PKG



- Project Boundary
- Built Environment Area of Potential Impact
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line
- **Previously Identified Properties**
  - Map ID 1. 2396 West Vaughn Road (051-300-031) (ca. 1960)
  - Map ID 2. 2294 West Vaughn Road (051-300-010) (ca. 1965)
  - Map ID 4. 1651 Westside Road (051-270-038) (ca. 1955)
  - Map ID 6. No Situs Address (051-350-017) (ca. 1974)
  - Map ID 7. 2094 Wixom Road (051-330-024) (ca. 1945)
  - Map ID 9. 1905 Wixom Road (051-360-038) (ca. 1970)
  - Map ID 10. Wixom Drain (Linear Resource) (ca. 1940)
  - Map ID 11. Fig Canal (Linear Resource) (ca. 1912)
  - Map ID 12. Fern Canal (Linear Resource) (ca. 1909)
  - Map ID 13. Dixie Drains and Laterals (Linear Resource) (1911/ca. 1940)
  - Map ID 14. Westside Main Canal and Drain (Linear Resources) (1908)
  - Map ID 15. Fox Glove Canal (Linear Resource) (ca. 1912)
  - Map ID 16. Wagon Road (Linear Resource) (ca. 1850)
- **Newly Recorded Properties**
  - Map ID 3. 2250 West Vaughn Road (051-300-027) (ca. 1976)
  - Map ID 8. 2104 West Wixom Road (051-330-021) (1940)
  - Map ID 17. APN 051-310-026
  - Map ID 18, Diehl Drain, Multiple APN's (no address)
  - Map ID 19. Fig Drain, Multiple APN's (no address)

SOURCE: Maxar 2023; Imperial County 2023

DUDEK 0 1,000 2,000 Feet

FIGURE 3

Built Environment Historic Era Properties Identified

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

5.1.2 Map ID 2. Westside Elementary School, 2294 West Vaughn Road (051-300-010)

Description

The subject property, sited at 2294 West Vaughn Road, consists of a modern-style one-story school building with an irregular plan constructed with concrete blocks. The flat roof is clad in rolled asphalt and features a wide cornice, parapet, and a series of fluted pilasters along the primary elevation. The east wing of the building has a utilitarian main entrance with a nearly full-width ribbon window composed of a series of aluminum sash windows. The Westside Elementary School building, constructed ca. 1965, was originally recorded in 2012 by Chambers Group, and there does not appear to be any changes to the resource since its original recordation (Johnson 2012b: 1–3) (Exhibit 2).

Six additional buildings, which were not recorded during the 2012 survey, are present on the campus. An ancillary building, located immediately west of the recorded Westside Elementary School building, appears to have been constructed within the historic era, and features complementary architectural elements. The one-story, square building has a raised foundation, flat roof, overhanging eaves on the south (primary) and north (rear) elevations, and wide cornices. The building features a utilitarian door, lacks windows, and is clad in T1-11 plywood siding. Five additional structures appear to have been constructed between ca. 1980 and ca. 2003 (NETR 2024a) (Exhibits 3 and 4).

Statement of Significance

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. In the original recordation, the property was incorrectly addressed as 2394 W Vaughn Road (APN 051-300-029-000). However, the property's legal address is 2294 W Vaughn Road (051-300-010-000). The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the original, no longer extant school complex was constructed in 1911 but replaced with the current (extant) building in ca. 1965 (Johnson 2012b: 1–3; ParcelQuest 2024).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for NRHP/CRHR Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or construction method and did not appear to represent the work of a master, possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under NRHP/CRHR Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under NRHP/CRHR Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On April 11, 2023, Dudek revisited the subject property at 2294 W Vaughn Road and observed the six additional buildings located on the property. Otherwise, there have not been any noticeable alterations since the 2012 record. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of

PC ORIGINAL PKG

the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

Exhibit 2. Primary (south) and east elevations of the Westside Elementary School building, view looking northwest. Photograph taken on April 11, 2023.



Exhibit 3. Primary (south) and west elevations of the ancillary building, view looking northeast. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

Exhibit 4. Overview of the Westside Elementary School campus, including four of the seven extant buildings, view looking north. Photograph taken on April 11, 2023.



5.1.3 Map ID 4. 1651 Westside Road (051-270-038)

Description

The subject property, sited at 1651 Westside Road, consists of a one-story ranch-style single-family residence constructed in ca. 1955. The rectangular, wood-framed residence has a concrete foundation and stucco cladding. The roof is a low-pitched, cross-gable roof clad in rolled asphalt. A projection extends from the building's south elevation. The residence's windows are vinyl-framed sliders and a brick chimney is located along the roof ridge. Other structures located on the property (constructed outside the historic period) include a front-gable carport and garage, shed, square swimming pool, and three pole shelters. The property includes mature landscaping. Fern Lateral Three, an agricultural irrigation system associated with the larger Fern Canal network, runs north to south across the east side of the property. This single-family residential property was initially recorded in 2011 by KP Environmental and ASM. There do not appear to have been any changes to the resource since its original recordation (Exhibit 5).

Statement of Significance

The property was previously evaluated in 2011 by KP Environmental and ASM and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property was likely constructed in ca. 1955 despite a U.S. Department of Agriculture document that listed the construction date as 1949 (Thomson and Adame 2011: 1–3; Krintz 2011a: 1–2).

PC ORIGINAL PKG

ASM Architectural Historian Jennifer Krintz determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for NRHP/CRHR Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction, and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Krintz found that the property did not appear eligible under NRHP/CRHR Criterion 3/C. Krintz also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under NRHP/CRHR Criterion 4/D. Krintz did not evaluate the property's historical integrity.

On April 11, 2023, Dudek revisited the residential property at 1651 Westside Road and did not observe any noticeable alterations since the last recordation in 2011. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

Exhibit 5. Overview of the property addressed as 1651 Westside Road, view looking northwest. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

5.1.4 Map ID 6. Property at the Intersection of Liebert Road and Mandrapa Road (No Situs Address; 051-350-017)

Description

The subject property located on APN 051-350-017 does not have a situs address but was previously recorded as part of 1105 Liebert Road. Two additional buildings on the parcel were demolished in 2004. The property was observed from the access roads surrounding the Fig and Westside Main Canals. Historical aerials show two buildings on the parcel, both of which were demolished in ca. 2004. The existing building was constructed prior to 1984 and is in the northeast corner of the parcel. A concrete canal was constructed along the north side of the property, with unofficial writing on the concrete with a date of February 15, 1974 (NETR 2024a).

The only building on the property, an abandoned barn, sits at the southeast corner of the intersection of Liebert Road and Mandrapa Road, north of the Westside Main Canal (Exhibit 6). The wood frame building has a gable-end entry with minimal overhang and dropped secondary roof over a shed room, a wood frame tractor entrance with no door attached, vertical wood board siding, with flat wood board roofing, a louvered wood attic vent, exterior mounted air conditioning vent system on the north elevation that appears to have been a later addition. Located on the main (south) and the north elevations are two offset to the right ventilation windows.

Exhibit 6. View of the existing building, looking north.



Statement of Significance

The property was previously evaluated in 2011 by ASM and AECOM. In 2012, Chambers Group recommended it as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for

PC ORIGINAL PKG

the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property was likely constructed in ca. 1940, ca. 1930s, and ca. 1945 based on visual observation and historic aerials.

Brent D. Johnson of Chambers Group most recently determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for NRHP/CRHR Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction, and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under NRHP/CRHR Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under NRHP/CRHR Criterion 4/D. Johnson did not evaluate the property's historical integrity.

On April 11, 2023, Dudek revisited the residential property at APN 051-350-017 and did not observe any noticeable alterations since the last recordation in 2012. Dudek concurs with the previous finding that the building does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

In conclusion, the farm property at APN 051-350-017 lacks sufficient significance to meet any of the criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the farm property at APN 051-350-017, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

5.1.5 Map ID 7. 2094 West Wixom Road (051-330-024)

Description

The subject property, sited at 2094 West Wixom Road, comprises two single-story residences, an ancillary building, and several shade structures. The first single-family residence is a single-story residence with a rectangular plan built in the Minimal Traditional architectural style. The side-gable roof, which features exposed rafter tails, is clad in composite roofing. The building is of brick construction that is clad in stucco, has double-hung windows with multi-pane glazing, louvered attic vents, and a pent roof over the center window on the main (west) elevation. The second single-family residence on the property is a single-story residence with an irregular plan that is clad in stucco. The roof has a medium-pitched, cross-gabled roof that has vented peaks. The second residence has a combination of aluminum-framed and vinyl-framed sliding-sashed windows. This property was originally recorded in 2012 by

PC ORIGINAL PKG

Chambers Group and there does not appear to be any changes to the resource since its original recordation (Exhibits 7 and 8).

Statement of Significance

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property that encompasses APN 051-330-024 was likely constructed in ca. 1945 (Johnson 2012c: 1–3).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for NRHP/CRHR Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under NRHP/CRHR Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under NRHP/CRHR Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On April 11, 2023, Dudek revisited the residential property at 2094 West Wixom Road and did not observe any noticeable alterations since the last recordation in 2012. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

Exhibit 7. Overview of the first single-family residence located at 2094 West Wixom Road, view looking east. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

Exhibit 8. The main (south) elevation of the second single-family residence located on the property, view looking north. Photograph taken on April 11, 2023.



5.1.6 Map ID 9. 1905 Wixom Road (051-360-038)

Description

The subject property, sited at 1905 Wixom Road, consists of a one-story single-family residence with a rectangular plan. The building was designed in the Spanish Colonial architectural style with an arched gallery on the exterior elevations and an interior courtyard with a rectangular pool. The residence also features elements of the French Colonial style including a dual-pitched pavilion roof. The building is constructed from concrete masonry blocks reinforced with steel. A north–south-oriented rectangular building, which appears to be a garage built during the same period as the residence, is located east of the main building. This single-family residence was originally recorded in 2012 by Chambers Group and there does not appear to be any changes to the resource since its original recordation (Exhibit 9).

Statement of Significance

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property that encompasses APN 051-360-038 was constructed in ca. 1970 (Johnson 2012a: 1–3).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for NRHP/CRHR Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction. It did not appear to represent the work of a master, possess high artistic value, or represent a significant or distinguishable entity whose

PC ORIGINAL PKG

components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under NRHP/CRHR Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under NRHP/CRHR Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On April 11, 2023, Dudek revisited the residential property at 1905 Wixom Road and observed no noticeable alterations to the main residence since the last recordation in 2012. A rectangular building, which is complementary and has similar building materials, is located directly east of the main residence. Dudek concurs with the previous finding that the residence does not meet any criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

Exhibit 9. Overview of the property located at 1905 Wixom Road, view looking northeast. Photograph taken on April 11, 2023.



5.1.7 Map ID 10. Wixom Drain

Description

The Wixom Drain is an earthen-dug irrigation drainage ditch located east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixom Road. The 2-mile drainage ditch is approximately 10–20 feet wide and about 10–15 feet deep. Concrete weirs are located intermittently along the drain to control water flow. Wixom Drain was originally recorded in 2011 by ASM and there does not appear to be any changes to the resource since its original recordation (Exhibit 10).

PC ORIGINAL PKG

Statement of Significance

Wixom Drain was previously evaluated in 2011 by ASM and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that Wixom Drain was constructed between 1922 and 1949 and assigned a construction date of ca. 1940 (Krintz 2011b: 1).

ASM Architectural Historian Jennifer Krintz determined that the Wixom Drain was a late, and modest, example of irrigation systems in Imperial Valley, California. The drain does not appear to be a significant representation of a significant historical trend or event and was recommended ineligible for NRHP/CRHR Criteria 1/A. Krintz did not evaluate Wixom Drain for significance under NRHP/CRHR Criteria 2/B, 3/C, or 4/D (Krintz 2011b: 1–3).

On April 11, 2023, Dudek revisited Wixom Drain and observed no noticeable alterations since the last recordation in 2011. Dudek concurs with the previous finding that the drain appears ineligible for NRHP/CRHR Criteria 1/A. However, the drain is unlikely to be associated with the lives of persons significant to the community's, state's, or nation's past. As such, the drain appears ineligible for NRHP/CRHR Criterion 2/B. The property also lacks the characteristics of a type, period, or construction method and does not appear to represent the work of a master, possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Accordingly, the property does not appear eligible under NRHP/CRHR Criterion 3/C. Wixom Drain is unlikely to yield information important to prehistory or history and, therefore, is recommended ineligible under NRHP/CRHR Criterion 4/D. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code (Krintz 2011b: 1–3).

Exhibit 10. North section of Wixom Drain, view looking south. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

5.1.8 Map ID 11. Fig Canal

Description

This portion of the Fig Canal is a trapezoidal concrete-lined channel with various widths and depths as it meanders and follows along the boundaries of several agricultural fields along Derrick Road and Wixom Road before terminating at the Westside Main Canal. The Fig Canal spans more than 4 miles and is predominantly 10 feet wide and approximately 6 feet deep. Sections of the canal vary in width as it traces along the boundaries of nearby agricultural fields. The Fig Heading, comprising two concrete-lined winged wall culverts and two metal gate structures, is associated with the canal (Exhibit 11).

Statement of Significance

Five previous historical studies document the subject portion of the Fig Canal. In the 1983 draft report Lake Cahuilla (East Mesa Segment) Management Plan and Environmental Assessment, BLM recommended that the All-American Canal be found eligible for the NRHP as part of a district under Criteria A and C. BLM communicated with SHPO and addressed comments on boundaries, significance criteria, setting, and national versus local levels of significance. After the comments were addressed, SHPO elected not to comment on the undertaking. BLM presumed SHPO concurrence in accordance with a Programmatic Agreement between the two agencies (BLM 1983; Schaefer and O'Neil 2001: v).

In 2001, IID employed ASM to complete an inventory and evaluation report for the entire All-American Canal system. ASM employees Jerry Schaefer and Collin O'Neill conducted an inventory system composed of 148 miles of main canals, 1,438 miles of laterals, and 1,406 irrigation and drainage ditches. ASM concurred that the entire All-American Canal system (trinomial CA-IMP-7130H), including components under 50 years old, was eligible for the NRHP for its historical and engineering significance. ASM conducted preliminary research for "any future efforts to actually nominate the AAC [All-American Canal] to the National Register of Historical Places, possibly as part of a larger district that would include the Imperial Dam and distilling plant, the Coachella Canal, and all the mains, laterals, and drains throughout the Imperial Valleys" (Schaefer and O'Neil 2001: 1). ASM concluded that the All-American Canal is eligible for the NRHP, CRHR, and local level as a historic district under Criteria A/1 and C/3 because of its association with a major federal public works project, IID, and Imperial Valley. ASM recommended that although "all of the elements of the canal evaluated here [are] significant contributing elements of a district, even if they are less than 50 years old, additional research is required to determine if all the elements are contributory prior to any NR nomination submittals" (Schaefer and O'Neil 2001: 71).

In 2009, URS evaluated (but did not survey) a portion of the Fig Canal, a component of the All-American Canal irrigation system. URS documented that the subject portion of the 4-mile-long Fig Canal, constructed in ca. 1912 was altered over time through dredging and widening. Date stamps indicate that the concrete on the canal was updated in the mid-1950s. URS concluded that the subject portion of the Fig Canal appeared ineligible for the NRHP due to a lack of significant historical associations and historic integrity. URS stated that the canal was constructed several years after the All-American Canal opened, but substantial improvements and reconstruction do not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials).

PC ORIGINAL PKG

In summary, in 2009, URS recommended that the portion of the Fig Canal near Evan Hewes Highway did not appear to be individually eligible for listing in the NRHP, CRHR, or considered a historical resource for purposes of CEQA. In 2011, ASM Architectural Historian Jennifer Krintz concurred with URS's recommendation that the canal be found ineligible for a lack of historical associations and integrity. In the same year, a subsequent study conducted by Chambers Group also concurred with URS's earlier recommendation (URS 2009a: 1-3; Krintz 2011d: 2; Johnson et al. 2011a: 1, 4).

On April 11, 2023, Dudek revisited the subject portion of the Fig Canal and did not observe any noticeable alterations since the last recordation. Dudek also reviewed all available documentation pertaining to this portion of the Fig Canal and concurs that the aqueduct does not meet any criteria for listing in the NRHP or CRHR. In 1983, BLM recommended that this ancillary canal may be eligible for the NRHP because of its association with the All-American Canal but requested that additional research be conducted to confirm its eligibility. ASM and URS conducted subsequent studies in 2001, 2009, and 2011 and recommended that the canal be found ineligible for recordation due to a lack of integrity. Dudek disagrees that routine maintenance, required to keep the aqueduct operational, disqualifies this portion of the Fig Canal from recordation on the NRHP. This portion of the Fig Canal is an ancillary extension of an extensive water conveyance system designed to irrigate individual, private agricultural ventures. The Fig Canal's mere association with the All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. This portion of the Fig Canal does not represent any significant historical trends associated with any important persons, architecturally significant, or likely to yield additional information about pre-history or history. As such, this portion of the Fig Canal appears ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

Exhibit 11. The north section of Fig Canal, view looking south. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

5.1.9 Map ID 12. Fern Canal

Description

This portion of the 10-mile-long Fern Canal system is a trapezoidal concrete-lined channel approximately 20 feet wide and 10 feet deep. The canal travels beneath Evan Hewes Highway through a concrete-lined winged wall culvert (stamped 1953), while the south portion has a wood and metal control gate constructed across the mouth of the culvert. The canal features a concrete and earthen bank (Exhibit 12).

Statement of Significance

Five previous historical studies document the subject portion of the Fern Canal and Fern Side Main. In the 1983 draft report Lake Cahuilla (Est Mesa Segment) Management Plan and Environmental Assessment, BLM recommended that the All-American Canal be found eligible for the NRHP/CRHR as part of a district under Criteria A/1 and C/3. BLM communicated with SHPO and addressed comments on boundaries, significance criteria, setting, and national versus local levels of significance. After the comments were addressed, SHPO elected not to comment on the undertaking. BLM presumed SHPO concurrence in accordance with a Programmatic Agreement between the two agencies (BLM 1983; Schaefer and O'Neil 2001: v).

In 2009, URS reevaluated but did not survey the canal segments and recommended that they be ineligible for the NRHP and CRHR due to a lack of significant historical associations and historic integrity. URS disagreed with the U.S. Bureau of Reclamation (USBR) and OHP's determination that the canal is a contributing element or significant related feature/component to the larger linear All-American Canal. For integrity, URS stated that the canal was originally constructed in ca. 1909, but substantial improvements and reconstruction may have occurred since the 1940s, as evidenced by the date-stamped culverts. Routine dredging and widening of canals and drains were also conducted to alleviate problems of silt and buildup. URS also stated that the Fern Canal crossing at Evan Hewes Highway does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). In summary, in 2009, URS recommended that the portion of the Fern Canal near Evan Hewes Highway did not appear to be individually eligible for listing in the NRHP or CRHR nor considered a historical resource for purposes of CEQA. In 2011, ASM Architectural Historian Jennifer Krintz concurred with URS's recommendation that the canal be ineligible for a lack of historical associations and integrity. In the same year, a subsequent study conducted by Chambers Group also concurred with URS's earlier recommendation (URS 2009b: 1-3; Krintz 2011e: 2; Johnson et al. 2011b: 1, 4).

On April 11, 2023, Dudek revisited this portion of the Fern Canal and did not observe any noticeable alterations since the last recordation in 2011. Dudek also concurs that the aqueduct does not meet any of the criteria for listing in the NRHP or CRHR. In 1983, BLM recommended that this ancillary canal may be eligible for the NRHP because of its association with the All-American Canal. However, it requested that additional research be conducted to confirm its eligibility. URS and ASM conducted subsequent studies in 2009 and 2011 and recommended that the canal be found ineligible for recordation due to a lack of integrity and historical associations. Dudek disagrees that routine maintenance, required to keep the aqueduct operational, disqualifies this portion of the Fern Canal from recordation on the NRHP. This canal, however, is an ancillary extension of an extensive water conveyance system designed to irrigate individual, private agricultural ventures. The Fern Canal's mere association with the All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. This portion of the Fern Canal and the Fern Side Main does not represent any significant historical trends associated with any

PC ORIGINAL PKG

important persons, architecturally significant, or likely to yield additional information about pre-history or history. As such, this portion of the Fern Canal appears ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

Exhibit 12. North section of Fern Canal, view looking south. Photograph taken on April 11, 2023.



5.1.10 Map ID 13. Dixie Drains and Laterals

Description

The subject property is a system of drains and laterals that bisect the API along portions northeast of the Westside Main Canal. Dixie Drains 2, 3, 3A, 3B, and 3C and Lateral 1 are part of a larger drainage system that runs parallel to Mandrapa Road, Westside Road, and north-to-south perpendicular to West Vaughn Road. The Dixie Drain system is a series of earthen-dug canals that are approximately 10 feet wide and 6 feet deep and were built in 1911 and modified in ca. 1940. Dixie Lateral 1 is a concrete irrigation canal that extends east from the Westside Main Canal west of Hyde Road and south of West Vaughn Road. It is connected to Dixie Drain 3 at Diehl Road and Westside Road (Exhibits 13 and 14).

Statement of Significance

Five previous historical studies document Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral. In the 1983 draft report Lake Cahuilla (East Mesa Segment) Management Plan and Environmental Assessment, BLM recommended that all elements associated with the All-American Canal be found eligible for the NRHP/CRHR as part of a district under Criteria A/1 and C/3. BLM communicated with SHPO and addressed

PC ORIGINAL PKG

comments on boundaries, significance criteria, setting, and national versus local levels of significance. After the comments were addressed, SHPO elected not to comment on the undertaking. BLM presumed SHPO concurrence in accordance with a Programmatic Agreement between the two agencies (BLM 1983; Schaefer and O'Neil 2001: v).

In 2009, URS reevaluated, but did not survey, the canal segments and recommended that they be found ineligible for the NRHP and CRHR due to a lack of significant historical associations and historic integrity. URS disagreed with USBR and OHP's determination that the canal is a contributing element or significant related feature/component to the larger linear All-American Canal. For integrity, URS stated that the canal system has undergone significant improvements and that reconstruction may have occurred since the mid-twentieth century, as evidenced by the date stamped on the culverts. Routine dredging and widening of the canals and lateral were also conducted to alleviate problems of silt and buildup. In summary, in 2009, URS recommended that the Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and Dixie Lateral did not appear to be individually eligible for listing in the NRHP or CRHR, nor considered a historical resource for purposes of CEQA. In 2011, ASM Architectural Historian Jennifer Krintz concurred with URS's recommendation that the canal be found ineligible for a lack of historical associations and integrity. In the same year, a subsequent study conducted by Chambers Group also concurred with URS's earlier recommendation (URS 2009c: 1-3; Krintz 2011c: 2; Johnson et al. 2011b: 1, 4).

On April 11, 2023, Dudek revisited Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral and did not observe any noticeable alterations since the last recordation in 2011. Dudek also concurs that the aqueduct does not meet any criteria for listing in the NRHP or CRHR. In 1983, BLM recommended that these ancillary canals may be eligible for the NRHP because of their association with the All-American Canal. However, it requested that additional research be conducted to confirm their eligibility. URS and ASM conducted subsequent studies in 2009 and 2011 and recommended that the drains and lateral be found ineligible for recordation due to a lack of integrity and historical associations. Dudek disagrees that routine maintenance, required to keep the aqueduct operational, disqualifies Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral from recordation on the NRHP. These canals, however, are ancillary extensions of a large water conveyance system designed to irrigate individual, private agricultural ventures. Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral's mere association with the All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral are not representative of any significant historical trends, associated with any important persons, architecturally significant, or likely to yield additional information about pre-history or history. As such, Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral appear to be ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

PC ORIGINAL PKG

Exhibit 13. West side of Dixie Lateral Drain 1, view looking east. Photograph taken on April 11, 2023.



Exhibit 14. North side of Dixie Lateral Drain 3, view looking south. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

5.1.11 Map ID 14. Westside Main Canal and Drain

Description

The 4-mile segment of the Westside Main Canal was identified using aerial images and observed from the right-of-way during the survey. The Westside Main Canal was constructed between 1906 and 1908 by the California Development Company and was extended into the API from a canal in Mexico. The earthen canal is approximately 75–80 feet wide and 10 feet deep. In 1941, the Westside Main Canal was incorporated into the All-American Canal system. Features along the Westside Main Canal include the Fern Check Bridge, built in 1947, and another spillway system, built in 1967, near the Fox Glove Canal. The segment observed is the main canal that feeds the Fig and Fern Canals and the Wixom and Dixie Drains (Exhibit 15). The Westside Main Canal was constructed and incorporated into the All-American Canal in 1941, and the portions of the canal that were located in Mexico were removed from the IID (URS 2009d: 1–5).

Exhibit 15. Photo taken from bridge to substation, looking southeast toward the Fern Check Bridge.



Statement of Significance

The Westside Main Canal was incorporated into the All-American Canal upon its completion the following year in 1942 (Wlodarski 2006: 3; Johnson 2012e; URS 2009d; IID 2024).

BLM and IID have determined the All-American Canal is eligible for the NRHP/CRHR as a historic district under Criterion A/1 and Criterion C/3. According to report from 2001, BLM stated that the All-American Canal was found to be significant on local, state, and national levels due to its association with major federal public works projects, IID, and Imperial Valley. All elements of the canal are evaluated here as significant contributing elements of a district even if they are less than 50 years old. Additional research is required to determine if elements are contributory, prior to any NRHP nomination submittals. The All-American Canal is an ongoing and vital element of Imperial Valley's

PC ORIGINAL PKG

infrastructure that, since its construction, has required regular maintenance and upgrading (Schaefer and O'Neil 2001: 71).

Individual segments of the Westside Main Canal have been previously evaluated 12 times. The first evaluation in 1999 considered the Westside Main Canal, as a whole, significant under NRHP/CRHR Criteria A/1 and C/3 for its association with the development of irrigated commercial agriculture in the Imperial Valley as a good example of an early large-scale irrigation canal system. However, the report mentioned that the segment within the project area did not possess sufficient integrity (Hupp 1999). One report from 2000 and three from 2007 considered the Westside Main Canal eligible for the NRHP/CRHR under Criterion A/1 as an extension of the All-American Canal. In 2009 and 2010, URS and the IID Dixieland 203-kilovolt Transmission Line and Substation Expansion Project considered the Westside Main Canal not eligible for the NRHP under the NRHP Status Code 6Z (URS 2009d: 2-4; Bowden-Renna 2010: 1).

In 2011, ASM concurred in two separate updates with the 2007 report from SWCA Environmental Consultants recommending that the segment of the Westside Main Canal was eligible for the NRHP/CRHR under Criterion A/1 as a contributor to the All-American Canal for its association with the irrigation of the Imperial Valley (Davis 2011a; Krintz 2011f:1). Three additional reports in 2011 by KP Environmental, Chambers Group, and AECOM evaluated a portion of the Westside Main Canal that included the Pump 6 site location, which was located on the south side of Mandrapa Road. KP Environmental and Chambers Group concluded that the segment of the property was not eligible and does not appear to be a contributing element to the Westside Main Canal system (Johnson et al. 2011c; Thomson 2011a). AECOM concurred with the 1999 California Department of Transportation report that the 7-mile portion of the canal that crosses under Interstate 8 is not eligible due to lack of integrity. In 2017, ASM did not give an updated evaluation but conducted an intensive-level survey of the canal between Mandrapa and Vogel Roads to Mandrapa and Liebert Roads (Lennen 2017:1)

On April 11, 2023, Dudek revisited a portion of the Westside Main Canal adjacent to the Project API and observed multiple alterations since the last recordation in 2017. Portions of the surveyed segment of the Westside Main Canal are included in past evaluations: the 2011 IID Dixieland 230-kilovolt Transmission Line and Substation Expansion Project (Thomson 2011a); and the Imperial Valley Solar Farm Project, West Imperial County, California (Krintz 2011f; URS 2009d). A concrete bridge that spans over the Westside Main Canal 830 feet west of the Fern Check is present and leads to the entrance of the Imperial Valley Substation, built ca. 2022.

Dudek concurs with the previous findings that the canal does not meet the criteria for listing in the NRHP or CRHR due to lack of integrity. The 4-mile segment of the Westside Main Canal between West Vaughn Road and Liebert Road does not reflect its original construction through the construction of features outside of its period of significance (1908–1941). Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the segment of the Westside Main Canal is not a historical resource for the purposes of CEQA. Dudek has assigned the segment of the Westside Main Canal a 6Z California Historical Resource status code.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

PC ORIGINAL PKG

5.1.12 Map ID 15. Fox Glove Canal

Description

The Fox Glove Canal was constructed in ca. 1912 and modified between 1954 and 1981. It was built parallel to the Westside Main Canal, most likely in the 1940s, and the spillway along the Westside Main Canal was built in 1967. In 1982, the diversion from the Westside Main Canal into the Fox Glove was constructed in concrete (Exhibit 16). The canal is approximately 20 feet wide, made of concrete slab sidings and metal gate structures, and runs for 1.1 miles parallel to the Westside Main Canal and the Dixie Drain 2 on the west portion of the API. The Fox Glove Canal connects to the Westside Main Canal by a spillway gate located southwest of the intersection of Mandrapa Road and Hyde Road, constructed in 1967. At 0.5 miles to the north, Fox Glove Canal connects to Dixie Lateral 1, which bisects multiple farmland segments in the API. The canal runs north to West Vaughn Road and continues northwest, parallel to the Westside Main Canal north of Interstate 8. The canal is approximately 9 miles long (NETR 2024a).

Exhibit 16. View of the Fox Glove Canal on the corner of Hyde Road and West Vaughn Road, facing east.



Source: Dudek IMG_3640

Statement of Significance

The property has been previously evaluated six times. The first evaluation was conducted by USBR and OHP in 2006. USBR and OHP determined that a portion of Fox Glove Canal is associated with the All-American Canal, which appeared to be eligible under NRHP/CRHR Criteria A/1 and C/3. USBR and OHP recommended that the canal be found ineligible under NRHP/CRHR Criteria B/2 and D/4. The IID report from 2001 included the entire IID system with all associated canals and was used as reference in this evaluation by USBR and for further evaluations (Schaefer and O'Neil 2001), In 2008, the Southeastern Information Center confirmed that SHPO considers eligible all components of the All-American Canal system. SWCA Environmental Consultants determined the Fox Glove Canal

PC ORIGINAL PKG

eligible for the NRHP/CRHR under Criterion A/1 for its significance in association with the development of the Imperial Valley and under NRHP/CRHR Criterion C/3 as part of "one of the great engineering marvels of the American West" as a contributor to the All-American Canal system, which is a linear historic district (Steely 2008). In 2009, URS considered the portion of the Fox Glove Canal crossing the Evan Hewes Highway as not eligible for listing on the NRHP or CRHR nor considered a historical resource for CEQA purposes (URS 2009e). In 2011, portions of the Fox Glove Canal were evaluated by KP Environmental, ASM, and AECOM. Both KP Environmental and ASM considered portions of the Fox Glove Canal not eligible, while AECOM considered the portion of the canal surveyed as largely unchanged and retained integrity; therefore, it was recommended eligible for the NRHP and CRHR (Davis 2011b; AECOM 2011; Thomson 2011b).

On April 11, 2023, Dudek revisited this portion of the Fox Glove Canal and did not observe any noticeable alterations since the last recordation in 2011. Dudek concurs with the previous findings of ASM and KP Environmental that the Fox Glove Canal does not meet any of the criteria for listing in the NRHP or CRHR. The canal has been altered throughout its development, most recently in the 1980s, and exhibits a loss of integrity with its restructuring and widening throughout its existence. Although it fits into the Imperial Valley's agricultural development theme, the canal is an ancillary extension of a large water conveyance system designed to irrigate individual, private agrarian ventures. The Fox Glove Canal's mere association with the West Side Main Canal or All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. The Fox Glove Canal does not represent any significant historical trends associated with any important persons, architecturally significant, or likely to yield additional information about pre-history or history. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

PC ORIGINAL PKG

5.1.13 Map ID 16. Crossed Wagon Road from Fort Yuma to Warners Ranch

Description

The location of the Wagon Road was noted on the previously completed site record in the API in Township 16 South, Range 12 East in Sections 21 and 22, adjacent to the Fern Canal and north of West Vaughn Road. However, the Wagon Road appears on the GLO maps from 1857 bisecting Sections 15 and 16 running southeast to northwest. This is north of the API, beyond the Kumeyaay Highway (Exhibits 17 and 18) (GLO 1857; Matthewson 1856). It seems likely that the road was noted incorrectly on the previous study. There is no indication of the road in the location where it was previously recorded.

Exhibit 17. Previously recorded site form map (P-13-003403).



PC ORIGINAL PKG

Exhibit 18. Aerial view of a GLO overlay from 1857 and Google Earth 2023.



Statement of Significance

According to the SCIC records search, the road was recorded as recently as 2009. The associated site form provides limited information and no evaluation was completed at this time. On April 11, 2023, Dudek revisited the site and did not find any indications the road was ever at this location and was likely incorrectly mapped in the API. Dudek concluded that the resource as it was previously mapped is not extant in this location.

PC ORIGINAL PKG

5.2 Newly Identified Properties

5.2.1 Map ID 3. 2250 West Vaughn Road (051-300-027)

Description

This 13.7-acre, rectangular-shaped parcel (051-300-027) is located adjacent to the API at the intersection of Westside Road and West Vaughn Road, directly east of APN 051-300-010. Mobile Home A is a single-story mobile home with an irregular-shaped floor plan with a cross-gabled roof. There are metal roof overhangs on the east and south elevations. The roof appears to be corrugated metal. The siding is unknown, as a lattice fence covers the façade. Features include palm tree landscaping and a front-facing gable porch covered with a red composite material. Mobile Home B is a single-story mobile home with a rectangular-shaped floor plan and a side-gabled roof. The roof appears to be corrugated metal, and the siding consists of horizontal and vertical board along the southern elevation. Additions to the property include metal porch overhangs on the north, east, and west elevations.

Outbuilding 1, located 25 feet north of Mobile Home A, is a single-story shed with a rectangular floor plan built in ca. 1976. The subject property has a side gabled roof made of corrugated metal with a pyramidal cupola on the interior north side of the building (Exhibit 19). The entrance to the building appears to be on the west elevation. Alterations to the building include repairs to the roof. Outbuilding 2, located 30 feet north of Mobile Home B, is a single-story shed built in ca. 1976. The subject property has a rectangular-shaped floor plan with a side gabled roof made of corrugated metal. The main elevation is most likely on the west elevation, and the siding material is unknown. Additions or alterations to the building are unknown (Exhibit 20).

Exhibit 19. View from the right-of-way of Westside Elementary School at Mobile Home A (green arrow) and Outbuilding 1 (red arrow) looking northeast.



PC ORIGINAL PKG

Exhibit 20. View from right-of-way with Mobile Home A (left) and Mobile Home B (right), looking north.



Property-Specific Historic Context

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000).

Vaughn Road was likely named after the Vaughn family, who were ranchers around the project API in the early 1910s. John Chester (J.C.) Vaughn Sr. and son J. Chester Vaughn were ranchers in Seeley, California, which was unincorporated lands west of El Centro (Ancestry 1918: 893). In 1911, the Vaughn family purchased land in Township 16 South, Range 12 East, in Sections 21 and 28. Prior to purchasing land in 1911, J.C. Vaughn Sr. (68) lived with his wife Huldah H. (53) and son J. Chester (28) in what was documented as "Road West of Calexico City" (U.S. Census Bureau 1910: 21). By 1920, J. Chester Vaughn was registered as farm manager in Silsbee, California, separate from J.C. Vaughn and Huldah H. Vaughn at their home in Seeley (U.S. Census Bureau 1920: 17). Huldah Vaughn was known for hosting Girls War Work Committee meetings and was the department chairmen for Home Economics, and later Westside Country Club Meetings (IVP 1918: 2; IVP 1923a: 2). Into the 1920s, the property was used as ranching land for cattle, and dairy sales (IVP 1923b: 3). The Westside Elementary School was also a gathering place for the Seeley-Westside Farm Bureau and the Woman's Christian Temperance Union. In 1931, it was announced that J. Chester Vaughn was building an addition to his ranch home near the Westside Elementary School (IVP 1931: 2); it was also announced that year that several ranchers would organize the Westside Ranchers Association (IVP 1932b: 3). In 1938, Rosielee McCoy Vaughn asked for a divorce from J. Chester Vaughn due to irritable behavior and forcing to deed some of their property to her brother (IVP 1938: 8).

PC ORIGINAL PKG

Archival research does not conclude that the two buildings on the property in the 1950s were part of the Vaughn Ranch addition announced in 1931. Before the construction of the current residential buildings, ca. 1978, the property was mostly agricultural land with two small farm buildings located in the southwest corner near West Vaughn Road. By 1984, aerials show the two small farm buildings were demolished, and the two residences were set farther back on the property. There are currently five buildings and two garage structures on the subject parcel. Only one of the existing buildings appears on the 1980 topographic maps. The other four buildings appear on historical aerials from 1984–1985 (Ancestry 1956: 245; NETR 2024a, 2024b).

Statement of Significance

Under NRHP/CRHR Criterion A/1, the property at 2250 West Vaughn Road lacks a direct and important association with any event significant in local, state, or national history. The Mobile Home Complex does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, 2250 West Vaughn Road does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the property at 2250 West Vaughn Road lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the mobile home complex at 2250 West Vaughn Road is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the property at 2250 West Vaughn Road does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possess high artistic values. The extant buildings located on the subject property were developed ca. 1978. The built environment resources located on the subject property do not possess high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect for the original design of the subject property buildings. Therefore, nothing suggests that the property is associated with an expert architect. Due to the pervasive nature of the buildings and structures, a lack of high artistic value, and a lack of evidence to suggest the extant buildings and structures are associated with an expert architect, the subject property buildings are not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the property at 2250 West Vaughn Road is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, 2250 West Vaughn Road lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the above significance criteria before determining whether it retains its historic character and can convey its significance. In the specific case of the property at 2250 West Vaughn Road, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation

PC ORIGINAL PKG

also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

5.2.2 Map ID 8. 2104 West Wixom Road (051-330-021)

Description

The subject property was identified using aerial images and observed from the access roads. Parcel information reveals that the subject property was built in 1940. The residential property includes one residential building with two garage-like structures. Historical aerials reveal multiple structures on the property before 1953, including a residence and other ancillary buildings that were removed by 1959. Today, the property includes one mobile home located near where the Wixom Drain and the Fern Canal meet. The mobile home is a shotgun-style rectangular floor plan elevated with concrete slabs and a front gabled roof. The main façade faces east and has an overhanging roof extension over the main entrance. The roof is made of composite shingles, and the siding appears to be horizontal board. Windows on the east and south elevations include one-by-one siding windows. The west elevation includes an extended wall made of concrete and appears to have an entrance on the south elevation with decorative concrete ornament slabs (Exhibit 21). Other structures located on the property include a standalone metal garage overhang with metal pole siding and a flat wooden roof (NETR 2024a; ParcelQuest 2024).

Exhibit 21. View from dirt road between Wixom Drain and Fern Canal of residential farmstead, looking northwest.



Property-Specific Historic Context

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a

PC ORIGINAL PKG

desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres. Between 1905 and 1907, the community of Silsbee was largely destroyed by flooding and was relocated. Seeley was established in 1910 along U.S. Highway 80 (Pioneers Museum of the Imperial Valley 2000; Gallegos 1979: 47).

The earliest depiction of residential development on the property is in 1940 topographic maps (USGS 2024). The building from the 1940s was not present by 1959. The subject property was first visible in 1984, but the mobile home was likely erected in ca. 1975. The parcel north of the subject property and south of the Fern Canal has remained agricultural land (NETR 2024a).

Statement of Significance

Under NRHP/CRHR Criterion A/1, the property at 2104 West Wixom Road lacks a direct and important association with any event significant in local, state, or national history. The residential farmstead does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, 2104 West Wixom Road does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the property at 2104 West Wixom Road lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the subject property is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the property at 2104 West Wixom Road does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possess high artistic values. The extant buildings located on the subject property were developed in ca. 1975. The built environment resources located on the subject property do not possess high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect for the original design of the subject property buildings. Therefore, nothing suggests that the property is associated with an expert architect. Due to the pervasive nature of the buildings and structures, a lack of high artistic value, and a lack of evidence to suggest the extant buildings and structures are associated with an expert architect, the subject property buildings are not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the property at 2104 West Wixom Road is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, 2104 West Wixom Road lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the property at 2104 West Wixom Road, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

PC ORIGINAL PKG

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

5.2.3 Map ID 17. Cattle Corral Shelter (051-310-026)

Description

This 40-acre, square-shaped parcel (051-310-026) is adjacent to the API on Derrick Road, directly north of APN 051-310-027. The Cattle Corral Shelter has a rectangular floor plan and a front-gabled roof. The roof overhang is oriented east to west and appears to be made of corrugated metal. There are four horizontal wood beam pillars on the south and north elevations, maintaining the roof shelter. No exterior or interior walls are present. Features of the property include triangle-shaped metal fences along the west and east borders of the corral, with a gate on the north side for entry and exit. The southern border of the corral is the only concrete-lined fence surrounding the Cattle Corral Shelter. There are no noticeable additions to the property. The fencing appears in disrepair and is surrounded by refuse such as tires, downed trees, and metal debris (Exhibits 22 and 23).

Exhibit 22. View from the elevated dirt road between Derrick Road and the Fig Canal, facing west.



PC ORIGINAL PKG

Exhibit 23. View from the southeast corner of the Cattle Corral Shelter near the Fig Canal, facing northwest.



Property-Specific Historic Context

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000).

The subject property is in the southwest corner of Section 23 of Township 16 South, Range 12 East. The earliest map of the area shows the "road from Warners Rancho to Fort Yuma" in the northeast corner of Section 23, about 0.5 miles from the property, in 1857 (GLO 1857). By 1909, the entire area was divided into tracts, with the subject property is located in Tract No. 52 (GLO 1909). Derrick Road was likely named after the Derrick family, who were farmers around the project API as early as 1893. Anderson B. Derrick first came to the Imperial Valley in 1893 and began buying land in the 1910s (IVP 1933a:2).

In 1911, George H. Woolliscroft applied for a desert land entry to establish a claim of the southwest corner of Section 23, Township 16 South, Range 12 East. Woolliscroft was an alfalfa farmer into the 1930s. Census data show George H. and Bertha M. had two children, Mabel and Merlin, and lived along San Diego Highway and Fern Ditch Road. Woolliscroft also sold Guernsey bulls and milk cows in the 1930s (IVP 1911:2, 1928:5, 1933b:5; U.S. Census Bureau 1930:16).

Prior to 1953, two buildings were located near the same area where the current Cattle Corral Shelter stands today. By 1959, the current structure and a building to the south and the north were present. The farm lands to the west and south are split into two sections, and a dirt road bisects them between Derrick Road and Jessup Road. By

PC ORIGINAL PKG

1996, the only building on the property is the Cattle Corral Shelter. Today, the property is owned by J.R. Preece Inc., a large alfalfa, Bermuda grass, and oat hay grower in Imperial Valley (NETR 2024a, 2024b; ParcelQuest 2024; Preece Farms 2014).

Statement of Significance

Under NRHP/CRHR Criterion A/1, the Cattle Corral Shelter lacks a direct and important association with any event significant in local, state, or national history. The Cattle Corral Shelter does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, the Cattle Corral Shelter does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the Cattle Corral Shelter lacks a significant association with the productive life of any person important in local, state, or national history. Archival research did reveal the original owner of the property. However, it did not reveal the property owner at the time the structure was built. Therefore, there is no known connection to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the Cattle Corral Shelter does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possess high artistic values. The extant structures located on the subject property were developed ca. 1956. The built environment resources located on the subject property do not have high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the builder for the subject property buildings. Therefore, nothing suggests that the property is associated with an expert architect or builder. Due to the pervasive nature of the buildings and structures, a lack of high artistic value, and a lack of evidence to suggest the extant buildings and structures are associated with an expert architect, the subject property buildings are not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the Cattle Corral Shelter is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, the Cattle Corral Shelter lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the Cattle Corral Shelter, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further study of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC

PC ORIGINAL PKG

Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

5.2.4 Map ID 18. Diehl Drain

Description

The Diehl Drain is an earthen-dug irrigation drainage ditch located east of Derrick Road. It flows west from the Fig Drain south to the agricultural fields along Derrick Road. The 1.1-mile drainage ditch is approximately 10–20 feet wide and about 10–15 feet deep. Concrete weirs are located intermittently along the drain to control water flow, including underneath Diehl Road and other paths between agricultural fields. It appears the Diehl Drain would allow overflow water to drain into the Fig Drain. However, the concrete weirs connecting the irrigation system appear out of use and in decay. The Diehl Drain connects to the agricultural lands to the north and south (Exhibits 24 and 25).

Exhibit 24. View from southern end of Diehl Drain, facing north.



PC ORIGINAL PKG

Exhibit 25. View of Diehl Drain and its connection to the Fig Drain, facing east.



Property-Specific Historic Context

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000). Between 1905 and 1907, the community of Silsbee was largely destroyed by flooding and was relocated. Seeley was established in 1910 along U.S. Highway 80 (Pioneers Museum of the Imperial Valley 2000; Gallegos 1979: 47).

In 1910, the Fig Canal, along with other distribution ditches were constructed as part of the irrigation land extension system by Mr. Edgar (IVP 1910:4). Both the Fig Canal and Fig Drain were not visible until a 1940s topographic map (NETR 2024b). A 1953 aerial photo shows the earliest visual of the Diehl Drain. However, it does not appear to be connected to the Fig Drain. By 1959, the Diehl Drain was widened and appeared regulated in size. A connection to the Fig Drain appears to be constructed. Between 1959 and 1984, a residential building was removed near the Diehl Drain on the southeast corner of Derrick Road and Diehl Road. The drain appeared unchanged until the late 1990s and 2000s, when the section connecting to the Fig Drain appeared slightly wider, with farm equipment and hay derricks staged north of the drain (NETR 2024a, 2024b).

Statement of Significance

Under NRHP/CRHR Criterion A/1, the Diehl Drain lacks a direct and important association with any event significant in local, state, or national history. The Diehl Drain does not appear to have been directly involved in significant

PC ORIGINAL PKG

events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, the Diehl Drain does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the Diehl Drain lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the Diehl Drain is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the Diehl Drain does not include resources that fully embody the distinctive characteristics of a type, period, or construction method or represent the work of a master or creative individual or that possess high artistic values. The ditch appears to be constructed ca. 1950. The linear resource does not have high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect or builder for the original design of the earthen drainage ditch. Therefore, nothing suggests that the property is associated with an expert. Due to the pervasive nature of the resource, a lack of high artistic value, and a lack of evidence to suggest the drainage ditch associated with an expert architect, the subject property is not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the Diehl Drain is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, the Diehl Drain lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the Deihl Drain, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

5.2.5 Map ID 19. Fig Drain

Description

The Fig Drain is an earthen-dug irrigation drainage ditch located east of Derrick Road and flows in between the New River and the Westside Main Canal. The 2.6-mile drainage ditch is approximately 20–30 feet wide and about 15–20 feet deep and runs north and south through the project API (Exhibits 26 and 27). Concrete weirs are located intermittently along the drain to control water flow, including underneath Diehl Road, Wixom Road, and other dirt paths between agricultural fields. The Fig Drain extends parallel to the Westside Main Canal 2 miles south of the project area.

PC ORIGINAL PKG

Exhibit 26. View of the Fig Drain and an intact concrete weir near Diehl Road, facing south.



Exhibit 27. View of Fig Drain near W Wixom Road, facing north.



PC ORIGINAL PKG

Property-Specific Historic Context

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres. Between 1905 and 1907, the community of Silsbee was largely destroyed by flooding and was relocated. Seeley was established in 1910 along U.S. Highway 80. In 1910, the Fig Canal was constructed as part of the irrigation land extension system by Mr. Edgar (Pioneers Museum of the Imperial Valley 2000; Gallegos 1979: 47; IVP 1910:4).

A 1945 topographic map provides the earliest visual of the Fig Drain. However, it only shows the portion of the Fig Drain south of Diehl Road. By 1959, agricultural fields populated the area along the Fig Drain. By this time, the Fig and Deihl Drains appeared to be connected and widened. By 1984, agricultural fields were established along the Fig Drain near the confluence of the New River Wixom Drain area. The Fig Drain has experienced minimal changes since the 1980s (NETR 2024a, 2024b).

Statement of Significance

Under NRHP/CRHR Criterion A/1, the Fig Drain lacks a direct and important association with any event significant in local, state, or national history. The Fig Drain does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. The Fig Drain was just an addition to a preexisting irrigation system that had already been established throughout the area. Therefore, the Fig Drain does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the Fig Drain lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the Fig Drain is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the Fig Drain does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possess high artistic values. The ditch appears to be constructed ca. 1940. The linear resource does not possess high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect for the original design of the earthen drainage ditch. Therefore, nothing suggests that the property is associated with an expert architect. Due to the pervasive nature of the resource, a lack of high artistic value, and a lack of evidence to suggest the drainage ditch associated with an expert architect, the subject property is not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the Fig Drain is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, the Fig Drain lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above

PC ORIGINAL PKG

before determining whether the resource retains its historic character and can convey its significance. In the specific case of the Fig Drain, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

PC ORIGINAL PKG

6 Findings and Conclusions

Dudek's survey of the API indicates that built environment properties located within and adjacent to the proposed API are limited to several historic-era (over the age of 45) water conveyance canals, drains, laterals, roads, residences, and a transmission line system. The water conveyance system features and the transmission line system all appear to be associated with the IID. Many of the resources in the API have been previously recorded and recommended as ineligible, but none appear to have concurrence from the California State Historic Preservation Office. Dudek completed DPR updates on the following properties: Map IDs 1, 2, 4, 6, 7, 9, 10, 11, 12, 13, 14, and 15. Map ID 16 was not identified during the survey. In addition, resources that have not been previously evaluated (Map IDs 3, 8, 17, 18, and 19) were recorded and evaluated for their significance within NRHP and CRHR criteria. None of these properties were found eligible for the NRHP and do not qualify as CEQA historical resources (Table 5).

Table 5. Summary of Significance Evaluations and Findings

Map ID	Address/APN	Year Built	Primary Number*	NRHP/ CRHR Eligibility	Assigned California Historical Resource Status code	CEQA Finding
Previously Recorded within the API						
1	2396 West Vaughn Road/051-300-031	ca. 1960	P-13-014263	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
2	2294 West Vaughn Road/051-300-010/	ca. 1965	P-13-014264	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
4	1651 Westside Road051-270-038	ca. 1955	P-13-013758	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
6	No Situs Address (previously associated with 1105 Liebert Road)/ 051-350-017	ca. 1974	P-13-012700	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
7	2094 Wixom Road/051-330-024	ca. 1945	P-13-014265	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
9	1905 Wixom Road/051-360-038	ca. 1970	P-13-014266	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
10	Wixom Drain (Linear Resource)	ca. 1940	P-13-014975	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
11	Fig Canal (Linear Resource)	ca. 1912	P-13-012693	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources

PC ORIGINAL PKG

Table 5. Summary of Significance Evaluations and Findings

Map ID	Address/APN	Year Built	Primary Number*	NRHP/ CRHR Eligibility	Assigned California Historical Resource Status code	CEQA Finding
12	Fern Canal (Linear Resource)	ca. 1909	P-13-012689	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
13	Dixie Drains and Laterals (Linear Resource)	1911/ ca. 1940	P-13-012688	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
14	Westside Main Canal and Drain (Linear Resources)	1908	P-13-008334	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
15	Fox Glove Canal (Linear Resource)	ca. 1912	P-13-009880	Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
16	Crossed Wagon Road from Fort Yuma to Warners Ranch	Ca. 1856	P-13-003403	Not Eligible	N/A	No Impact to Historical Resources
Newly Recorded within the API						
3	2250 West Vaughn Road051-300-027	ca. 1976		Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
8	2104 West Wixom Road/051-330-021	1940		Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
17	Preece Cattle Corral Shelter	ca. 1956		Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
18	Diehl Drain	ca. 1950		Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources
19	Fig Drain	ca. 1940		Not Eligible	6Z: Found ineligible for NR, CR, or local designation through survey evaluation	No Impact to Historical Resources

Notes: APN = Assessor's Parcel Number; API = Area of Potential Impacts; ca. = circa; CEQA = California Environmental Quality Act; NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.
* If previously evaluated

Dudek evaluated the API in accordance with Section 15064.5 (a)(2)-(3) of the State CEQA Guidelines and using the criteria outlined in Section 5024.1 of the PRC. Dudek concludes that the properties evaluated within the API do not appear eligible for listing in the NRHP or CRHR due to a lack of significance. As such, no properties within the API are considered to be historical resources under CEQA. In conclusion, this study finds that the Project would have no impact on historical resources as defined by CEQA. No further consideration of historic era-built environment resources is necessary prior to Project implementation.

PC ORIGINAL PKG

7 References

AECOM. 2011. “DPR Form set for the Fox Glove Canal.” AECOM.

Ancestry. 1918. “Index to Great Register of Imperial County, California, U.S. Voter Registration 1900-1918.” Page 395. Accessed August 17, 2023. Ancestry.com.

Ancestry. 1956. “California, U.S. Voter Registrations. For Raymond C. Vaughn. Imperial County.” Page 295. Accessed August 17, 2023. Ancestry.com.

Bakhtiary, R., A. Pham, and M. Hale. 2024. *Cultural Resources Inventory Report, Big Rock 2 Cluster Solar and Storage Project, Imperial County, California*. Lead Agency: Imperial County, El Centro, California. Project Proponent: 90FI 8me LLC, El Dorado Hills, California. Encinitas, California: Dudek. April 2024.

BLM (Bureau of Land Management). 1983. *Draft Lake Cahuilla (East Mesa Segment) Management Plan and Environmental Assessment.*

BLM. 2024. “Bureau of Land Management General Land Office Records for Imperial County, CA, Dating to 1857.” Accessed April 2024. https://glorecords.blm.gov/search/.

Bowden-Renna, C. 2010. Cultural Resources Investigations Class III Report for the IID Dixieland 230 kV Transmission Line and Substation Expansion Project, Imperial County, California. Prepared by AECOM.

CC (Calexico Chronicle). 1982. “State Treasurer Approves IID Bond Election.” *Calexico Chronicle*. August 12, 1982.

City of San Diego. 2007. *San Diego Modernism Historic Context Statement*. Prepared for the State of California Office of Historic Preservation. October 17, 2007. Accessed March 3, 2023. https://www.sandiego.gov/sites/default/files/modernism_2007.pdf.

County of Imperial. 2016. *Imperial County Conservation and Open Space Element*. El Centro, California: County of Imperial, Planning and Development Services Department. Adopted March 8, 2016. Accessed June 2023. https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf.

Davis, S. 2011a. “Westside Main Canal and Drain.” ASM Affiliates.

Davis, S. 2011b. “Fox Glove Canal DPR form update.” ASM Affiliates.

Dowd, M.J. 1956. *IID: The First 40 Years*. History of the Imperial Irrigation District and the Development of Imperial Valley. Unpublished manuscript on file at IID. Accessed November 12, 2021. https://www.iid.com/home/showpublisheddocument/6000/635648001335730000.

Farr, F.C. 1918. *The History of Imperial County*. Berkeley, California: Elms and Franks.

Finley, R.L. 1974. “An Economic History of the Imperial Valley of California to 1971.” ProQuest. Accessed June 2023. http://libproxy.usc.edu/login?url=https://www.proquest.com/dissertations-theses/economic-history-imperial-valley-california-1971/docview/302736275/se-2.

PC ORIGINAL PKG

Frisby, K.J. 1992. "Imperial Valley: The Greening of a Desert." Imperial, California: Imperial Valley College Museum.

Gallegos, D. 1979. *Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions, Imperial Valley, California*. Volume 1. WESTEC Services. Prepared for U.S. Department of Interior.

GLO (General Land Office) 1857. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289216. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

GLO. 1909. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289218. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

Hupp, J. 1999. CA-IMP-7834 Westside Main Canal. Sacramento, California: Caltrans Environmental Program.

Imperial County. 2023. "Our County." Imperial County, California. Accessed June 2023. https://imperialcounty.org/.

IID (Imperial Irrigation District). 2024. "Water History." Imperial County, California. Accessed April 2024. https://www.iid.com/about-iid/mission-vision-statements/iid-history.

Imperial Valley Museum. 2023. "Land of Extremes." Ocotillo, California: Imperial Valley Desert Museum. April 13, 2023.

IVP (Imperial Valley Press). 1908. "Notice to Public." *Imperial Valley Press*. March 7, 1908.

IVP. 1910. "District twelve Extensions." *Imperial Valley Press*. October 22, 1910.

IVP. 1911. "Notice for Publication." *Imperial Valley Press*. September 30, 1911. IVP. 1917.

IVP. 1918. "Doings of Clubs Personals." *Imperial Valley Press*. October 7, 1918.

IVP. 1920. "Outstanding." *Imperial Valley Press*. July 1, 1920.

IVP. 1923a. "Imperial Valley Society: Westside Country Club Holds Enjoyable Meeting." *Imperial Valley Press*. April 28, 1923.

IVP. 1923b. "Dairy Sale." *Imperial Valley Press*. March 6, 1923.

IVP. 1927. "School Attendance Shows Increase." *Imperial Valley Press*. June 22, 1927.

IVP. 1928. " El Centro Lumber & Trading Co." *Imperial Valley Press*. December 6, 1928.

IVP. 1930. "Supervisors of County Schools Conduct Survey." *Imperial Valley Press*. September 20, 1930.

IVP. 1931. "Doings in and about Seeley." *Imperial Valley Press*. January 2, 1931.

IVP. 1932a. "Petitions for Charter to be Given Board." *Imperial Valley Press*. May 2, 1932.

PC ORIGINAL PKG

IVP. 1932b. "Voting Time Coming." *Imperial Valley Press*. June 24, 1932.

IVP. 1933a. "I.V. Hardware Company Host to Pioneers." *Imperial Valley Press*. October 30, 1933.

IVP. 1933b. "Livestock for Sale." *Imperial Valley Press*. January 9, 1933.

IVP. 1936. "Free Hot Lunches to be Served in Schools of Imperial County." *Imperial Valley Press*. September 20, 1936.

IVP. 1938. "Husband Irritable, Wife Asks Divorce." *Imperial Valley Press*. November 10, 1938.

IVP. 1942. "Schools Receive Attendance Grant." *Imperial Valley Press*. August 21, 1942.

IVP. 1943. "School Enrollment Down in County." *Imperial Valley Press*. October 19, 1943.

IVP. 1945. "Educators Slate Meet to Study Japanese Problem." *Imperial Valley Press*. January 3, 1945.

Johnson, B.D., C. Bodmer, et al. 2011a. "DPR Form set for the Fig Canal." Chambers Group, Inc.

Johnson, B.D., C. Bodmer, et al. 2011b. "DPR Form set for the Portion of Dixie Drain 3." Chambers Group, Inc.

Johnson, B.D., C. Bodmer, et al. 2011c. "DPR Form set for the Westside Main Canal." Chambers Group, Inc.

Johnson, B.D. 2012a. "DPR form set for the Black Residence." Chambers Group, Inc.

Johnson, B.D. 2012b. "DPR form set for the Westside Elementary School." Chambers Group, Inc.

Johnson, B.D. 2012c. "DPR form set for the Multiple Residence Compound at Liebert & Wixom Road." Chambers Group, Inc.

Johnson, B.D. 2012d. "DPR form set for Preece Residence." Chambers Group, Inc.

Johnson, B.D. 2012e. DPR form set for Westside Main Canal." Chambers Group, Inc.

Krintz J. 2011a. "DPR form set from 1651 Westside Road." ASM Affiliates, Inc.

Krintz, J. 2011b. "DPR 523 Form set for the Wixom Drain." ASM Affiliates, Inc.

Krintz, J. 2011c. "DPR 523 Form set for the Dixie Drains and Lateral 1 Update." ASM Affiliates, Inc.

Krintz, J. 2011d. "DPR Form set for the Fig Canal and Drain Update." ASM Affiliates, Inc.

Krintz, J. 2011e. "DPR Form set for the Fern Canal Update." ASM Affiliates, Inc.

Krintz, J. 2011f. "DPR Form set for the Westside Main Canal." ASM Affiliates, Inc.

Lawton, H.W. 1976. "History and Ethnohistory of the Yuha Desert (1769–1865)." In *Background to Prehistory of the Yuha Desert Region*, edited by P.J. Wilke. Ramona, California: Ballena Press.

PC ORIGINAL PKG

Lennen, J. 2017. "DPR 523 Form set for the Westside Main Canal." ASM Affiliates, Inc.

Matthewson, R.C. 1856. Imperial Valley College Museum: Site No. CA-IMP-3403H.

NETR (National Environmental Title Agency). 2024a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 2024. https://www.historicaerials.com/viewer.

NETR. 2024b. "Historic Topographic Maps of the Imperial Valley, CA, dating from 1944, 1945, 1955, 1956, 1958, 1960, 1961, 1964, 1968, 1976, 1977, 1979, 1980, 1983, 1985, 1991, 2012, 2015, 2018, and 2021." Accessed April 2024. https://www.historicaerials.com/viewer.

NPS (National Park Service). 2023. "San Diego Mission Church." Accessed March 3, 2023. https://www.nps.gov/nr/travel/ca/ca3.htm#:~:text=The%20mission%20was%20founded%20in,fourth%20constructed%20at%20the%20site.

Office of Agricultural Commissioner. 2019. *Imperial County Agricultural Crop & Livestock Report*. Imperial County, California. Accessed May 3, 2023. https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf.

OHP (Office of Historic Preservation). 1995. *Instructions for Recording Historical Resources*. California State Parks, Office of Historic Preservation. March 1995. Accessed September 2023. https://ohp.parks.ca.gov/pages/1054/files/manual95.pdf.

OHP. 2005. California State Law & Historic Preservation Statutes. Technical Assistance Series. Department of Parks and Recreation. September 2005.

ParcelQuest. 2024. "Parcel Information for APN 051-330-021." Accessed April 2024. https://pqweb.parcelquest.com/#home.

Pioneers Museum of the Imperial Valley. 2000. History of the Imperial Valley- California. Accessed June 2, 2023.

Preece Farms. 2014. "About Us." Jerry Preece Jr. Farms, J R Preece Inc. Accessed April 8, 2024. https://jrpreece.com/about.html.

SBS (San Bernardino Sun). 1960. "Winds Cause Wide Damage." *San Bernardino Sun*. January 5, 1960. Page 1.

Schaefer, J., and O'Neil, C. 2001. *The All-American Canal: An Historic Properties Inventory and Evaluation.* Completed by ASM Affiliates for the Imperial Irrigation District (IID). On file at the San Joaquin Valley Information Center.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." *Southern California Quarterly* 50(3): 279–307. https://doi.org/10.2307/41170190.

PC ORIGINAL PKG

Smythe, W.E. 1908. *History of San Diego (1542–1908): An Account of the Rise and Progress of the Pioneer Settlement on the Pacific Coast of the United States*. Volume II. The Modern City. San Diego, California: The History Company.

Steely, J.W. 2008. "DPR form set from Fox Glove Canal." SWCA Environmental Consultants.

Stene, Eric A. 2009. All-American Canal: Boulder Canyon Project. Bureau of Reclamation. Accessed September 12, 2023. https://www.usbr.gov/projects/pdf.php?id=80

Thomson, H., and M. Adame. 2011. "DPR Form set for 1651 Westside Drive." KP Environmental.

Thomson, H. 2011a. "Westside Main Canal (portions)." State of California Department of Parks and Recreation.

Thomson, H. 2011b. "Fox Glove Canal (Portions)." State of California Department of Parks and Recreation.

URS (URS Corporation). 2009a. "DPR Form set for the portion of Fig Canal."

URS. 2009b. "DPR Form set for the portion of Fern Canal"

URS. 2009c. "DPR Form set for the Dixie Drain 3 and laterals."

URS. 2009d. "DPR Form set for the Westside Main Canal."

URS. 2009e. "DPR Form set for the Fox Glove Canal."

U.S. Census Bureau. 1910. "Calexico Township, Imperial County, California." United States Government. District 0004. Image 21. Accessed August 17, 2023. Ancestry.com.

U.S. Census Bureau. 1920. "Silsbee Township, Imperial County, California." United States Government. District 0032. Image 4. Accessed August 17, 2023. Ancestry.com.

U.S. Census Bureau. 1930. "Silsbee Township, Imperial County, California." United States Government. District 0049. Image 16. Accessed April 8, 2024. Ancestry.com.

U.S. Census Bureau. 1950. "QuickFacts, Imperial County, California." United States Government. Accessed May 4, 2023. https://www.census.gov/quickfacts/imperialcountycalifornia.

USGS (U.S. Geological Survey). 2024. "Historic Topographic Maps of Imperial County, CA, Dating from 1940 to 1989." Accessed April 2024. https://livingatlas.arcgis.com/topoexplorer/.

VRIC (Vegetable Research & Information Center). 2023. "Imperial County Agriculture." University of California Cooperative Extension. Accessed May 3, 2023. https://vric.ucdavis.edu/virtual_tour/imp.htm.

Warren, C.N. 1984. "The Desert Region." In *California Archaeology*, by M.J. Moratto. Orlando, Florida: Academic Press.

Wlodarski, R.J. 2006. "Field Reconnaissance Report Cellular Archaeology Resource Evaluations C.A.R.E."

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix A
Preparers' Qualifications

PC ORIGINAL PKG

Evan Brisentine

ARCHITECTURAL HISTORIAN

Evan Brisentine (*EH-vin BRISS-n-tyn; he/him*) is an architectural historian with 2 years' experience in historic preservation. He has experience in transportation resources, National Register of Historic Places (NRHP) nominations, historic context statements, reconnaissance-level survey reports, and local landmark designation. Mr. Brisentine also has experience with National Historic Preservation Act, Section 106, compliance; National Register Bulletins; and Historic American Buildings Survey documentation. Mr. Brisentine meets the Secretary of the Interior's Professional Qualification Standards for architectural history and is familiar with research methods in Oregon, Washington, and California.



Education

University of Oregon
MS, Historic Preservation, 2022

Santa Clara University
BA, History, 2015

Project Experience

Cultural Resources Inventory for Hillsboro Airport Land Release Project, Port of Portland, Multnomah County, Oregon. Served as an architectural historian for the background research and identification of built environment in the project area and the client's property in its entirety. The investigations involved General Land Office surveys, Metsker maps, historic aerials, and archival research. The project is subject to State Historic Preservation Officer standards and must meet the requirements of National Historic Preservation Act, Section 106, for Federal Aviation Administration compliance. (2022–Present)

Cultural Resources Inventory Report for Chief Joseph Snohomish No. 3 Access Roads Improvements Project, Bonneville Power Administration, Douglas County, Washington. Served as an architectural historian for the cultural resources inventory of Bonneville Power Administration's 35-mile transmission line corridor located between Bridgeport, Washington, and Entiat, Washington. Conducted background research and prepared a literature review report. Historic context, methods, and results of the survey will be compiled into a technical report that meets Department of Archaeology and Historic Preservation and Bonneville Power Administration standards. It will include NRHP eligibility evaluations and management recommendations for any identified resources. (2022)

Cultural Resources Inventory and Evaluation Report for Lower Cowiche Floodplain Restoration Project, Mid-Columbia Fisheries and Wildlife, Yakima County, Washington. Served as an architectural historian on a multidisciplinary team working on the evaluation of a previously documented historic built environment and archaeological resource. The project included archival research and an analysis of previous evaluation reports, including the historic context statement, significance evaluation, and recommendations. The project proposed that the historic-period structure is in ruin and should remain as an archaeological resource; therefore, it is not eligible for the NRHP. (2022)

Heritage Survey for the Boundary Vegetation Management Project, Oregon Department of Forestry, Harney and Grant Counties, Oregon. Served as an architectural historian on a multidisciplinary team for a 2600-acre pedestrian inventory survey and site documentation for a portion of the Malheur National Forest managed by the Oregon Department of Forestry. The team of archaeologists recorded new cultural resources, updated previously identified sites, and coauthored a technical report that met State Historic Preservation Officer and Bureau of Land Management standards, including NRHP eligibility evaluations and management recommendations. Mr. Brisentine conducted background research on potential built environment in the project area and created a historic context for this specific portion of the national forest. This project was found to have no built environment resources in the survey area. (2022)

PC ORIGINAL PKG

Cultural Resources Inventory Report for Delta Campground Decommissioning and Restoration Project, Eugene Water & Electric Board, Lane County, Oregon. Served as an architectural historian. Dudek conducted a cultural resources inventory for Eugene Water & Electric Board's proposed Delta Campground Decommissioning and Restoration Project within the McKenzie River watershed in Lane County, Oregon. Eugene Water & Electric Board is partnering with the U.S. Forest Service and Willamette National Forest to complete the project, which will include post-Holiday Farm Fire cleanup and watershed restoration. The project is anticipated to be funded by the Federal Emergency Management Agency's Post-Fire Hazard Mitigation Grant Program and is subject to the National Environmental Policy Act, Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations, 36 Code of Federal Regulations 800. No historic built environment resources were previously identified within the area of potential effect. The Delta Campground district was inventoried and evaluated as a part of this undertaking and was found not eligible for the NRHP. (2022)

Built Environment Inventory and Cultural Resources Risk Assessment, Confidential Client, Oregon. Served as an architectural historian, completing a built environment inventory report and conducting a reconnaissance-level survey for an energy-related development. Contributed to archival research and conducted the report, including the historic context statement, identification of resources, and recommendations. The project proposed that several of the remaining historic-period buildings and structures were not eligible for the NRHP. (2022)

Built Environment Inventory and Evaluation Report, Confidential Client, Sacramento County, California. Served as an architectural historian, completing a built environment inventory and evaluation report for an energy-related development. Contributed to archival research and coauthored the report, including the historic context section, significance evaluations, and recommendations. The project proposed that several of the remaining historic-period buildings were eligible for the NRHP. (2022)

Class III Cultural Resources Inventory and Evaluation Report for a Confidential Solar Project, Confidential Client, Laramie County, Wyoming. Served as an architectural historian on a multidisciplinary team working on a Class III resources inventory and evaluation report. Contributed to archival research and the evaluation report, including the historic context statement, significance evaluations, and recommendations. The project proposed that the remaining historic-period buildings were not eligible for the NRHP. (2022)

Relevant Previous Experience

Preservation Intern, Greater Portland Landmarks Department of Education and Advocacy, Portland, Maine. Continued a citywide neighborhood survey report conducted between 2017 and 2020. From previous survey work, used the State of Maine's GIS database to insert reconnaissance-level data for a potential local historic district. In addition to survey work, conducted individual property research projects that were presented to the Local Landmarks Committee for potential designation. These projects helped document the city's immigrant population history and history of urban renewal in neighborhoods of Portland, Maine. (2021)

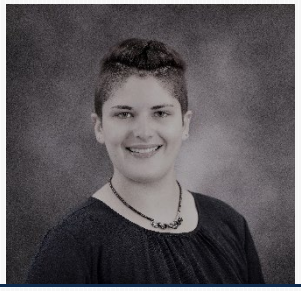
Historic Research for Watzek House Historic American Buildings Survey Report, University of Oregon, Portland, Oregon. Performed historical landscape archival research and submitted a section for the Watzek House that is affiliated with the John Yeon Center for Architecture and Landscape for an updated Historic American Buildings Survey report conducted by the University of Oregon. (2021)

Pacific Northwest Preservation Field School, University of Oregon, Concrete, Washington. Attended University of Oregon's Field School with National Park Service professionals and cultural resource management professionals in the State of Washington. Met with professionals that specialize in materials conservation and restoration, historic district nominations, and Tribal Historic Preservation Office consultation. (2021)

PC ORIGINAL PKG

EJ (Erin) Jones, MA

ARCHITECTURAL HISTORIAN



EJ (Erin) Jones (EE-JAY *JO-nes; they/them*) is a cultural resource manager with 3 years' experience specializing in Washington, Oregon, and California. Jones is an expert researcher and is adept at context writing and the evaluation of historic properties. They have experience authoring California Environmental Quality Act (CEQA) compliance documents, National Historic Preservation Act (NHPA) Section 106 compliance reports, Historic Resource Evaluation Reports (HRERs), Cultural Resources Inventory and Evaluation Reports (CRIERs), Historical Resource Inventories (HRI), Cultural Resource Technical Reports (CRTRs), Historical Resources Inventory and Evaluation Reports (HRIERs), and Historic American Building Survey (HABS)–level documentation. Jones meets the Secretary of the Interior's Professional Qualification Standards for architectural history.

Education

California State University, Sacramento
MA, Public History with Distinguished Honors,

University of Oregon
BA, History and Political Science

Dudek Project Experience

Confidential Energy Project, Confidential Client, Kern County, California. Serving as architectural historian, conducted in-person archival research and authored the Historic Architectural Landscape Survey (HALS) documentation as a mitigation measure for a proposed energy facility and energy storage system in Kern County, California. (2022–2023)

Confidential Solar Project, Confidential Client, Washoe County, Nevada. Serving as architectural historian, coauthored the technical study for the project, which proposed the development of a solar energy facility and energy storage system. The project sites are in unincorporated Washoe County, Nevada. All buildings and structures more than 45 years old were recorded and evaluated for historical significance, which included conducting archival research and building development research for a potential historic vernacular landscape, energy transmission, mined areas, and related histories located on the project sites and completing a historic context. (2022–2023)

Confidential Solar Project, Confidential Client, Sacramento County, California. Serving as architectural historian, authored the technical study for the project, which proposed the development of a solar energy facility, energy storage system, and Gen-Tie Line. The project sites are in unincorporated south Sacramento County, California. The technical study involved a pedestrian survey for the presence of historic built environment resources. All buildings and structures more than 45 years old were recorded and evaluated for historical significance, which included conducting archival research and building development research for a potential historic vernacular landscape located on the project site and completing a historic context. (2023)

Confidential Solar Project, Confidential Client, Sacramento County, California. Serving as architectural historian, coauthored the technical study for the project, which proposed the development of a solar energy facility and energy storage system. The project sites are in unincorporated eastern Sacramento County, California. The technical study involved a pedestrian survey for the presence of historic built environment resources. All buildings

PC ORIGINAL PKG

and structures more than 45 years old were recorded and evaluated for historical significance, which included conducting archival research and building development research for a potential historic vernacular landscape, military development, energy transmission, mined areas, ranching, dairy, and related histories located on the project sites and completing a historic context. Contributed to the associated archeology site work and authored a section of the archeological context. (2021–2023)

Confidential Solar Project, Confidential Client, Sacramento County, California. Serving as architectural historian, coauthored the technical study for the project, which proposed the development of a solar energy facility and energy storage system. The project sites are in unincorporated eastern Sacramento County, California. The technical study involved a pedestrian survey for the presence of historic built environment resources. All buildings and structures more than 45 years old were recorded and evaluated for historical significance, which included conducting archival research and building development research for a potential historic vernacular landscape, hop growing, and related histories located on the project sites and completing a historic context. (2021–2023)

Confidential Solar Project, Confidential Client, San Bernardino County, California. Serving as architectural historian, authored the technical study for the project, which proposed the demolition of extant structures and development of a solar energy facility and energy storage system. The project sites are in unincorporated San Bernardino County, California. All buildings and structures more than 45 years old were recorded and evaluated for historical significance. Efforts included conducting archival research and building development research for a potential historic significance. (2022)

BEIER for NSCD Biomass Project, NCSD, Truckee, Placer County, California. Dudek was retained by Northstar Community Services District (NCSD) to prepare a BEIER for the proposed NCSD Biomass Project located in Northstar at Tahoe Ski Resort community, which is located approximately 6 miles south of downtown Truckee in Placer County. The NCSD proposes to build a biomass energy system to meet heating loads that are currently served by natural gas-fired boilers in approximately 14 buildings in the Northstar California ski resort community. The new energy system will consist of two wood chip–fired hot water boilers located on NCSD property at 908 Northstar Drive. Heating loads include a range of residential and commercial space heating, domestic hot water, and swimming pools and spas. As lead architectural historian, authored the technical report as part of supporting documentation for the initial study prepared in accordance with the requirements of CEQA (PRC, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) (2022)

Confidential Solar Project, Confidential Client, Santa Clara County, California. Project architectural historian and author of the technical study for the project. The proposed project sites are in unincorporated Santa Clara County, California. Efforts included conducting archival research for a county wide historic context document. (2022)

BEIER for Golden State Natural Resources Gould Site, Golden State Finance Authority, Lassen County, California. Served as the architectural historian and coauthor of the BEIER for the Golden State Natural Resources Gould Site Project. Dudek was retained by the Golden State Finance Authority to complete a BEIER for a proposed project that would redevelop a site in Nubieber, Lassen County, to facilitate the transport of forest material (such as trees or underbrush that have no lumber value). The project parcels comprised approximately 65 acres, a light-industrial site associated with regional logging, and an abandoned 1930s Great Northern and Western Pacific Railroad station. Conducted the CHRIS records search; the pedestrian surface reconnaissance survey of the built environment Area of Potential Effects (APE); extensive archival and building development research; the development of an appropriate historic context for the project area; recordation and evaluation of the buildings over 45 years of age for the NRHP, CRHR, and local historic resource eligibility criteria and integrity requirements in compliance with CEQA; and report and accompanying DPR 523 form set preparation. (2022)

PC ORIGINAL PKG

Katie Ahmanson, MA

ARCHITECTURAL HISTORIAN



Katie Ahmanson (*KAY-tee AH-mun-son; she/her*) is an architectural historian with 2 years' experience in the field of architectural history and heritage conservation. She has experience with Historic-Cultural Monument and National Register of Historic Places (NRHP) nominations, historic context statements, building descriptions, and California Department of Parks and Recreation (DPR) 523 forms. Ms. Ahmanson has worked with environmental compliance documentation in support of projects that fall under the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA).

Education

University of Southern California School of Architecture
MA, Heritage Conservation, 2022

Claremont McKenna College
BA, Art History, 2019

Project Experience

Palisade Santee Commerce Center Project Built Environment Inventory and Evaluation Report, North Palisade Partners, Santee, California. Dudek was retained by North Palisade Partners to prepare a Built Environment Inventory and Evaluation Report (BEIER) for the proposed Santee Warehouse Project in the City of Santee, California. The project proposes the demolition of all existing on-site structures located at 10990 Woodside Avenue (APN: 381-070-52) that was originally developed in 1962 as the Santee Drive-In Theatre. The purpose of this report is to determine if the project would impact any historical resources pursuant to CEQA. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, surveyed the property, and completed archival research. (2023)

14940 Proctor Avenue BEIER, Rexford Industrial Realty, City of Industry, California. Dudek was retained by the Rexford Industrial Realty to prepare a BEIER for the proposed 14940 Proctor Avenue Project in the City of Industry, California. The project proposes demolition of the existing 90,828 square-foot warehouse and manufacturing facility located at 14940 Proctor Avenue (AIN 8208-002-049) that was originally constructed in 1962 for the construction of a new, approximately 165,537 square-foot warehouse facility. The purpose of this report is to determine if the project would impact any historical resources pursuant to CEQA. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, surveyed the property, and completed archival research. (2023)

Seguro Storage Historic Technical Report, County of San Diego, California. Dudek was retained by the County of San Diego to complete a Historic Technical Report to determine if the proposed project would impact any historical resources pursuant to CEQA. Seven properties/historic-age structures in Escondido, California, were evaluated for historical significance pursuant to CEQA. As an architectural historian, completed significance evaluations. (2023)

Ben Clark Training Center BEIER, Riverside County Fire/California Department of Forestry and Fire Protection, Riverside, California. Dudek was retained by the Riverside County Fire/California Department of Forestry and Fire Protection to complete a BEIER to identify all historical resources (if any) on the subject properties. This BEIER

PC ORIGINAL PKG

included a records search of the Ben Clark Training Center (BCTC) campus and a 0.5-mile buffer around its boundary; an intensive level survey of the campus; archival and property specific development research for historic built resources over 45 years of age that are located within the campus boundaries; evaluation of buildings for the NRHP, California Register of Historical Resources, and local eligibility criteria and integrity requirements; and the delineation of a study area to assess potential impacts of the BCTC Modernization Project on historical resources in compliance with CEQA. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, surveyed the property, and completed archival research. (2023)

9065 and 9061 Nemo Street Historical Resource Assessment, Carlyle Group Inc., West Hollywood, California. Dudek was retained by Carlyle Group Inc. to complete a Historical Resource Assessment to identify all historical resources (if any) on the subject properties. The purpose of this report is to determine if the subject properties at 9065 Nemo Street (APN: 4340-013-005) and 9061 Nemo Street (APN: 4340-013-006) in the West Hollywood, California, would impact any historical resources pursuant to CEQA. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, surveyed the property, and completed archival research. (2022)

517 I Avenue, City of Coronado, California. Dudek was retained by the City of Coronado to evaluate the property located at 517 I Avenue (APN: 536-351-04-00) for historical significance under City of Coronado designation criteria and integrity requirements. The evaluation involved research and development of an occupancy timeline, supplemental research on occupants and building development, survey of the property, a description of the property, and completion of a historical resource evaluation in consideration of City of Coronado designation criteria and integrity requirements. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, and completed archival research. (2022)

1222 Brunswick Historical Resource Evaluation Report, City of South Pasadena, California. Dudek was retained by the City of South Pasadena to complete a historic resource evaluation for a single-family residential property built in 1946 and located at 1222 Brunswick Avenue in South Pasadena, California. As part of this study, Dudek completed archival and building development research, occupancy research, and an intensive-level survey of the subject property and recorded and evaluated the property for historical significance and integrity on the local, state, and national levels. The purpose of this report is to determine if the subject property would impact any historical resources pursuant to CEQA. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, surveyed the property, and completed archival research. (2022)

743 B Avenue Historical Resource Evaluation Report, City of Coronado, California. Dudek was retained by the City of Coronado to evaluate the property located 743 B Avenue (APN: 537-101-07-00) for historical significance under City of Coronado designation criteria and integrity requirements. The evaluation involved research and development of an occupancy timeline, supplemental research on occupants and building development, survey of the property, a description of the property, and completion of a historical resource evaluation in consideration of City of Coronado designation criteria and integrity requirements. As an architectural historian, co-authored the report, wrote building descriptions and significance evaluations, and completed archival research. (2022)

Tooley Carlsbad Historical Resources Technical Report, Atlantis Group Land Use Consultants, Carlsbad, California. Dudek was retained by Atlantis Group Land Use Consultants to complete a historical resources technical report (HRTR) to identify all historical resources (if any) on the subject property. The purpose of this report is to determine if the subject property at 945-1065 Carlsbad Village Drive (APN: 203-320-53-00-203-320-56-00) in the City of Carlsbad, California, would impact any historical resources pursuant to CEQA. As an architectural historian, co-authored the report, wrote significance evaluations, and completed archival research. (2022)

PC ORIGINAL PKG

Adrienne Donovan-Boyd, MSHP

ARCHITECTURAL HISTORIAN



Education

University of Oregon
MS, Historic Preservation, 2009

Portland State University
BA, Community Development, 2006

Certifications

National Safety Council First Aid/CPR/AED Certification, 2019

Professional Affiliations

National Trust for Historic Preservation

Portland Architectural Heritage Center

Oregon Historical Society

Adrienne Donovan-Boyd (*AY-dree-en DON-uh-vin BOID; she/her*) is an architectural historian with significant experience in Oregon and the Pacific Northwest. Ms. Donovan-Boyd has 17 years of experience in all elements of cultural resources management, including intensive- and reconnaissance-level field investigations, architectural history studies, and historical significance evaluations for compliance projects, the National Register of Historic Places (NRHP), and local landmark designations. She is a skilled researcher, is adept at evaluating historic properties, and is an experienced author of historical resources evaluation reports, findings-of-effect documentation for Sections 106 and 110 of the National Historic Preservation Act (NHPA), historic context statements, and management plans for historic properties. Ms. Donovan-Boyd meets the Secretary of the Interior's Professional Qualification Standards for architectural history and maintains a strong professional relationship with State Historic Preservation Office staff in Washington and Oregon. Ms. Donovan-Boyd has completed numerous projects requiring compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Project Experience

Education

Built Environment Inventory and Evaluation Report for Monterey Bay Master Plan, California State University, Monterey Bay, California. Dudek was retained by California State University, Monterey Bay, to conduct a built environment inventory and evaluation study and report for the proposed California State University, Monterey Bay, Master Plan. For the purposes of this project, Dudek formally recorded and evaluated 11 campus properties more than 45 years old that were proposed for renovation, alteration, or demolition as part of the project. All 11 of these built environment properties were identified as not eligible for national, state, or local designations. Ms. Donovan-Boyd worked with a team of architectural historians. The properties were photographed, researched, and evaluated in consideration of NRHP, California Register of Historical Resources, California Historic Landmarks, local designation criteria and integrity requirements, and potential impacts to historical resources under California Environmental Quality Act and Public Resources Code, Sections 5024 and 5024.5. (2021)

Phase I Historic Resources Technical Report for Building 7045, Devereux Gymnasium, University of California, Santa Barbara, California. Served as an architectural historian and coauthor of the report for Phase I: Building 7045, Devereux Gymnasium, on the west campus of the University of California, Santa Barbara. Dudek was retained by the University of California, Santa Barbara, to complete the project. The project was federally funded by the National Endowment for the Humanities, making the project subject to federal review under Section 106. The project was also subject to review under California Environmental Quality Act and Public Resources Code, Sections 5024 and 5024.5, for state-owned resources. The project report included a California Historical Resource Status records search of the proposed project area and a 1-mile radius; the identification of previously recorded historic

PC ORIGINAL PKG

properties in the vicinity of the project area; an intensive-level survey; archival and building development research; an evaluation of the building for NRHP, California Register of Historical Resources, California Historic Landmarks and Santa Barbara County local eligibility criteria and integrity requirements; and an assessment of effects to historic properties. (2021)

Cultural Landscape Report for The Shire, University of Oregon, Skamania County, Washington. Served as the lead architectural historian on a multidisciplinary team working for the University of Oregon on a Cultural Landscape Inventory for John Yeon's Columbia River Gorge property, The Shire. Contributed archival research, in-field research, geographic information system data, and sections of the report, including landscape descriptions, the historic context section, existing conditions, significance evaluations, and treatment recommendations. The project proposed that the site was eligible at the local and state level for the NRHP. (2019–2020)

Energy

Class III Inventory and Cultural Resources Report, Confidential Client, Washoe County, Nevada. Served as the lead architectural historian on a multidisciplinary team to complete a Class III Cultural Resources Inventory for an energy-related development. Coauthored the report, including the historic context section, significance evaluations, and recommendations. The project proposed that the historic period residential buildings and linear features that remained were not eligible for the NRHP. (2022)

Built Environment Inventory and Evaluation Report, Confidential Client, Sacramento County, California. Served as an architectural historian for a built environment inventory and evaluation for an energy-related development. Contributed to archival research and coauthored the report, including the historic context section, significance evaluations, and recommendations. The project proposed that several of the historic period buildings remaining were eligible for the NRHP. (2021–2022)

Class III Cultural Resources Inventory and Evaluation Report for a Solar Project, Confidential Client, Laramie County, Wyoming. Served as the lead architectural historian on a multidisciplinary team working on a Class III Cultural Resources Inventory report. Contributed to archival research and reporting—including the historic context statement, significance evaluations, and recommendations—and provided quality assurance and quality control for the project. The project proposed that the historic period buildings remaining were not eligible for the NRHP. (2022)

Cultural Resources Inventory for the Olympia–Grand Coulee No. 1 Insulator Replacement Phase 4 Project, Bonneville Power Administration, Pierce and King Counties, Washington. Served as the lead architectural historian for the Cultural Resources Inventory for Bonneville Power Administration's 50-mile-long project to replace worn insulators. Dudek conducted background research and prepared a literature review report. Historic context, methods, and survey results will be compiled into a technical report to the Washington Department of Archaeology and Historic Preservation and Bonneville Power Administration's standards, including NRHP eligibility evaluations and management recommendations for any identified resources. (2020–2022)

Built Environment Inventory and Evaluation Report for Golden State Natural Resources Gould Site, Golden State Finance Authority, Lassen County, California. Served as an architectural historian and coauthor of the report for the project. Dudek was retained by the Golden State Finance Authority to complete a built environment inventory and evaluation report for the proposed project that would redevelop a site in Nubieber, located in Lassen County, to facilitate the transport of forest material (such as trees or underbrush that have no lumber value). The project parcels comprised approximately 65 acres, a light-industrial site associated with regional logging, and an abandoned 1930s Great Northern and Western Pacific Railroad station. (2022)

PC ORIGINAL PKG

Appendix B
Interested Party Correspondence

PC ORIGINAL PKG

From: EJ Jones
To: info@ivdesertmuseum.org
Cc: Adrienne Donovan-Boyd; Evan Brisentine
Subject: Outreach for Historical Information
Date: Thursday, September 14, 2023 2:37:00 PM
Attachments: Imperial Valley IPC Attachments.pdf

Hello Mrs. O'Lear,

I am reaching out today to provide you with information as part of the cultural resources study for a proposed project near El Centro, California. Dudek is consulting all regional historical organizations to determine if there are any known historic or cultural resources that may be within the proposed project area. Please see the attached letter and map for more information about the nature and location of the project, and please feel free to contact me should you have questions or information regarding cultural or historical resources in this area.

Thank you,

EJ (Erin) **Jones**, **MA**
Cultural Resources-Architectural Historian (They/Them)
1810 13th Street, Suite 110, Sacramento, CA, 95811
E: ejones@dudek.com C: 916-247-7918
www.dudek.com

PC ORIGINAL PKG

DUDEK
1810 13TH STREET, SUITE 110
SACRAMENTO, CALIFORNIA 95811
T 916.443.8335

Kristin O'Lear, Executive Director
Imperial Valley Desert Museum
11 Frontage Road
Ocotillo, Ca 92259

September 14, 2023

Subject: Outreach for Historical Information

Dear Mrs. O'Lear,

Dudek has been retained to complete a technical report for a proposed project west of El Centro in Imperial County, California (see Figure 1 enclosed).

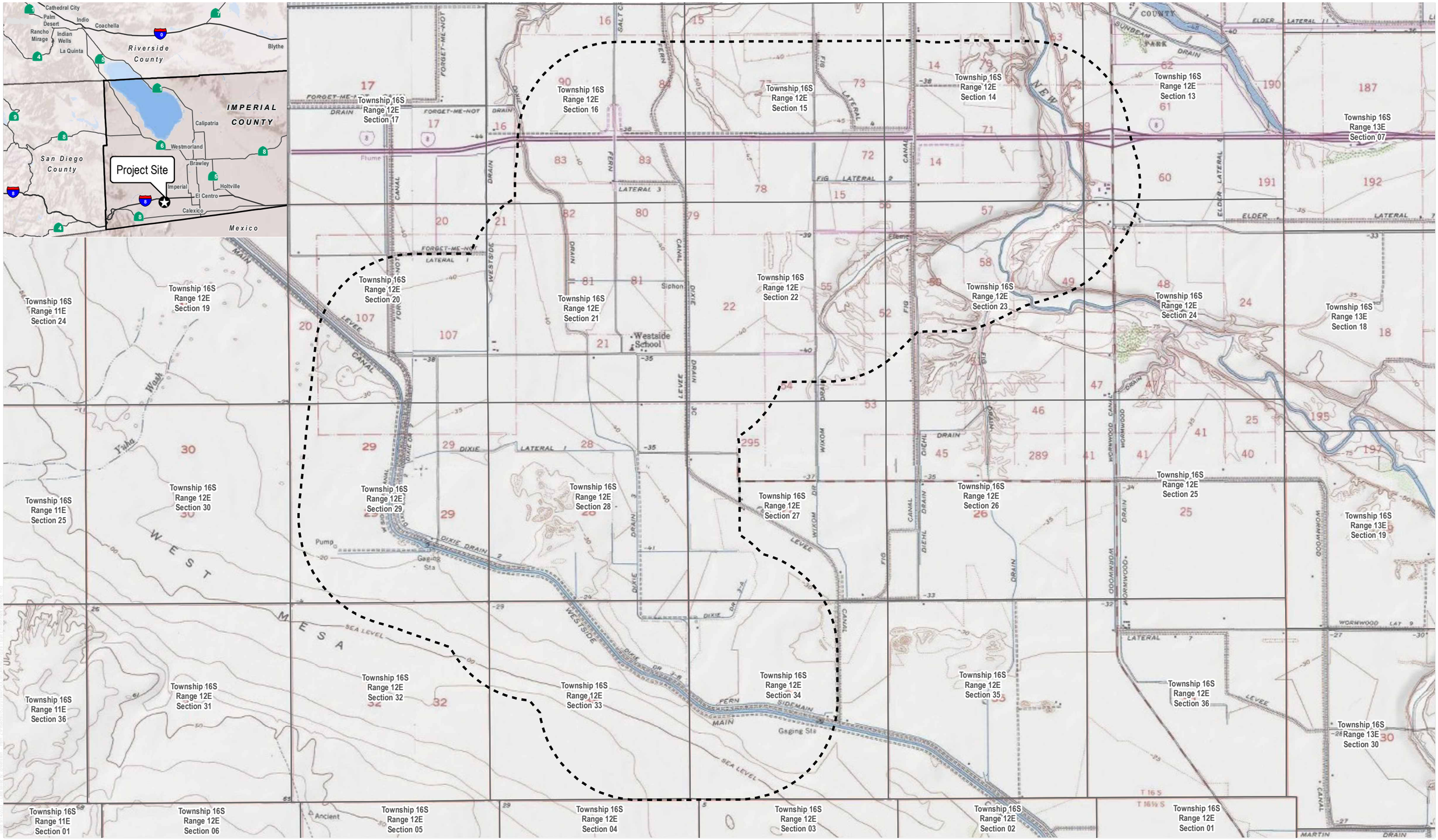
As part of our study, we are consulting all regional historical organizations to determine if there are any known historic or cultural resources that may be affected by the Proposed Project. Your efforts in this process will provide invaluable information for the proper identification and treatment of such resources. If you have any information regarding known cultural resources in the Proposed Project area, please feel free to contact me via phone or email (listed below). All comments, emails, or letters received will be included in the reports generated by this study. Thank you for your time regarding our request.

Sincerely,

EJ. Jones

EJ (Erin) Jones
Architectural Historian
916.438.5308 // ejones@dudek.com
Att.: Figure 1, Project Area
cc: Evan Brisentine and Adrienne Donovan-Boyd, Dudek; David Hochart, Dudek

PC ORIGINAL PKG



SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

FIGURE 1, Project Area

DUDEK

0 1,150 2,300 Feet

PC ORIGINAL PKG

P# 15207

From: EJ Jones
To: IV Desert Museum
Cc: Adrienne Donovan-Boyd; Evan Brisentine
Subject: RE: Outreach for Historical Information
Date: Friday, September 29, 2023 3:32:02 PM

Good afternoon,

Kristin, thank you! We will incorporate IVDM's comments into the report and I'll reach out with any questions.

We appreciate your time and effort. I hope you have a good weekend,

EJ. Jones

EJ Jones, MA
Cultural Resources-Architectural Historian (They/Them)

1810 13th Street, Suite 110, Sacramento, CA, 95811
E: ejones@dudek.com C: 916-247-7918
www.dudek.com

From: IV Desert Museum <info@ivdesertmuseum.org>
Sent: Friday, September 29, 2023 3:28 PM
To: EJ Jones <ejones@dudek.com>
Cc: Adrienne Donovan-Boyd <adonovanboyd@dudek.com>; Evan Brisentine <ebrisentine@dudek.com>
Subject: Re: Outreach for Historical Information

Good afternoon EJ,

Please find enclosed IVDM's comments as it relates to the proposed project in Imperial Valley.

If you have any additional questions or concerns, please do not hesitate to contact me.

Best,
Kristin

PO Box 430, 11 Frontage Rd
Ocotillo, CA 92259
Kristin O'Lear, Executive Director
Pronouns: She/Her/Hers

PC ORIGINAL PKG

PC ORIGINAL PKG

info@ivdesertmuseum.org
(760) 358-7016

On Thu, Sep 14, 2023 at 3:40 PM IV Desert Museum <info@ivdesertmuseum.org> wrote:

> Thank you EJ for the information, it is immensely helpful! I will have a response/comments to you no later than Friday September 29.
>
> If you have any additional questions, please do not hesitate to contact me.
>
> Best,
> Kristin
>
> 
>
> **PO Box 430, 11 Frontage Rd**
> **Ocotillo, CA 92259**
> **Kristin O'Lear, Executive Director**
> **Pronouns: She/Her/Hers**
> **info@ivdesertmuseum.org**
> **(760) 358-7016**
>
> On Thu, Sep 14, 2023 at 3:14 PM EJ Jones <ejones@dudek.com> wrote:
>
> > Hello Kristin,
> >
> > Thank you for the speedy reply, I hope you're having a good afternoon. If we receive comments on local cultural resources the week of September 25 (25th-29th), we'll be able to amend the report before it goes to the city.
> >
> > I appreciate your participation,
> >
> > **EJ** (Erin) **Jones**, **MA**
> > Cultural Resources-Architectural Historian (They/Them)
> > 
> > 1810 13th Street, Suite 110, Sacramento, CA, 95811
> > E: ejones@dudek.com C: 916-247-7918
> > www.dudek.com
> >
> > ---
> >
> > **From:** IV Desert Museum <info@ivdesertmuseum.org>
> > **Sent:** Thursday, September 14, 2023 2:56 PM
> > **To:** EJ Jones <ejones@dudek.com>

Cc: Adrienne Donovan-Boyd <adonovanboyd@dudek.com>; Evan Brisentine <ebrisentine@dudek.com>
Subject: Re: Outreach for Historical Information

Good afternoon EJ,

Thank you for sending this over and including IVDM as part of the project. I am happy to assist in any way I can!

I will be out of the office beginning tomorrow September 15 and will not be returning until September 24. What is the proposed timeline, not only for the project to start/end, but also the timeline for Dudek to receive comments. I want to make sure I have adequate time to respond to your request.

If you have any additional questions or concerns, please do not hesitate to contact me.

Best,
Kristin

PO Box 430, 11 Frontage Rd
Ocotillo, CA 92259
Kristin O'Lear, Executive Director
Pronouns: She/Her/Hers
info@ivdesertmuseum.org
(760) 358-7016

On Thu, Sep 14, 2023 at 2:38 PM EJ Jones <ejones@dudek.com> wrote:

> Hello Mrs. O'Lear,
>
> I am reaching out today to provide you as part of the cultural resources study for a proposed project near El Centro, California. Dudek is consulting all regional historical organizations to determine if there are any known historic or cultural resources that may be within the proposed project area. Please see the attached letter and map for more information about the nature and location of the project, and please feel free to contact me should you have questions or information regarding cultural or historical resources in this area.
>
> Thank you,
>
> **EJ** (Erin) **Jones**, MA
> Cultural Resources-Architectural Historian (They/Them)

PC ORIGINAL PKG

1810 13th Street, Suite 110, Sacramento, CA, 95811
E: ejones@dudek.com C: 916-247-7918
www.dudek.com

PC ORIGINAL PKG

IMPERIAL VALLEY
Desert Museum
Imperial County, California
PO Box 2455 El Centro, CA 92244

September 29, 2023

EJ (Erin) Jones
Dudek
1810 13th Street, Suite 10
11 Frontage Rd, PO Box 430
Ocotillo, CA 92259

Re: Proposed Project in Imperial County on behalf of Dudek

Dear Mx. Jones,

The Imperial Valley Desert Museum Society, Inc. is a registered 501(c)(3) nonprofit, which operates the Imperial Valley Desert Museum (IVDM), a federally recognized curation facility and museum, located at 11 W. Frontage Rd., Ocotillo, CA 92259. The Museum is located near the projected project by Dudek in Imperial County.

The mission of IVDM is to preserve, interpret, and celebrate the deserts of Southern California through outstanding research, collections, and educational programs. The lands of IVDM and the surrounding region of Ocotillo and western Imperial County reside on the traditional lands of the Kumeyaay and Quechan peoples, which today still preserves over 10,000 years of their history on and beneath the modern landscape.

Given the rich and documented history of indigenous activity throughout the region in antiquity, there exists the possibility of an accidental discovery or disturbance of sensitive cultural materials with any new ground disturbance activity. It is recommended that any ground disturbance be preceded by a Cultural Resource Inventory, owing to the abundance of known material culture within the immediate area. An abundance of caution is also recommended in this and all other projects within the area, whenever they would require subsurface work.

The Imperial Valley Desert Museum recognizes that Dudek maintains a roll of agencies and individuals capable of performing the necessary Cultural Resource Inventory. In addition, IVDM recommends reaching out for monitoring services with members of the local Kumeyaay and Quechan nations to ensure representation from the tribes while the project is underway.

If you have further questions, please do not hesitate to contact the museum at info@ivdesertmuseum.org or (760) 358-7016.

Sincerely,

Kristin O'Lear, M.A
Executive Director
Executive Director, Imperial Valley Desert Museum

PC ORIGINAL PKG

From: EJ Jones
To: curator@pioneersmuseum.net
Cc: Adrienne Donovan-Boyd; Evan Brisentine
Subject: Outreach for Historical Information
Date: Thursday, September 14, 2023 2:39:00 PM
Attachments: Pioneers Park IPC Attachments.pdf

Hello Mrs. Montes,

I am reaching out today to provide you with information as part of the cultural resources study for a proposed project near El Centro, California. Dudek is consulting all regional historical organizations to determine if there are any known historic or cultural resources that may be within the proposed project area. Please see the attached letter and map for more information about the nature and location of the project, and please feel free to contact me should you have questions or information regarding cultural or historical resources in this area.

Thank you,

EJ (Erin) **Jones**, **MA**
Cultural Resources-Architectural Historian (They/Them)
1810 13th Street, Suite 110, Sacramento, CA, 95811
E: ejones@dudek.com C: 916-247-7918
www.dudek.com

PC ORIGINAL PKG

DUDEK
1810 13TH STREET, SUITE 110
SACRAMENTO, CALIFORNIA 95811
T 916.443.8335

Alyssa Montes, Curator
Pioneers' Park Museum and Imperial County Historical Society
373 East Aten Road
Imperial, Ca 92251

September 14, 2023

Subject: Outreach for Historical Information

Dear Mrs. Montes,

Dudek has been retained to complete a technical report for a proposed project west of El Centro in Imperial County, California (see Figure 1 enclosed).

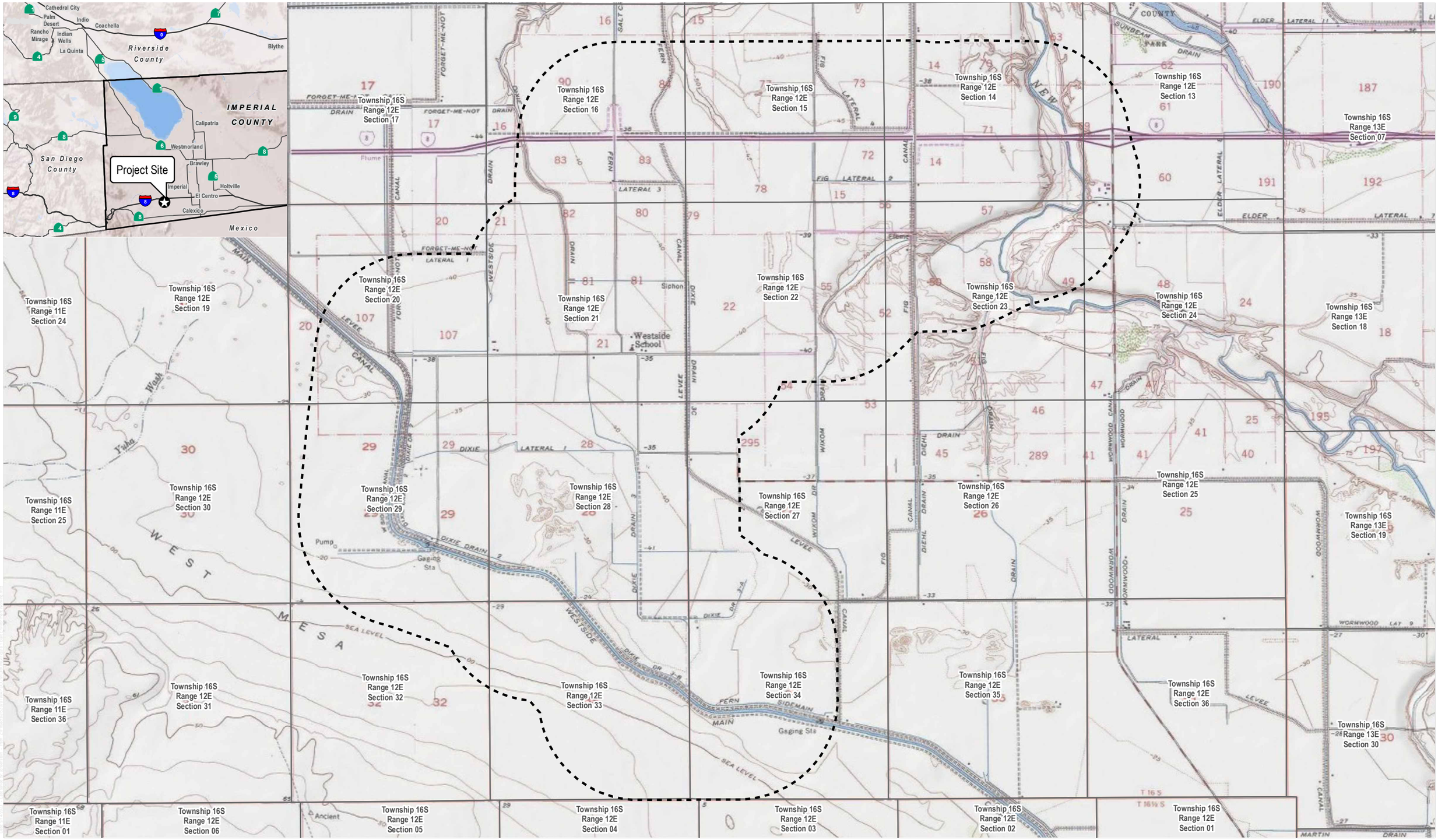
As part of our study, we are consulting all regional historical organizations to determine if there are any known historic or cultural resources that may be affected by the Proposed Project. Your efforts in this process will provide invaluable information for the proper identification and treatment of such resources. If you have any information regarding known cultural resources in the Proposed Project area, please feel free to contact me via phone or email (listed below). All comments, emails, or letters received will be included in the reports generated by this study. Thank you for your time regarding our request.

Sincerely,

EJ. Jones

EJ (Erin) Jones
Architectural Historian
916.438.5308 // ejones@dudek.com
Att.: *Figure 1, Project Area*
cc: *Evan Brisentine and Adrienne Donovan-Boyd, Dudek; David Hochart, Dudek*

PC ORIGINAL PKG



SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

FIGURE 1, Project Area

DUDEK

0 1,150 2,300 Feet

PC ORIGINAL PKG

P# 15207

Appendix C

Previously Recorded Resources/DPR Updates

PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # P-13-014263
HRI #
Trinomial
NRHP Status Code(s) 6Z

*Resource Name or #: Building 4; Preece Residence

☐ Continuation X Update

Map Reference Number: 1

P1. Other Identifier: 2396 West Vaughn Road, El Centro, Imperial County, California. 92243.
e. Other Locational Data: Assessor Parcel Number (APN): 051-300-031-000

*P3a. Description: The subject property, sited at 2396 West Vaughn Road (APN 051-300-031), consists is comprised of a modern-style ranch house with a low-pitch gable roof and composite roofing, a pedimented front gable entry with a full-length porch, and stucco cladding on the exterior. This single-family residence was originally initially recorded in 2012 by Chambers Group, and there does do not appear to be any notable changes to the resource since its the original recordation in 2012 (Photograph 1).

*P3b. Resource Attributes: HP2. Single Family Property; HP4. Ancillary Building

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. In the original recordation, the property was incorrectly addressed as 2396 Vaughn Road. However, the property's legal address is 2396 W Vaughn Road. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that Jerry Preece developed the subject property in 1952, although historical aerials show no development had occurred by that time. Historical aerials indicate that the property was developed in ca. 1960 (Johnson 2012d: 1–3; ParcelQuest 2023; NETR 2023a).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction, and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On August 14, 2023, Dudek revisited the residential property at 2396 W Vaughn Road and did not observe any noticeable alterations since the last recordation in 2012. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

*B14. Evaluator: EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

*Date of Evaluation: August 14, 2023.

PC ORIGINAL PKG

Photograph(s):

Photograph 1. Main (north) elevation of the residence located at 2396 W Vaughn Road, view looking northeast. Photograph taken on April 11, 2023.



References

Johnson, B. "DPR 523 Form for 2396 Vaughn Road." Prepared by Chambers Group. 2012.

NETR (National Environmental Title Research). 2023. "2396 West Vaughn Road, El Centro." Accessed August 15, 2023.

Parcel Quest. 2023. "051-300-030-000." Accessed August 15, 2023. https://pqweb.parcelquest.com/

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-014263
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 4 ***Resource Name or #:** Building 4

P1. Other Identifier: Preece Residence

***P2. Location:** ☐ **Not for Publication** ☒ Unrestricted ***a. County:** Imperial

and

***b. USGS 7.5' Quad:** Mount Signal **Date:** 1981 **T** 5S;**R** 13W; **¼ of ¼ of Sec** 1; San Bernardino B.M.

c. Address: 2396 Vaughn Road City: El Centro Zip: 92243

d. UTM: NAD83 Zone: 11N; 617663 mE/ 3625194 mN (G.P.S.)

e. Other Locational Data: Parcel # 051-300-030-000, Elevation: 0 ft.

***P3a. Description:** The resource consists of a Modern Ranch style house with a low-pitch front gable roof and composite roofing, a pedimented front gable entry with full-length porch, stucco cladding on the exterior, and fenestration that includes both casement windows with transom lights, and contemporary vinyl sliding windows with multi-pane glazing. Ancillary buildings located on the property include barns and storage sheds for maintaining and storing tractors and farm equipment. Jerry Preece is the third owner of the property who operates a working farm that produces dairy quality seed and hay from alfalfa and Bermuda grass.

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View looking north toward the south elevation of the residence.
Photo taken 1/27/2012

***P6. Date Constructed/Age and Sources:**
☒ Historic
☐Prehistoric ☐Both
Date of construction according to Jerry Preece is 1952.

***P7. Owner and Address:**
Jerry Preece
2396 Vaughn Road
El Centro CA

***P8. Recorded by:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***P9. Date Recorded:** 4/24/2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** A Built Environment Survey for the Silverleaf Solar LLC Photovoltaic Solar Project near the city of El Centro, Imperial County, California. March 2012

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒ Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: Unknown
B2. Common Name: Preece Residence
B3. Original Use: Residential/Agricultural B4. Present Use: Same
***B5. Architectural Style:** Modern Ranch style building with multiple ancillary buildings

***B6. Construction History:** No history of the building's construction was discovered. The current owner is the third owner of the property.

***B7. Moved?** ☐**No** ☐**Yes** ☒**Unknown** **Date:** **Original Location:**
***B8. Related Features:** N/A
B9a. Architect: N/A b. Builder: N/A
***B10. Significance: Theme:** Farm House and Ancillary Buildings **Area:** Western El Centro

Period of Significance: circa 1952 **Property Type:** Farm House and Ancillary Buildings
Applicable Criteria: N/A
The community is located in the Imperial Valley, approximately 10 miles southwest of El Centro. The construction of a canal system from the Colorado River in 1901 brought water via the Encina Canal (Westside Main Canal) to the area, liberating the productivity of ancient silt deposits and alluvium that comprise the region. Farmers and speculators were soon attracted by the Federal Government's Desert Land Entry program that allowed individuals to file for ownership on 160 acres of desert ground, or 320 acres for married couples. Pioneering settlers to the region lived in simple tents and lean-to's covered with woven tule mats. The typical valley home consisted of a tent house, frame built with a floor, lumber sides three-feet high, and a canvas top with arrow weed built over the canvas. The first "proper" wood frame homes and masonry buildings would not be erected until the middle of the first decade.

B11. Additional Resource Attributes: HP2. Single Family Property: Farm House; HP4. Ancillary Building: Barn

***B12. References:**
Ching, Francis D.K., *A Visual Dictionary of Architecture*, John Wiley & Sons, Inc., 1995
Imperial County Historical Society, 1956-1958. *The Valley Imperial, Book I and Book II*. Published by Imperial Valley Pioneers. Revised and Reprinted, June 1991
Howe, Edgar F. and Wilbur Jay Hall, *The Story of the First Decade In Imperial Valley, California*. Edgar F. Howe and Sons, 1910. Reprinted by Imperial County Historical Society, December 1998.
Nuffer, David, *Saga of Imperial Valley*. Self-published. 1990

B13. Remarks: None

***B14. Evaluator:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***Date of Evaluation:** 4/24/2012

(This space reserved for official comments.)



PC ORIGINAL PKG

*Recorded by: Brent D. Johnson *Date: 4/24/2012 ☒ Continuation ☐ Update

Integrity Statement

In regard to the seven aspects of integrity of location, design, setting, materials, workmanship, feel and association, the building has retained its original location. The building's setting, feel and association appear to have remained intact since its construction. In addition, its original materials, and workmanship have remained intact. The integrity level of the property is good and the condition of the building is good.

National Register of Historic Places Eligibility Evaluation

The property was assessed under the National Register Criterion A for its potential significance as part of an historic trend that may have made a significant contribution to the broad patterns of history. The subject property cannot be said to represent a significant historic trend or event. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.**

The property was considered under Criterion B for its association with the lives of persons significant in our past. No information was discovered that would indicate an association with the lives of persons significant in the past.**Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.**

The property was evaluated under Criterion C for embodying the distinctive characteristics of a type, period, or method of Modern construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components lack individual distinction. The building does not represent a significant and distinguishable entity whose components may lack individual distinction. The building does not serve as a significant example of the style to qualify for National Register status. The building does not include significant artistic values and does not represent the work of a master architect or craftsman. No builders or architects associated with the construction of the building could be identified.The building retains its basic integrity in terms of mass and form. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.**

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures and objects to be eligible under this criterion, they need to "be, or must have been, the principal source of information." This is not the case with this property. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.**

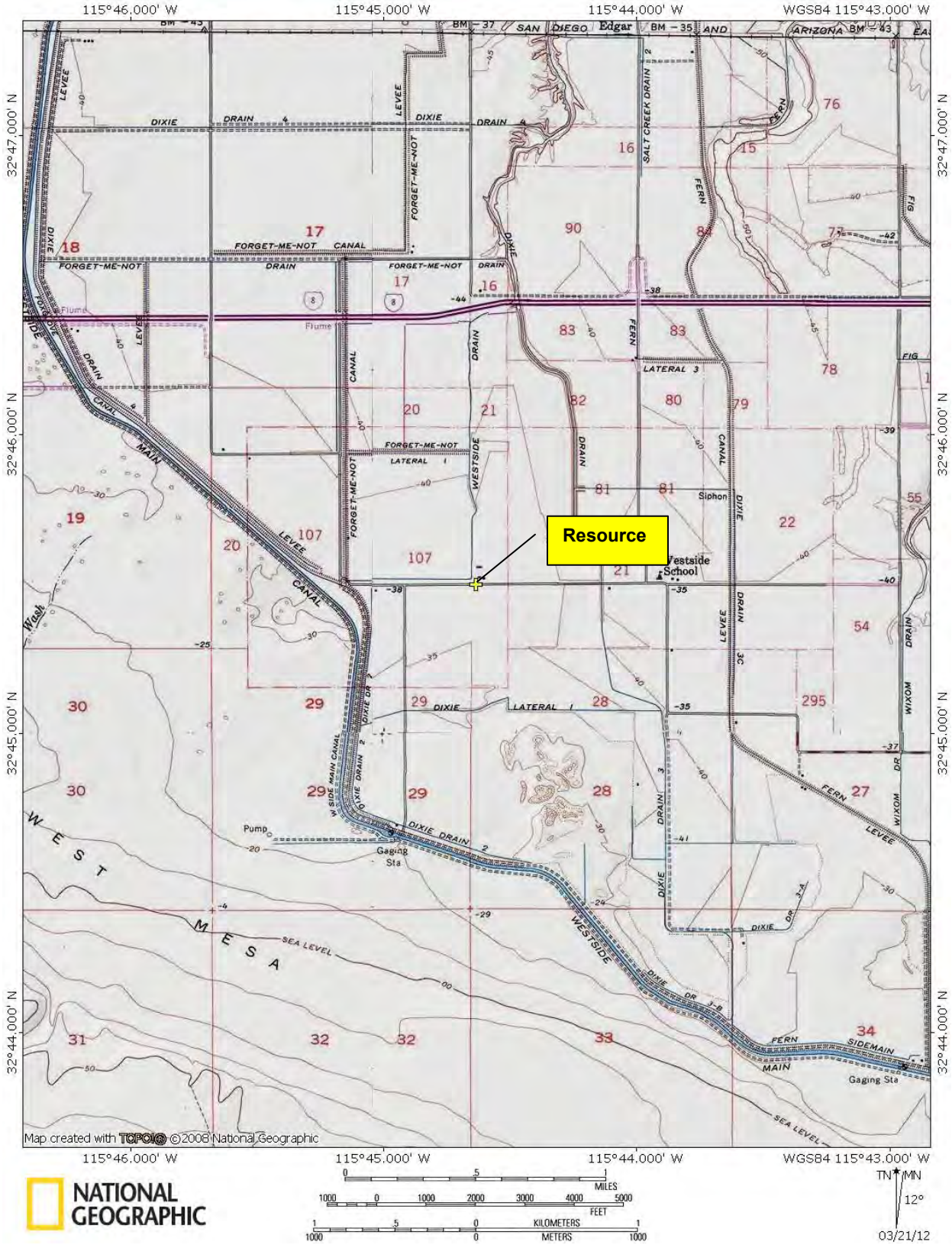
In summary, the property does not appear to qualify for the NRHP under Criterion A, B, C, and/or D. Therefore, the building is not potentially eligible for the NHPA.

PC ORIGINAL PKG

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial	P-13-014263

Page **4** of **4** *Resource Name or #: Building 4

***Map Name:** Mount Signal Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1990



DPR 523J (1/95)

PC ORIGINAL PKG

*Resource Name or #: Building 5; Westside Elementary School
☐ Continuation X Update

Map Reference Number: 2

P1. Other Identifier: 2294 West Vaughn Road, El Centro, Imperial County, California. 92243.
e. Other Locational Data: Assessor Parcel Number (APN): 051-300-010-000

*P3a. Description: The subject property, sited at 2294 West Vaughn Road, consists of a modern-style one-story school building with an irregular plan constructed with concrete blocks. The flat roof is clad in rolled asphalt and features a wide cornice, parapet, and a series of fluted pilasters along the primary elevation. The east wing of the building has a utilitarian main entrance with a nearly full-width ribbon window composed of a series of aluminum sash windows. The Westside Elementary School building, constructed ca. 1965, was originally recorded in 2012 by Chambers Group, and there does not appear to be any changes to the resource since its original recordation (Johnson 2012b: 1–3) (Photograph 1).

Six additional buildings, which were not recorded during the 2012 survey, are present on the campus. An ancillary building, located immediately west of the recorded Westside Elementary School building, appears to have been constructed within the historic era, and features complementary architectural elements. The one-story, square building has a raised foundation, flat roof, overhanging eaves on the south (primary) and north (rear) elevations, and wide cornices. The building features a utilitarian door, lacks windows, and is clad in T1-11 plywood siding. Five additional structures appear to have been constructed between ca. 1980 and ca. 2003 (NETR 2023a) (Photograph 2; Photograph 3).

*P3b. Resource Attributes: HP15. Education Building; HP4. Ancillary Building

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. In the original recordation, the property was incorrectly addressed as 2394 W Vaughn Road (APN 051-300-029-000). However, the property's legal address is 2294 W Vaughn Road (051-300-010-000). The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the original, no longer extant school complex was constructed in 1911 but replaced with the current (extant) building in ca. 1965 (Johnson 2012b: 1–3; ParcelQuest 2023).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction, and did not appear to represent the work of a master, possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On April 11, 2023, Dudek revisited the subject property at 2294 W Vaughn Road and observed the six additional buildings located on the property. Otherwise, there did not appear to be any noticeable alterations since the 2012 recordation. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

PC ORIGINAL PKG

***Resource Name or #:** Building 5; Westside Elementary School

☐ Continuation X Update

***B14. Evaluator:** EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

***Date of Evaluation:** August 15, 2023.

References

Johnson, B. "DPR 523 Form for 2394 Vaughn Road." Prepared by Chambers Group. 2012.

NETR (National Environmental Title Research). 2023. "2396 West Vaughn Road, El Centro." Accessed August 15, 2023.

Parcel Quest. 2023. "051-300-030-000." Accessed August 15, 2023. https://pqweb.parcelquest.com/

Photograph(s):

Photograph 1. Primary (south) and east elevations of the Westside Elementary School building, view looking northwest. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

Photograph 2. Primary (south) and west elevations of the ancillary building, view looking northeast. Photograph taken on April 11, 2023.



Photograph 3. Overview of the Westside Elementary School campus, including four of the seven extant buildings, view looking north. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-014264
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 4 ***Resource Name or #:** Building 5
P1. Other Identifier: Westside Elementary School

***P2. Location:** ☐ **Not for Publication** ☒ Unrestricted ***a. County:** Imperial
and
***b. USGS 7.5' Quad:** Mount Signal **Date:** 1981 **T** 5S;**R** 13W; **¼ of ¼ of Sec** 1; San Bernardino B.M.
c. Address: 2394 Vaughn Road City: El Centro Zip: 92243
d. UTM: NAD83 Zone: 11N; 618808 mE/ 3625208 mN (G.P.S.)
e. Other Locational Data: Parcel # 051-300-029-000, Elevation: 0 ft.

***P3a. Description:** The resource is a one-story school building with an irregular plan, designed in the Modern style and constructed with concrete blocks. The roof is flat and covered with rolled asphalt. There is a wide cornice band along the parapet and a series of fluted pilasters along the front façade, which features a blind wall. The east wing of the building has a simple, unadorned main entrance with a nearly full-width ribbon window composed of a series of aluminum sash windows. The original Westside Elementary School was constructed in 1911, but none of the original buildings remain. The only relic from the first school is the original school bell. Principal Nancy Rood believes the current building was constructed circa, 1960-1970.

***P3b. Resource Attributes:** HP15. Educational Building

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View looking north toward the south elevation of the building.
Photo taken 1/27/2012

***P6. Date Constructed/Age and Sources:**
☒ Historic
☐Prehistoric ☐Both
Date of construction according to Nancy Rood is 1960-1970.

***P7. Owner and Address:**
El Centro Elementary School District
1256 Broadway Street
El Centro CA 92243

***P8. Recorded by:** (Name, affiliation, and address)
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***P9. Date Recorded:** 4/24/2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** A Built Environment Survey for the Silverleaf Solar LLC Photovoltaic Solar Project near the city of El Centro, Imperial County, California. March 2012

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒ Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: Westside Elementary School
B2. Common Name: Westside Elementary School
B3. Original Use: Educational B4. Present Use: Same
***B5. Architectural Style:** Modern

***B6. Construction History:** School Principal, Nancy Rood, believes the current school building was constructed sometime between 1960 and 1970.

***B7. Moved?** ☐**No** ☐**Yes** ☒**Unknown** **Date:** **Original Location:**
***B8. Related Features:** N/A
B9a. Architect: N/A b. Builder: N/A
***B10. Significance: Theme:** School Building **Area:** Western El Centro

Period of Significance: circa 1960 **Property Type:** School Building
Applicable Criteria: N/A
The community is located in the Imperial Valley, approximately 10 miles southwest of El Centro. The construction of a canal system from the Colorado River in 1901 brought water via the Encina Canal (Westside Main Canal) to the area, liberating the productivity of ancient silt deposits and alluvium that comprise the region. Farmers and speculators were soon attracted by the Federal Government's Desert Land Entry program that allowed individuals to file for ownership on 160 acres of desert ground, or 320 acres for married couples. Pioneering settlers to the region lived in simple tents and lean-to's covered with woven tule mats. The typical valley home consisted of a tent house, frame built with a floor, lumber sides three-feet high, and a canvas top with arrow weed built over the canvas. The first "proper" wood frame homes and masonry buildings would not be erected until the middle of the first decade.

B11. Additional Resource Attributes: HP15. Educational Building: Any building with an educational purpose, e.g. schools, libraries, museums, etc.

***B12. References:**
Ching, Francis D.K., *A Visual Dictionary of Architecture*, John Wiley & Sons, Inc., 1995
Imperial County Historical Society, 1956-1958. *The Valley Imperial, Book I and Book II*. Published by Imperial Valley Pioneers. Revised and Reprinted, June 1991
Howe, Edgar F. and Wilbur Jay Hall, *The Story of the First Decade In Imperial Valley, California*. Edgar F. Howe and Sons, 1910. Reprinted by Imperial County Historical Society, December 1998.
Nuffer, David, *Saga of Imperial Valley*. Self-published. 1990

B13. Remarks: None

***B14. Evaluator:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***Date of Evaluation:** 4/24/2012



(This space reserved for official comments.)

PC ORIGINAL PKG

*Recorded by: Brent D. Johnson *Date: 4/24/2012 ☒ Continuation ☐ Update

Integrity Statement

In regard to the seven aspects of integrity of location, design, setting, materials, workmanship, feel and association, the building has retained its original location. The building's setting, feel and association appear to have remained intact since its construction. In addition, its original materials, and workmanship have remained intact. The integrity level of the property is good and the condition of the building is good.

National Register of Historic Places Eligibility Evaluation

The property was assessed under the National Register Criterion A for its potential significance as part of an historic trend that may have made a significant contribution to the broad patterns of history. The subject property cannot be said to represent a significant historic trend or event. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.**

The property was considered under Criterion B for its association with the lives of persons significant in our past. No information was discovered that would indicate an association with the lives of persons significant in the past.**Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.**

The property was evaluated under Criterion C for embodying the distinctive characteristics of a type, period, or method of Modern construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components lack individual distinction. The building does not represent a significant and distinguishable entity whose components may lack individual distinction. The building does not serve as a significant example of the style to qualify for National Register status. The building does not include significant artistic values and does not represent the work of a master architect or craftsman. No builders or architects associated with the construction of the building could be identified.The building retains its basic integrity in terms of mass and form. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.**

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures and objects to be eligible under this criterion, they need to "be, or must have been, the principal source of information." This is not the case with this property. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.**

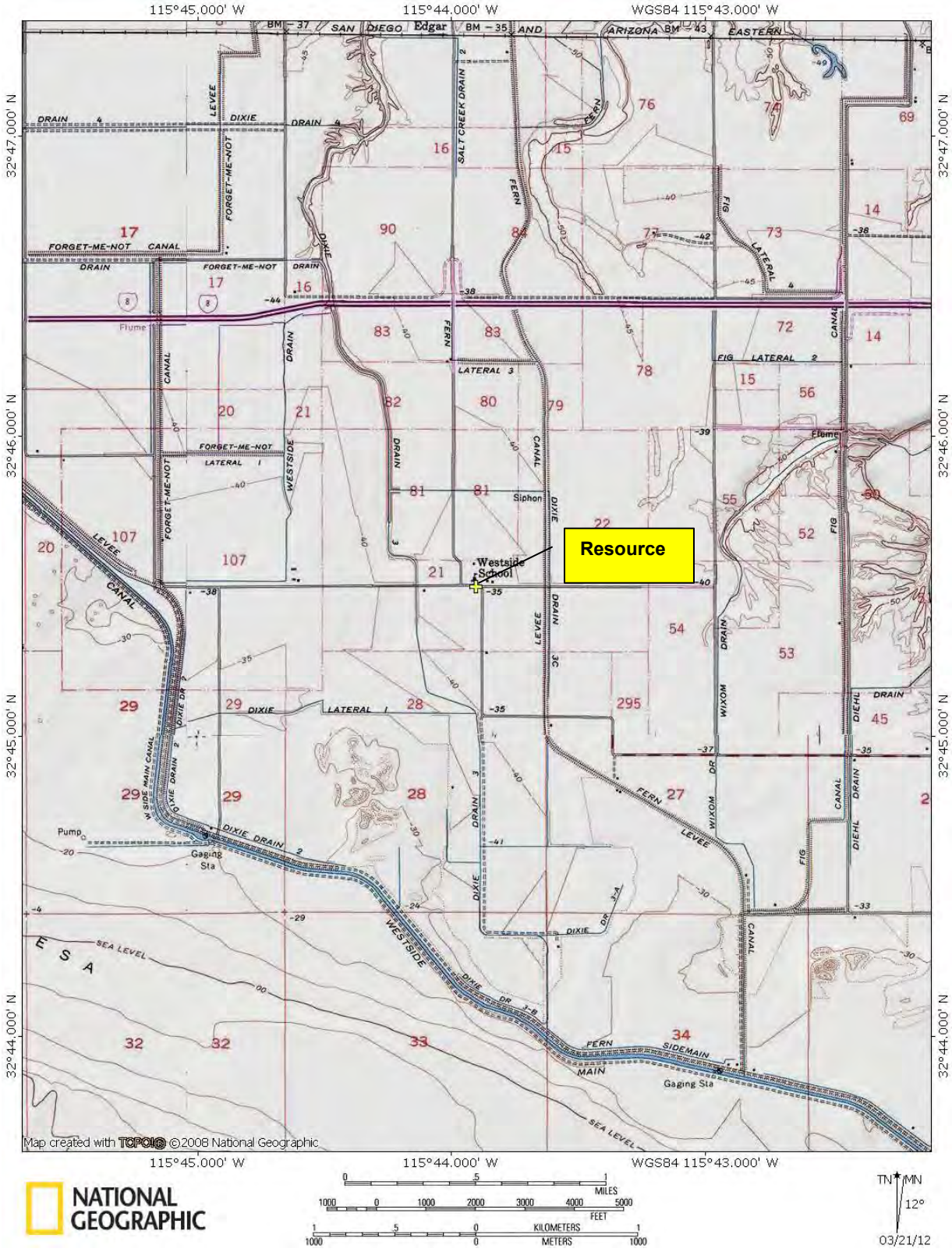
In summary, the property does not appear to qualify for the NRHP under Criterion A, B, C, and/or D. Therefore, the building is not potentially eligible for the NHPA.

PC ORIGINAL PKG

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial	P-13-014264

Page **4** of **4** *Resource Name or #: Building 5

***Map Name:** Mount Signal Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1990



DPR 523J (1/95)

PC ORIGINAL PKG

*Resource Name or #: MS 10; 1651 Westside Road

☐ Continuation X Update

Map Reference Number: 4

P1. Other Identifier: 2651 Westside Road, El Centro, Imperial County, California. 92243.
e. Other Locational Data: Assessor Parcel Number (APN): 051-270-038-000

*P3a. Description: The subject property, sited at 1651 Westside Road, consists of a one-story ranch-style single-family residence constructed in ca. 1955. The rectangular, wood-framed residence has a concrete foundation and stucco cladding. The roof is a low-pitched, cross-gable roof clad in rolled asphalt. A projection extends from the building's south elevation. The residence's windows are vinyl-framed sliders and a brick chimney is located along the roof ridge. Other structures located on the property (constructed outside the historic period) include a front-gable carport and garage, shed, square swimming pool, and three pole shelters. The property includes mature landscaping. Fern Lateral Three, an agricultural irrigation system associated with the larger Fern Canal network, runs north to south across the east side of the property. This single-family residential property was initially recorded in 2011 by KP Environmental and ASM. There do not appear to have been any changes to the resource since its original recordation (Photograph 1).

*P3b. Resource Attributes: HP2. Single Family Property; HP4. Ancillary Building

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

The property was previously evaluated in 2011 by KP Environmental and ASM and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property was likely constructed in ca. 1955 despite a U.S. Department of Agriculture document that listed the construction date as 1949 (Thomson and Adame 2011: 1–3; Krintz 2011a: 1–2).

ASM Architectural Historian Jennifer Krintz determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Krintz found that the property did not appear eligible under Criterion 3/C. Krintz also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under Criterion 4/D. Krintz did not evaluate the property's historical integrity.

On April 11, 2023, Dudek revisited the residential property at 1651 Westside Road and did not observe any noticeable alterations since the last recordation in 2011. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

*B14. Evaluator: EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

*Date of Evaluation: August 15, 2023.

PC ORIGINAL PKG

Photograph(s):

Photograph 1. Overview of the property addressed as 1651 Westside Road, view looking northwest. Photograph taken on April 11, 2023.



References

Thompson, H. "DPR 523 Form for 2651 Westside Road." Prepared by kp Environmental, LLC. 2011.

Krintz, J. "DPR 523 Form for 2651 Westside Road." Prepared by ASM Affiliates, Inc. 2011.

PC ORIGINAL PKG

UPDATE
~~P-13-013758~~
CA-IMP-11759

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

Page 1 of 2 ***Resource Name or #:** 1651 Westside Road
P1. Other Identifier:
***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County:** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Seeley **Date** 1957; 1976 **T** 16 S **R** 12 E; **¼ of** **of Sec** 82; S.B. **B.M.**
c. Address 1651 Westside Road City El Centro Zip 92243
d. UTM: (give more than one for large and/or linear resources) Zone 11S, 618613.72 mE/ 3626595.34 mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN: 051-270-038

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

1651 Westside Road is a one-story Ranch house constructed as a single-family residence ca. 1955. A structure may have existed on property by March 1949, but it is not the present-day building (United States Department of Agriculture 1949). Located on the west side of Westside Road, it is a wood frame building, rectangular in plan with a concrete foundation. The exterior is clad in stucco siding. The roof is a low-pitched side gable roof with a front gable projection on the south section of the building and clad in an asphalt roll. On the east elevation, a concrete walkway leads to a primary entrance located on the north or east elevation. The primary entrance could not be seen from the street at the time of the survey. The windows consist of vinyl sliders with sandwich muntins. There is one chimney located within the roof surface. Modifications to the building include the replacement windows. Landscape features include tall palm trees. Other buildings include a front gable carport and garage as well as a shed roof storage shed.

(continued on page)

***P3b. Resource Attributes:** (List attributes and codes) HP2. Single Family Property
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking west at the property
Photo taken November 2, 2011

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1955,
1949 Imperial County Aerials, US Dept of Agriculture
USGS Topo Quad Map, 1957

***P7. Owner and Address:**
Earl G. Vandergriff
1651 Westside Road
El Centro, CA 92243

***P8. Recorded by:** (Name, affiliation, and address)
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
2034 Corte Del Nogal
Carlsbad, CA 92011

***P9. Date Recorded:** November 2011

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.")
Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☒ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

***NRHP Status Code** 6Z
***Resource Name or #** (Assigned by recorder) 1651 Westside Road

B1. Historic Name: Unknown
B2. Common Name: Unknown
B3. Original Use: Single family residence
B4. Present Use: Single family residence
***B5. Architectural Style:** Ranch
***B6. Construction History:** **(Construction date, alterations, and date of alterations)** The building was constructed circa 1955. Alterations include replacement windows circa 1990.
***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** None
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme** Agricultural Homestead **Area:** Imperial Valley, CA

Period of Significance: N/A **Property Type:** Single Family Property **Applicable Criteria:** None

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

1651 Westside Road is not recommended as eligible for listing in the NRHP and CRHR. Specifically, under Criterion A/1, research failed to tie the buildings to events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Under Criterion B/2, research failed to link the building with the lives of persons important to local, California, or national history. Under Criterion C/3, the building does not embody significant characteristics of a type, period, region, or method of construction; nor does it represent the work of a master, or possess high artistic values that would qualify it for listing. Finally, because this resources is a common property type it does not have the potential to provide information about history or prehistory that is not available through historic research. Therefore, the building was not evaluated for the NRHP or the CRHR under Criterion D/4.

(continued on page)

B11. Additional Resource Attributes: (List attributes and codes) None

***B12. References:** United States Department of Agriculture. 1949 Imperial County Aerials.

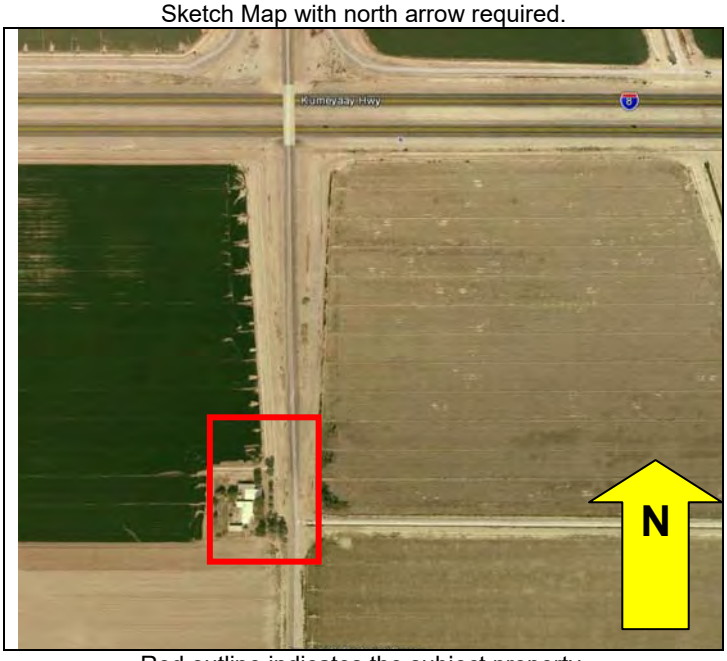
B13. Remarks: None

***B14. Evaluator:** Jennifer Krintz, Architectural Historian

***Date of Evaluation:** November 2011

(This space is reserved for official comments)

Sketch Map with north arrow required.



Red outline indicates the subject property.
Map courtesy of Google Earth.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-013758
HRI # CA-IMP-11759
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

 *Resource Name or #: MS 10

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** Imperial County

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Seeley, Calif **Date:** 1957 (1979) T 12E; R16S; SE ¼ **of** S ½ **of Sec** 83**;** M.D. San Bernardino **B.M.**

c. Address: 1651 Westside Road City: Zip:

d. UTM: Zone: 11; 618628mE/ 3626616mN(G.P.S.) NAD83 UTM coordinates

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: -36'

The site is located in the Imperial Valley, west of the town of El Centro and south of the town of Seeley. To reach the isolate from Interstate 8, take the Drew Road exit south. Drive 1.7 miles and turn west onto West Diehl Road. Drive 2.5 miles and turn right onto Westside Road. Drive north for 2591 feet and turn left onto West Vaughn Road. Drive 437' and turn right onto Westside Road. Travel 4642'. The site will be on the left side of the road. It is the only residence in this area.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The site consists of a residential complex composed of a single family dwelling unit, a garage, and several outbuildings. The house is an irregularly shaped building. It has a front gabled roof with open eaves. The front elevation has four windows, three of these are three panel sliders with the fixed interior sash having 12-lites and the outside sliding sashes each 6-lites. The remaining window is a sliding casement window with each sash having 9-lites. The main entrance door is on the north elevation. North of the living area is a detached garage with a shed roof overhang off the front elevation. North of the house and garage is a shed roof which shelters a motorhome and an additional shed roof at the northwest corner of the complex that is used as a shelter for heavy equipment. There is one additional outbuilding at the southwest corner of the complex with a porch roof overhang on the east elevation of the structure. A canal and several palm trees and other ornamentals line the roadway at the front of the complex. This complex was also evaluated for this project by ASM Affiliates and found to be not eligible for listing on the NRHP or CRHR (Davis et al. 2011).

***P3b. Resource Attributes:** (List attributes and codes) HP2-single family property, HP20-canal

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☒Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) IMG_1933; overview to north.

***P6. Date Constructed/Age and Sources:**
☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Imperial 1585 LLC, 6160 Plumas St. Reno, NV 89519

***P8. Recorded by:** (Name, affiliation, and address)
Heather Thomson and Marina Adame, kp environmental, LLC, 2387 Montgomery Ave. Cardiff By The Sea, CA 92007

***P9. Date Recorded:** July 21, 2011

***P10. Survey Type:** (Describe) Intensive pedestrian survey (15-meters)

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

***Attachments:** ☐NONE ☒Location Map ☒Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☒Photograph Record ☐ Other (List):

PC ORIGINAL PKG

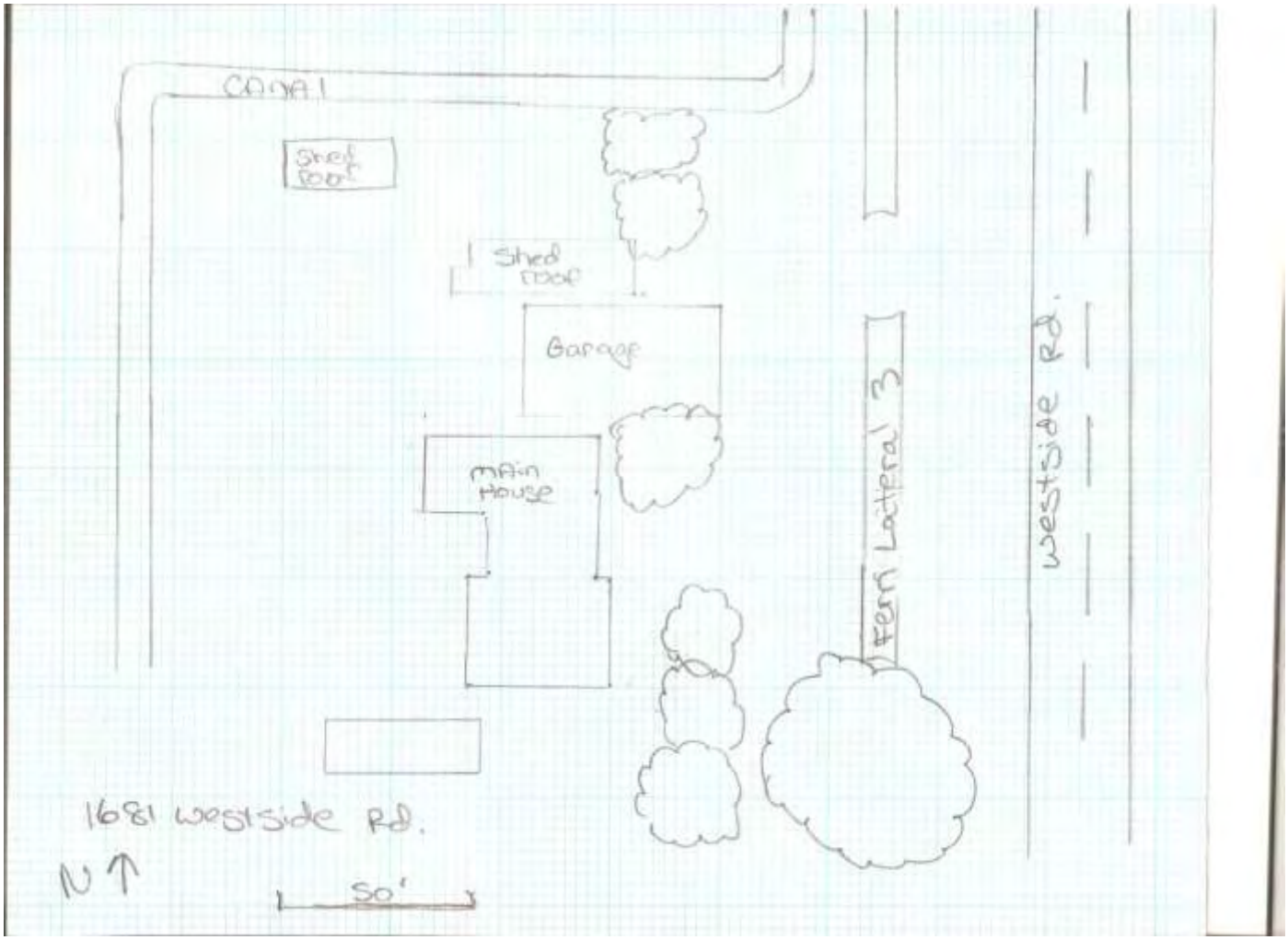
*Required information

Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives Kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Site	Subject/Description	View Toward
07	18	1894	Site 6	finish	D
07	18	1895	Site 6	finish	D
07	18	1896	Site 6	Site overview	W
07	18	1897	Site 6	Site overview	W
07	18	1898	Site 6	Bottle base	D
07	18	1899	Site 6	Bottle base	D
07	18	1900	Site 6	finish	D
07	18	1901	Site 6	finish	D
07	18	1902	Site 6	finish	D
07	18	1903	Site 6	finish	D
07	18	1904	Site 6	Bottle base	D
07	18	1905	Site 6	Fuzzy potsherd	D
07	18	1906	Site 6	Potsherd	D
07	18	1907	Site 6	Bone fragment	D
07	18	1908	/	Aqua glass fragment	D
07	19	1915	/	View of visibility on northeast side	D
07	19	1916-1919	/	House on Westside Road	W
07	20	1926	/	Wormwood Check	NE
07	20	1927	/	Concrete ditch	W
07	20	1928	/	Concrete ditch adjacent to Fig Drain in SE area	N
07	21	1930-1931	/	Memorial	W
07	21	1933-1935	Iso 9	Green glass bottle fragments	N
07	21	1936	/	Example of gate	S
07	21	1937-1938	Iso 7	bottle	D
07	21	1948-1951	/	snake	D
07	21	1962-1965	/	1651 West side Road	W
07	15	1858	/	North end of canal next to wormwood	
07	15	1859	/	Fig drain at southern end of western area	SE
07	15	1860	/	Same as above with tile line sign	
07	15	1861	/	East-west lateral at Derrick Drive & Wixom concrete ditch, check is out of project area on other side of road.	
07	15	1863	/	owl	
07	16	1873	/	Rykerson 1966	
07	16	1874	/	Overview at NE corner of west area turnouts 26 & 27	ESE
07	16	1875	/	Turnout 27	
07	16	1876	/	Bone	D
07	16	1877	/	Bone	D
07	16	1878	/	Bone	D
07	18	1879	Site 6	1-Yellow ceramic fragment with part of handle	D
07	18	1880	Site 6	2- can with external friction lid and piece of cut bone pork?	D
07	18	1881	Site 6	-3 bottle base	D
07	18	1882	Site 6	-4 Metal hinge and piece of milled lumber	D
07	18	1883	Site 6	5- light green bottle fragment	D
07	18	1884	Site 6	6- white ceramic fragment	D
07	18	1885	Site 6	Sherd and pipe stem	D
07	18	1886	Site 6	Sherd	D

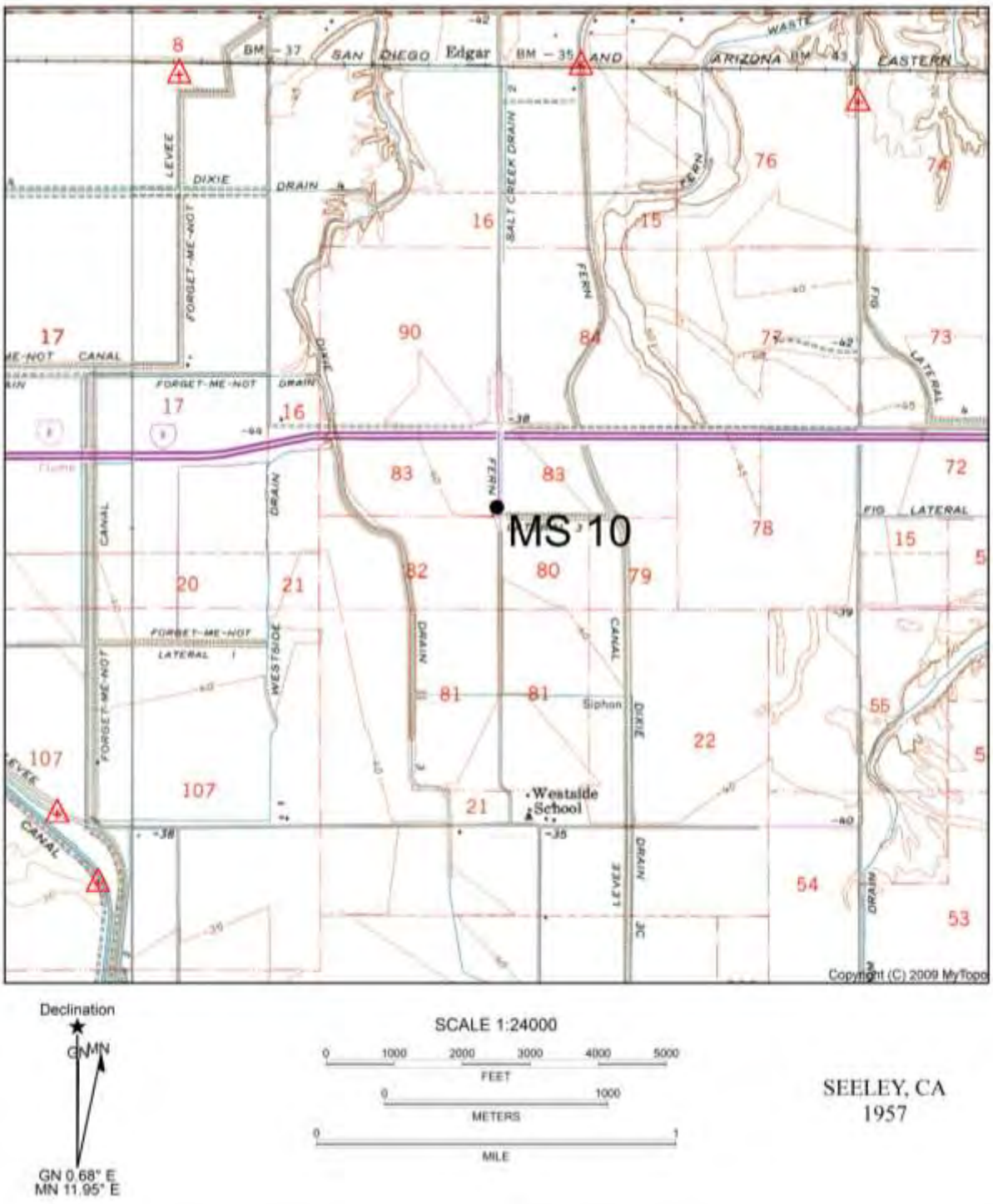
PC ORIGINAL PKG

*Drawn By: Heather Thomson, kp environmental, LLC, 2387 Montgomery Ave. Cardiff By The Sea, CA 92007 *Date: 07/12/2011



PC ORIGINAL PKG

*Map Name: Seeley, Calif. *Scale: 1: 24,000 *Date of Map: 1957 (1979)



PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # P-13-012700
HRI #
Trinomial
NRHP Status Code(s) 6Z

*Resource Name or #: Property at the Intersection of Liebert Road and Mandrapa Road

☐ Continuation X Update

Map Reference Number: 6

P1. Other Identifier: N/A
e. Other Locational Data: Assessors Parcel Number (APN) 051-350-017.

*P3a. Description: The subject property located on APN 051-350-017 does not have a situs address, but was previously recorded as part of 1105 Liebert Road. Two additional buildings on the parcel were demolished in 2004. The property was observed from the access roads surrounding the Fig and Westside Main Canals. Historical aerials show two buildings on the parcel, both of which were demolished in ca. 2004. The existing building was constructed prior to 1984 and is in the northeast corner of the parcel. A concrete canal was constructed along the north side of the property, with unofficial writing on the concrete with a date of February 15, 1974 (NETR 2023a).

The only building on the property, an abandoned barn, sits at the southeast corner of the intersection of Liebert Road and Mandrapa Road, north of the Westside Main Canal (Exhibit 6). The wood frame building has a gable-end entry with minimal overhang and dropped secondary roof over a shed room, a wood frame tractor entrance with no door attached, vertical wood board siding, with flat wood board roofing, a louvered wood attic vent, exterior mounted air conditioning vent system on the north elevation that appears to have been a later addition. Located on the main (south) and the north elevations are two offset to the right ventilation windows. (Photograph 1).

*P3b. Resource Attributes: HP4: Ancillary Building

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

The property was previously evaluated in 2011 by ASM and AECOM. In 2012, Chambers Group recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property was likely constructed in ca. 1940, ca. 1930s, and ca. 1945 based on visual observation and historic aerials.

Brent D. Johnson of Chambers Group most recently determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction, and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under Criterion 4/D. Johnson did not evaluate the property's historical integrity.

On April 11, 2023, Dudek revisited the residential property at APN 051-350-017 and did not observe any noticeable alterations since the last recordation in 2012. Dudek concurs with the previous finding that the building does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

PC ORIGINAL PKG

*B10. Significance (continued):

In conclusion, the farm property at APN 051-350-017 lacks sufficient significance to meet any of the criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the farm property at APN 051-350-017, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), either individually or as a contributing element to an existing or potential historic district.

*B14. Evaluator: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*Date of Evaluation: August 15, 2023.

Photograph(s):

Photograph 1. View of the existing building on farm property, looking north.



References

NETR (National Environmental Title Agency). 2023a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 27, 2023. https://www.historicaerials.com/viewer.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-012700
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 **of** 8 ***Resource Name or #:** (Assigned by recorder) 1105 Liebert Road

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

*** a. County** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*** b. USGS 7.5'** Mount Signal **Date** 1957 **T** 16S **R** 12E ; ¼ ¼ **of** 34 ; SB **B.M.**

c. Address 1105 Liebert Road City El Centro Zip 92243

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 620418 mE/ 3622274 mN

e. Other Locational Data: (e.g., parcel I, directions to resource, elevation, etc., as appropriate)

1105 Liebert Road consists of two parcels (APN 051-350-012 and APN 051-350-017). The larger main parcel (APN 051-350-012) is 1.03 acres and is located at the northwest corner of Liebert Road and Mandrapa Road. The smaller parcel (APN 051-350-017 is 0.84 acres and is located at the northeast corner of Liebert Road and Mandrapa Road. The two parcels are surrounded by agricultural fields located to the north, east, and west. The West Side Main Canal runs east to west immediately south of the parcels.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The larger main parcel of 1105 Liebert Road contains a two-story house, a two car-garage structure located southwest of the house, and a large storage shed located between the house and the garage. The house has a front-gabled two-story portion and a side-gabled one story wing on the west. The exterior of the house is stucco and the roof appears to be clad with red clay tiles. There is a square stucco chimney located on the rooftop of the one-story wing of the house. A shed roof porch spans the width of the two-story portion of the house, and the front entrance is located on the west side beneath the porch. Windows are generally sliding metal sash of various sizes. The building has been heavily altered by the addition of a second story.

SEE CONTINUATION SHEET 523L (PAGE 3).

***P3b. Resource Attributes:** (List attributes and codes) HP2. Single Family Property

***P4. Resources Present:** ☐ **Building** ☒ **Structure** ☐ **Object** ☐ **Site** ☐ **District** ☐ **Element of District** ☐ **Other** (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (view, date, accession #)
Looking northwest at house and detached garage
March 2010

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1960 per building permit records

***P7. Owner and Address:**
Private

***P8. Recorded by:** (name, affiliation, and address)
URS Corporation
1615 Murray Canyon Rd., Suite 1000
San Diego, CA 92108

***P9. Date Recorded:** 03/2010

***P10. Survey Type:** (Describe)
Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Mutaw, Robert J. (Ph.D.), Elizabeth B. Roberts, Gordon C. Tucker Jr., Ph.D., Brian Shaw, Terrie Bagwell, Colin O'Hanlon, Rachael Nixon, Gary Fink, Jeremy Hollins, Mark Neal. 2010 Draft Final Class III Confidential Cultural Resources Technical Report for the Imperial Valley Solar (formerly Solar 2), Imperial Valley County. URS Corporation. Technical report prepared for Tessera Solar (Applicant). Submitted to the Bureau of Land Management – El Centro Field Office, El Centro, CA. Copies available from the Bureau of Land Management – El Centro Field Office, El Centro, CA.

***Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☐ Other (List):

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # P-13-012700
HRI #

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

*Resource Name or #: (Assigned by recorder) 1105 Liebert Road

B1. Historic Name: N/A

B2. Common Name: N/A

B3. Original Use: Single Family Residence B4. Present Use: Single Family Residence

*B5. **Architectural Style:** N/A

*B6. **Construction History:** (Construction date, alterations, and date of alterations)
According to building permit records for APN 051-350-012, the house was constructed in 1960. In 1985, the two-car garage was added to the property. Although no date was listed for the storage shed between the house and the garage, the shed appears to have been constructed in or after 1985. Building permit records show that an addition was constructed on the house in 1992. The original house was recorded as a single story; therefore, it can be concluded that a two-story addition may have been constructed in 1992. The single-story storage structure located on APN 051-350-017 was built in 1960 according to building permit records, and recorded as a "sleeping room." In 1970, a metal carport was added to the structure.

*B7. **Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A

*B6. **Related Features:**
None

B9. Architect: N/A b. Builder: Unknown

*B10. **Significance: Theme** N/A **Area** Imperial County
Period of Significance N/A **Property Type** Single Family Residence **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A

*B12. **References:**
SEE CONTINUATION SHEET 523L (PAGE 6)

B13. Remarks:
None

(Sketch Map with north arrow required)

SEE CONTINUATION SHEET 523L (PAGE 5)

*B14. **Evaluator:** Jeremy Hollins
***Date of Evaluation:** 03/2010

(This space reserved for official comments)

PC ORIGINAL PKG

P3a. Description (Continued)

The two-car garage structure has a front-facing gable roof clad with asphalt shingles. A basketball hoop is located above the wood garage door. A single window with metal bars is located on the south elevation of the garage. The storage shed appears to be constructed from the same materials as the garage and has a flat roof and a large garage type door. The garage and shed are not historic. A chain link fence surrounds the parcel at the property boundaries.

The smaller parcel contains a small single-story storage-like structure with a front-facing gable roof. The roof is clad with asphalt shingles and there is a large opening on the south elevation, which appears to be missing a door. The structure is surrounded by overgrown weeds and brush, appears to be vacant. A chain link fence surrounds the building.

B10. Significance (Continued)

In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991).

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979).

Imperial Valley began to develop widespread irrigated agriculture only after 1898-1899, when C. R. Rockwood and George Chaffey took an interest in the area (JRP Historical Consulting and Caltrans 2000). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest. By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. In the early 1900s and 1910s, farmers began to settle in Imperial Valley and cultivate cotton in large quantities (Caltrans 2007). The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and by the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The widespread availability of water led to the growth of the agricultural industry and the development of Imperial Valley.

Agricultural development in Imperial Valley was facilitated by the irrigation development, and soon became a major producer in a range of crops. Between 1900 and 1910, farmers raised cotton in Imperial Valley. By 1929, Imperial County led the state in acres of vegetables and the area a few years earlier was a pioneer in Califoria's pomegranate cantaloupe industries (California Department of Transportation 2007).

On the 1957 Mount Signal 7.5-minute USGS Topographic Quadrangle Map, structures are depicted in the same location as the house, garage, and storage structures located at 1105 Liebert Road, but are not labeled. According to building permit records for APN 051-350-012, the house was constructed in 1960. In 1985, the two-car garage was added to the property. Although no date was listed for the storage shed between the house and the garage, the shed appears to have been constructed in or after 1985. Building permit records show that an addition was constructed on the house in 1992. The original house was recorded as a single story; therefore, it can be concluded that a two-story addition may have been constructed in 1992. The single-story storage structure located on APN 051-350-017 was built in 1960 according to building permit records, and recorded as a "sleeping room." In 1970, a metal carport was added to the structure.

B10. Significance (Continued)

Presently, initial research has indicated 1105 Liebert Road does not appear directly linked with important trends, events, or themes, and due to substantial alterations of the buildings and structures (i.e., second-story addition during the past twenty years) is not unique or representative of its time and place as an agricultural property associated with irrigation agriculture in Imperial Valley. It is a modest example of a historic-period rural property. Recent changes to the property as a whole have erased many of its historic characteristics and have impacted its important scenic qualities. The original form and appearances of the residence is no longer apparent, and the property has a whole has not retained its spatial organization and evidence of an important historic period of development. In conclusion, 1105 Liebert Road does not appear to be associated with significant events, people, design/construction, or have the potential to yield important information.

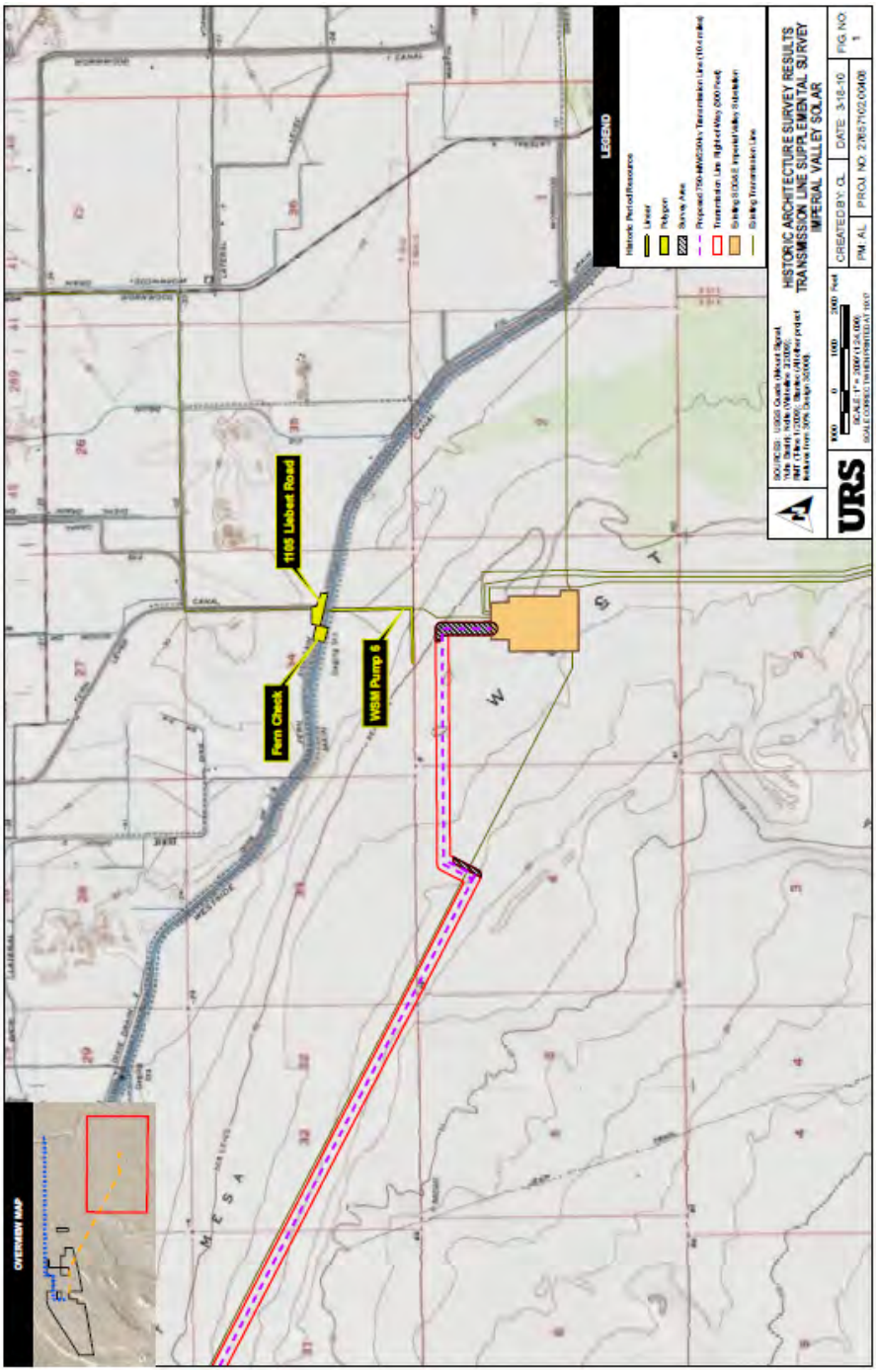
Further, 1105 Liebert Road does not appear to retain a sufficient amount of its historic integrity. Due to the alterations, the property does not appear to possess sufficient integrity of workmanship, design, materials, setting, feeling, and association (though it still retains sufficient historic location).

In summary, 1105 Liebert Road does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA. .

PC ORIGINAL PKG

Sketch Map:

Not to scale



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

California Department of Transportation. 2007. A Historical Context and Archaeological Research Design for Agricultural Properties in California http://www.dot.ca.gov/ser/downloads/cultural/agriculture_study.pdf Website last visited March 19, 2010.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

PC ORIGINAL PKG

Additional Photos:



View from Mandrapa Road looking northeast



View from Mandrapa Road looking north

Additional Photos:



View from Liebert Road looking northeast at storage structure on APN 051-350-017

UPDATE

P-13-012700

SUBSUMES

P-13-014261Σ P-13-014262Σ !b5 tπmoπлmopcт

ALL DOCUMENTS PLACED WITH

P-13-012700

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI # P-13-014261
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 4 ***Resource Name or #:** Building 2

P1. Other Identifier: Northeast corner of Libert Road and Mandrapa Road intersection

***P2. Location:** ☐ **Not for Publication** ☒ Unrestricted ***a. County:** Imperial
and
***b. USGS 7.5' Quad:** Mount Signal **Date:** 1981 **T** 5S;**R** 13W; **¼ of ¼ of Sec** 1; San Bernardino B.M.
c. Address: Libert Road and Mandrapa Road (No Address) City: El Centro Zip: 92243
d. UTM: NAD83 Zone: 11N; 620563 mE/ 3622211 mN (G.P.S.)
e. Other Locational Data: Parcel # 051-350-017-000, Elevation: 0 ft.

***P3a. Description:** The resource is an abandoned barn located east of the intersection of Libert Road and Mandrapa Road in the southeast quadrant of what appears to be the 109-acre Childers Farm. The wood frame building has a rectangular plan, a low-pitch front gable roof with a narrow strip of metal coping along the roof ledge, vertical wood siding with corner boards, an off-center louvered attic vent at the roof peak, and a large open bay with no door. There do not appear to be any windows on the building.

***P3b. Resource Attributes:** HP4. Ancillary Building. Barn

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View looking north toward the south elevation of the barn. Photo taken 1/27/2012

***P6. Date Constructed/Age and Sources:**
☒ Historic
☐Prehistoric ☐Both
Date of construction is circa 1940-50.

***P7. Owner and Address:**
The building appears to be located on property owned by the Whitmer Farm.

***P8. Recorded by:** (Name, affiliation, and address)
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***P9. Date Recorded:** 4/24/2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** A Built Environment Survey for the Silverleaf Solar LLC Photovoltaic Solar Project near the city of El Centro, Imperial County, California. March 2012

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒ Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: Unknown
B2. Common Name: None
B3. Original Use: Agricultural B4. Present Use: Abandoned
***B5. Architectural Style:** gable-front barn

***B6. Construction History:** No history of the barn's construction was discovered.

***B7. Moved?** ☐**No** ☐**Yes** ☒**Unknown** **Date:** **Original Location:**
***B8. Related Features:** N/A
B9a. Architect: N/A b. Builder: N/A
***B10. Significance: Theme:** Agricultural building **Area:** Western El Centro

Period of Significance: 1940-50 **Property Type:** Ancillary Building
Applicable Criteria: N/A
The community is located in the Imperial Valley, approximately 10 miles southwest of El Centro. The construction of a canal system from the Colorado River in 1901 brought water via the Encina Canal (Westside Main Canal) to the area, liberating the productivity of ancient silt deposits and alluvium that comprise the region. Farmers and speculators were soon attracted by the Federal Government's Desert Land Entry program that allowed individuals to file for ownership on 160 acres of desert ground, or 320 acres for married couples. Pioneering settlers to the region lived in simple tents and lean-to's covered with woven tule mats. The typical valley home consisted of a tent house, frame built with a floor, lumber sides three-feet high, and a canvas top with arrow weed built over the canvas. The first "proper" wood frame homes and masonry buildings would not be erected until the middle of the first decade.

B11. Additional Resource Attributes: HP4. Ancillary Building: Barn

***B12. References:**
Ching, Francis D.K., *A Visual Dictionary of Architecture*, John Wiley & Sons, Inc., 1995
Imperial County Historical Society, 1956-1958. *The Valley Imperial, Book I and Book II*. Published by Imperial Valley Pioneers. Revised and Reprinted, June 1991
Howe, Edgar F. and Wilbur Jay Hall, *The Story of the First Decade In Imperial Valley, California*. Edgar F. Howe and Sons, 1910. Reprinted by Imperial County Historical Society, December 1998.
Nuffer, David, *Saga of Imperial Valley*. Self-published. 1990

B13. Remarks: None

***B14. Evaluator:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***Date of Evaluation:** 4/24/2012



(This space reserved for official comments.)

PC ORIGINAL PKG

*Recorded by: Brent D. Johnson *Date: 4/24/2012 ☒ Continuation ☐ Update

Integrity Statement

In regard to the seven aspects of integrity of location, design, setting, materials, workmanship, feel and association, it is not known whether this building has retained its original location. The building's setting, feel and association appear to have remained intact since its construction. In addition, its original materials, and workmanship have remained largely intact. The integrity level of the property is poor and the condition of the building is poor.

National Register of Historic Places Eligibility Evaluation

The property was assessed under the National Register Criterion A for its potential significance as part of an historic trend that may have made a significant contribution to the broad patterns of history. The subject property cannot be said to represent a significant historic trend or event. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.**

The property was considered under Criterion B for its association with the lives of persons significant in our past. No information was discovered that would indicate an association with the lives of persons significant in the past.**Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.**

The property was evaluated under Criterion C for embodying the distinctive characteristics of a type, period, or method of Modern construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components lack individual distinction. The building does not represent a significant and distinguishable entity whose components may lack individual distinction. The building does not serve as a significant example of the style to qualify for National Register status. The building does not include significant artistic values and does not represent the work of a master architect or craftsman. No builders or architects associated with the construction of the building could be identified.The building retains its basic integrity in terms of mass and form. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.**

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures and objects to be eligible under this criterion, they need to "be, or must have been, the principal source of information." This is not the case with this property. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.**

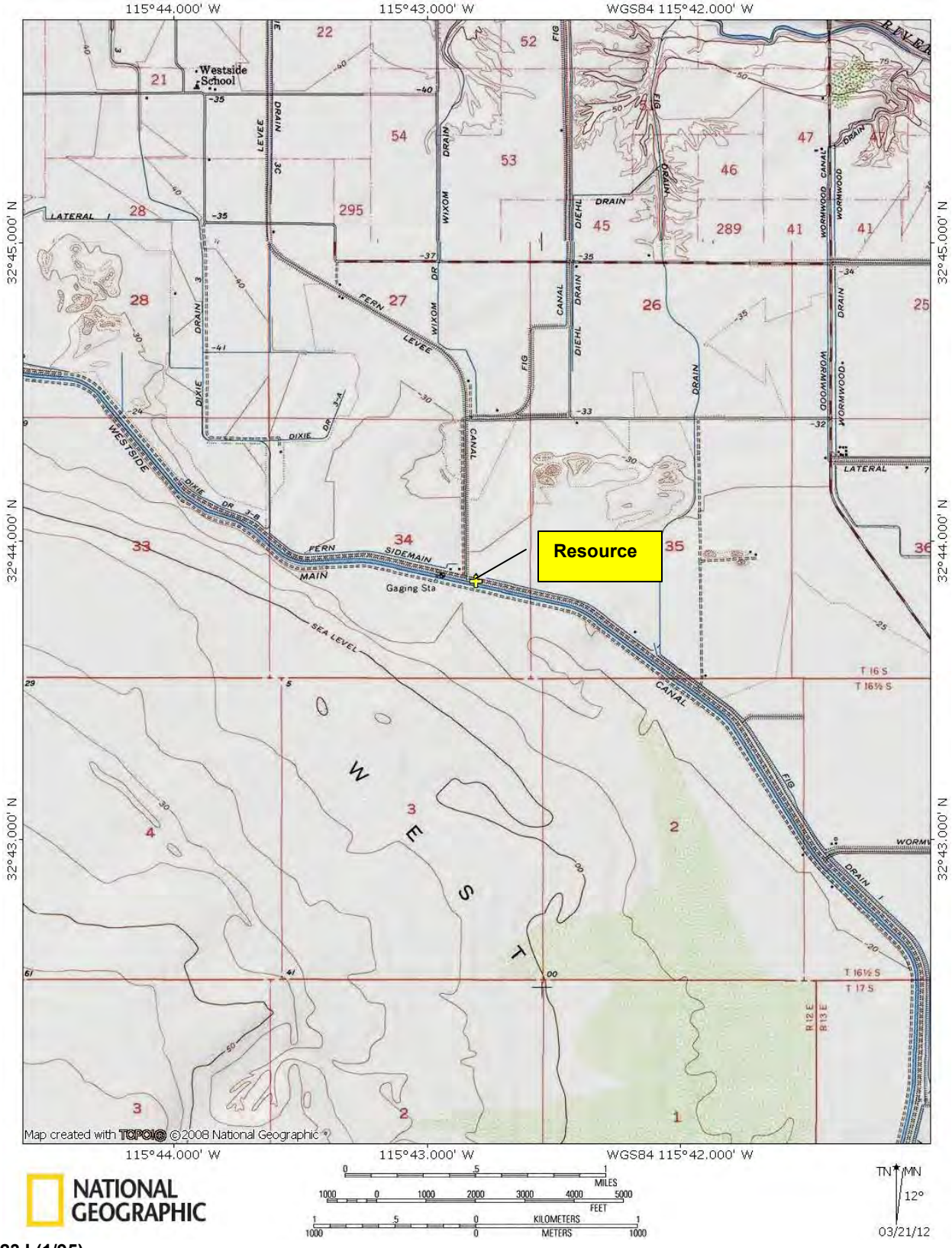
In summary, the property does not appear to qualify for the NRHP under Criterion A, B, C, and/or D. Therefore, the building is not potentially eligible for the NHPA.

PC ORIGINAL PKG

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial	P-13-014261

Page **4** of **4** *Resource Name or #: Building 2

***Map Name:** Mount Signal Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1990



DPR 523J (1/95)

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-014262
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 4 ***Resource Name or #:** Building 3
P1. Other Identifier: Bryant Residence

***P2. Location:** ☐ **Not for Publication** ☒ Unrestricted ***a. County:** Imperial
and
***b. USGS 7.5' Quad:** Mount Signal **Date:** 1981 **T** 5S;**R** 13W; **¼ of ¼ of Sec** 1; San Bernardino B.M.
c. Address: 1105 Libert Road City: El Centro Zip: 92243
d. UTM: NAD83 Zone: 11N; 620484 mE/ 3622271 mN (G.P.S.)
e. Other Locational Data: Parcel # 051-350-012-000, Elevation: 0 ft.

***P3a. Description:** The resource consists of a 4 bed, 3 bath, 2,332 square foot, two-story single family residence and an ancillary building located northwest of the intersection of Libert Road and Mandrapa Road on the north side of the Westwide Main Canal, on approximately 1.03 acres. The primary residence is a Modern split-level residence, circa 1970, with a low-pitch front-gable roof, red Spanish tile, three-quarter length front porch, sliding glass windows with multi-pane glazing, and an attached garage with a shed style roof that appears to be a later addition. The ancillary building is a storage shed with a gabled roof, composite asphalt roofing, and vertical wood cladding on the exterior walls.

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View looking north toward the south elevation of the residence.
Photo taken 1/27/2012

***P6. Date Constructed/Age and Sources:**
☒ Historic
☐Prehistoric ☐Both
Date of construction is estimated at 1972-1975.

***P7. Owner and Address:**
The Bryant Residence is located on the Whitmer Farm; however, the owner was not identified.

***P8. Recorded by:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***P9. Date Recorded:** 4/24/2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** A Built Environment Survey for the Silverleaf Solar LLC Photovoltaic Solar Project near the city of El Centro, Imperial County, California. March 2012

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒ Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: Unknown
B2. Common Name: Bryant Residence
B3. Original Use: Residential B4. Present Use: Vacant
***B5. Architectural Style:** Modern split-level

***B6. Construction History:** No history of the building's construction was discovered.

***B7. Moved?** ☐**No** ☐**Yes** ☒**Unknown** **Date:** **Original Location:**
***B8. Related Features:** N/A
B9a. Architect: N/A b. Builder: N/A
***B10. Significance: Theme:** Farm House and Ancillary Building **Area:** Western El Centro

Period of Significance: 1970s **Property Type:** Vacant Farm House and Ancillary Building
Applicable Criteria: N/A
The community is located in the Imperial Valley, approximately 10 miles southwest of El Centro. The construction of a canal system from the Colorado River in 1901 brought water via the Encina Canal (Westside Main Canal) to the area, liberating the productivity of ancient silt deposits and alluvium that comprise the region. Farmers and speculators were soon attracted by the Federal Government's Desert Land Entry program that allowed individuals to file for ownership on 160 acres of desert ground, or 320 acres for married couples. Pioneering settlers to the region lived in simple tents and lean-to's covered with woven tule mats. The typical valley home consisted of a tent house, frame built with a floor, lumber sides three-feet high, and a canvas top with arrow weed built over the canvas. The first "proper" wood frame homes and masonry buildings would not be erected until the middle of the first decade.

B11. Additional Resource Attributes: HP2. Single Family Property: Farm House; HP4. Ancillary Building: Barn

***B12. References:**
Ching, Francis D.K., *A Visual Dictionary of Architecture*, John Wiley & Sons, Inc., 1995
Imperial County Historical Society, 1956-1958. *The Valley Imperial, Book I and Book II*. Published by Imperial Valley Pioneers. Revised and Reprinted, June 1991
Howe, Edgar F. and Wilbur Jay Hall, *The Story of the First Decade In Imperial Valley, California*. Edgar F. Howe and Sons, 1910. Reprinted by Imperial County Historical Society, December 1998.
Nuffer, David, *Saga of Imperial Valley*. Self-published. 1990

B13. Remarks: None

***B14. Evaluator:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***Date of Evaluation:** 4/24/2012



(This space reserved for official comments.)

PC ORIGINAL PKG

*Recorded by: Brent D. Johnson *Date: 4/24/2012 ☒ Continuation ☐ Update

Integrity Statement

In regard to the seven aspects of integrity of location, design, setting, materials, workmanship, feel and association, the building has retained its original location. The building's setting, feel and association appear to have remained intact since its construction. In addition, its original materials, and workmanship have remained largely intact. The integrity level of the property is good and the condition of the building is fair.

National Register of Historic Places Eligibility Evaluation

The property was assessed under the National Register Criterion A for its potential significance as part of an historic trend that may have made a significant contribution to the broad patterns of history. The subject property cannot be said to represent a significant historic trend or event. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.**

The property was considered under Criterion B for its association with the lives of persons significant in our past. No information was discovered that would indicate an association with the lives of persons significant in the past.**Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.**

The property was evaluated under Criterion C for embodying the distinctive characteristics of a type, period, or method of Modern construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components lack individual distinction. The building does not represent a significant and distinguishable entity whose components may lack individual distinction. The building does not serve as a significant example of the style to qualify for National Register status. The building does not include significant artistic values and does not represent the work of a master architect or craftsman. No builders or architects associated with the construction of the building could be identified.The building retains its basic integrity in terms of mass and form. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.**

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures and objects to be eligible under this criterion, they need to "be, or must have been, the principal source of information." This is not the case with this property. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.**

In summary, the property does not appear to qualify for the NRHP under Criterion A, B, C, and/or D. Therefore, the building is not potentially eligible for the NHPA.

PC ORIGINAL PKG

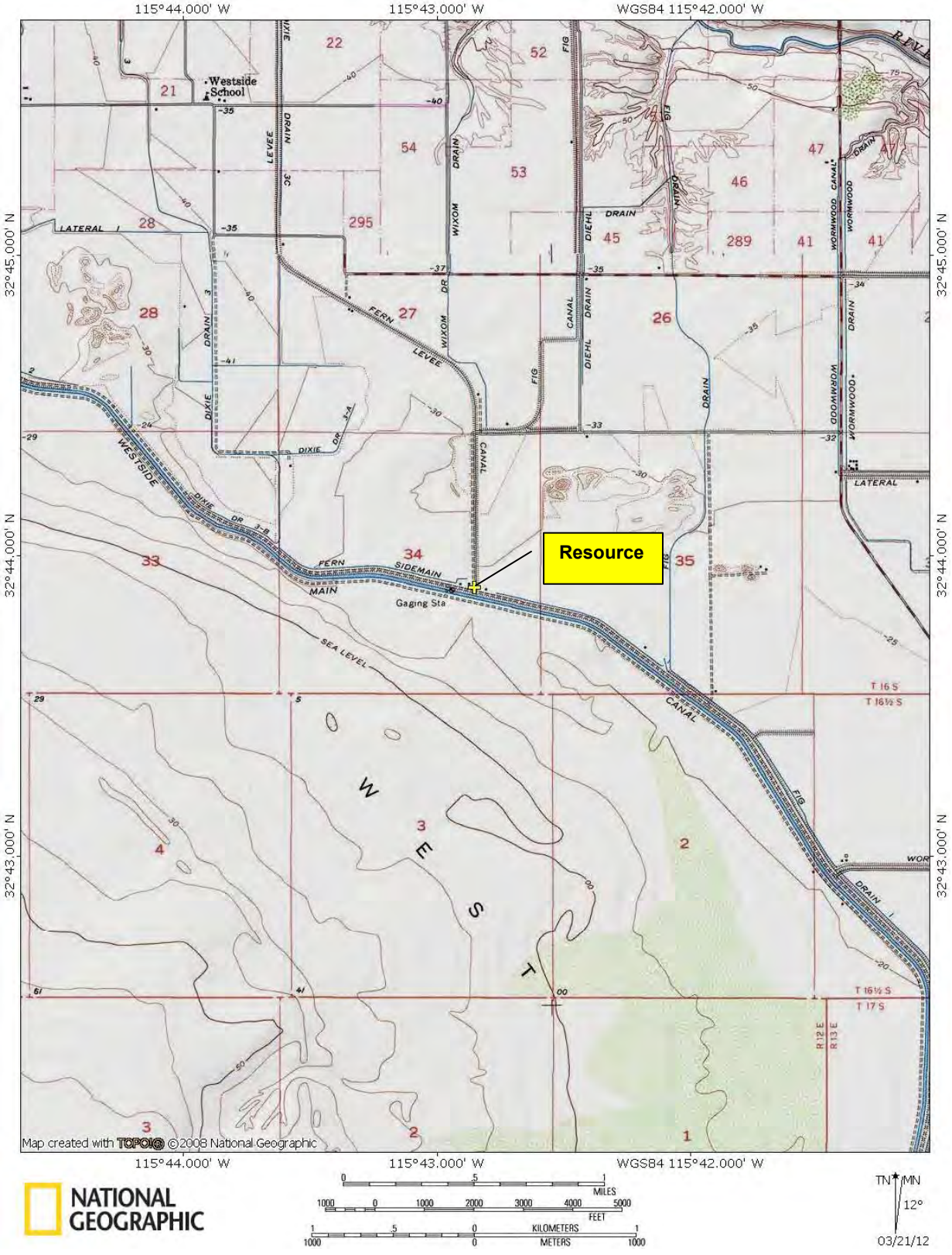
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
P-13-014262
Trinomial

Page 4 of 4 *Resource Name or #: Building 3

***Map Name:** Mount Signal Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1990



DPR 523J (1/95)

PC ORIGINAL PKG

***P3a. Description:** The shed at Liebert Road and Mandrapa Road, P-13-013567, is was previously recorded and recommended not eligible to the NRHP and the CRHR by ASM. It is still present, although in poor condition.

***P8. Recorded by:** (Name, affiliation, and address)
Joel Lennen
ASM Affiliates, Inc.
2034 Corte del Nogal
Carlsbad, CA 92011

***P10. Survey Type: (Describe):**
Intensive Pedestrian

***P11. Report Citation:**
Castells, Shelby and Joel Lennen
2017 *Cultural Resource Inventory for the Vega SES LLC Solar Project, Imperial County, California*. Submitted to Vega SES LLC

PC ORIGINAL PKG

UPDATE

P-13-013567

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 1 of 1 ***Resource Name or # (Assigned by recorder)** Liebert Road Shed
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

***P2. Location:** ☒ Not for Publication ☐ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad** Mount Signal **Date** 1957 **T** 16S **R** 12E; **¼ of** **1/4** **of Sec** 34;S.B. **B.M.**
c. Address Unknown Number Liebert Road City Imperial Zip 92243
d. UTM: (give more than one for large and/or linear resources) Zone 11S, mE/ 620529.40 mN; 3622237.27
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN: 051-350-017-000

***P3a. Description:** The building on the south corner of Liebert Road and Westside Main Canal was constructed as a shed ca. 1940. The vernacular building is one-and-one-half stories located on the south side of Liebert Road. The shed is wood framed and rectangular in plan with a concrete foundation. The exterior is clad in vertical wood board siding. The roof is a front gable low-pitched roof with wide eaves. There is one entryway on the north elevation. A chain link fence surrounds the building. No other features could be seen from the road at the time of the survey.

***P3b. Resource Attributes:** HP4. Ancillary Building
P5a. Photograph or Drawing:



P5b. Description of Photo:
View looking south at Liebert Road Shed
Photo taken November 2, 2011.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1940, visual observation

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** November 2011
***P10. Survey Type:** Intensive

P11. Report Citation:
INVENTORY, EVALUATION, AND ANALYSIS OF IMPACTS ON HISTORIC RESOURCES ON PRIVATE LANDS WITHIN THE AREA OF POTENTIAL EFFECT OF THE CAMPO VERDE SOLAR PROJECT, IMPERIAL COUNTY, CALIFORNIA, ASM Affiliates, November 2011.

***B10. Significance: Theme:** Agricultural Property **Area:** Imperial Valley

Period of Significance: N/A **Property Type:** Ancillary Shed **Applicable Criteria:** N/A
ASM previously recommended that the Leibert Road Shed was not eligible for listing in the NRHP and the CRHR. We concur with our previous recommendation, and the shed is recommended not eligible for listing in the NRHP or CRHR. Specifically, under Criterion A/1, research failed to tie the shed to events that have made a significant contribution to the broad patterns of local or regional history, or to the cultural heritage of California or the U.S., including agricultural complexes in Imperial Valley. Under Criterion B/2, research failed to link the building with the lives of persons important to local, California, or national history. Under Criterion C/3, the building does not embody significant characteristics of a type, period, region, or method of construction; nor does it represent the work of a master, or possess high artistic values that would qualify it for listing. Finally, because this resource is a common property type it does not have the potential to provide information about history or prehistory that is not available through historic research. Therefore, the 1596 Fisher Road was not evaluated for the NRHP or the CRHR under Criterion D/4.
.

PC ORIGINAL PKG

UPDATE

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-013567
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code _____ Reviewer _____ Date _____

*Resource Name or # IID-051-350-017

P1. Other Identifier: _

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Imperial County
and
***b. USGS 7.5' Quad** Mount Signal **Date** 1976 **T**16_;S **R**; 12E ¼ **of Sec** 34_; SB **B.M.**
c. Address City Zip
d. UTM: Zone 11 620564 mE/ 3622055mN
e. Other Locational Data: APN: 051-350-017
This resource is north of Mandrapa Road and east of Liebert Road.

***P3a. Description:**

A one and a half story shed with a gabled roof is situated on this .8 acre parcel. The garage has a rectangular plan and is roofed and sided in corrugated metal. The south façade has a large opening for farm equipment on the west side. A rectangular vent is centered on the south parapet. Access to this residence was limited to the public right-of-way. The parcel has tall shrubs surrounding the garage and a mature palm tree on the east side.

***P3b. Resource Attributes:** (List attributes and codes) HP 4. Ancillary Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #) View facing northeast; T.M.: photo # DSCN 8770; 07/20/2011

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
ca. 1930s/ visual inspection

***P7. Owner and Address:**
IID

***P8. Recorded by:** (Name, affiliation, address)
AECOM
1420 Kettner Blvd., Suite 500
San Diego, CA 92101

***P9. Date Recorded:** 07/20/2011

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** *BUILT ENVIRONMENT SURVEY REPORT ADDENDUM TO THE CULTURAL RESOURCES INVESITGATIONS CLASS III REPORT FOR THE IID DIXIELAND 230 kV TRANSMISSION LINE AND SUBSTATION EXPANSION PROJECT, IMPERIAL COUNTIES, CALIFORNIA*, AECOM 2012

***Attachments:** NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) _____

PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # P-13-013567
HRI #

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z
*Resource Name or # IID-051-350-017

B1. Historic Name: Unknown
B2. Common Name: Unknown
B3. Original Use: Agricultural B4. Present Use: Vacant
*B5. Architectural Style: Vernacular
*B6. Construction History:
*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: Original Location:
*B8. Related Features:

B9. Architect: Unknown b. Builder: Unknown
*B10. Significance: Theme Area
Period of Significance 1930s Property Type Shed Applicable Criteria N/A

Built in the 1920s-50s, this property appears to have been associated with a now demolished residential structure and the general agricultural development in the desert area of Imperial Valley. Imperial Valley was established at the turn of the 20th Century when the canals and railroads were built, facilitating urban growth and the expansion of the region's agricultural economy. Although the property played a general role in a steady period of rural development in the area, it is not known to be directly associated with events that have made a significant contribution to local, state or national history; therefore, it does not appear to be eligible under NRHP Criterion A or CRHR Criterion 1. The property does not appear to have any associations with important historic persons; consequently, the property does not appear to be eligible under NRHP Criterion B or CRHR Criterion 2. The property is a shed, a popular and ubiquitous style to meet the agricultural needs of farmers, and is not a distinctive example of a type period, or method of construction, and does not exhibit high artistic values or the work of a master architect. The property does not appear to be significant under NRHP Criterion C or CRHR Criterion 3. In does not, nor is likely to, yield important information relating to history or prehistory under NRHP Criterion D or CRHR Criterion 4.

Overall, the property lacks significance and integrity, and it does not appear eligible for the NRHP or CRHR

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References: McAlester, Virginia and Lee McAlester. *A Field Guide to American Houses*. Alfred A. Knopf, 2002.

B13. Remarks:

*B14. Evaluator: Jill Gibson and M.K. Meiser, AECOM

*Date of Evaluation: 7/20/2011

(This space reserved for official comments.)



*Required Information

PC ORIGINAL PKG

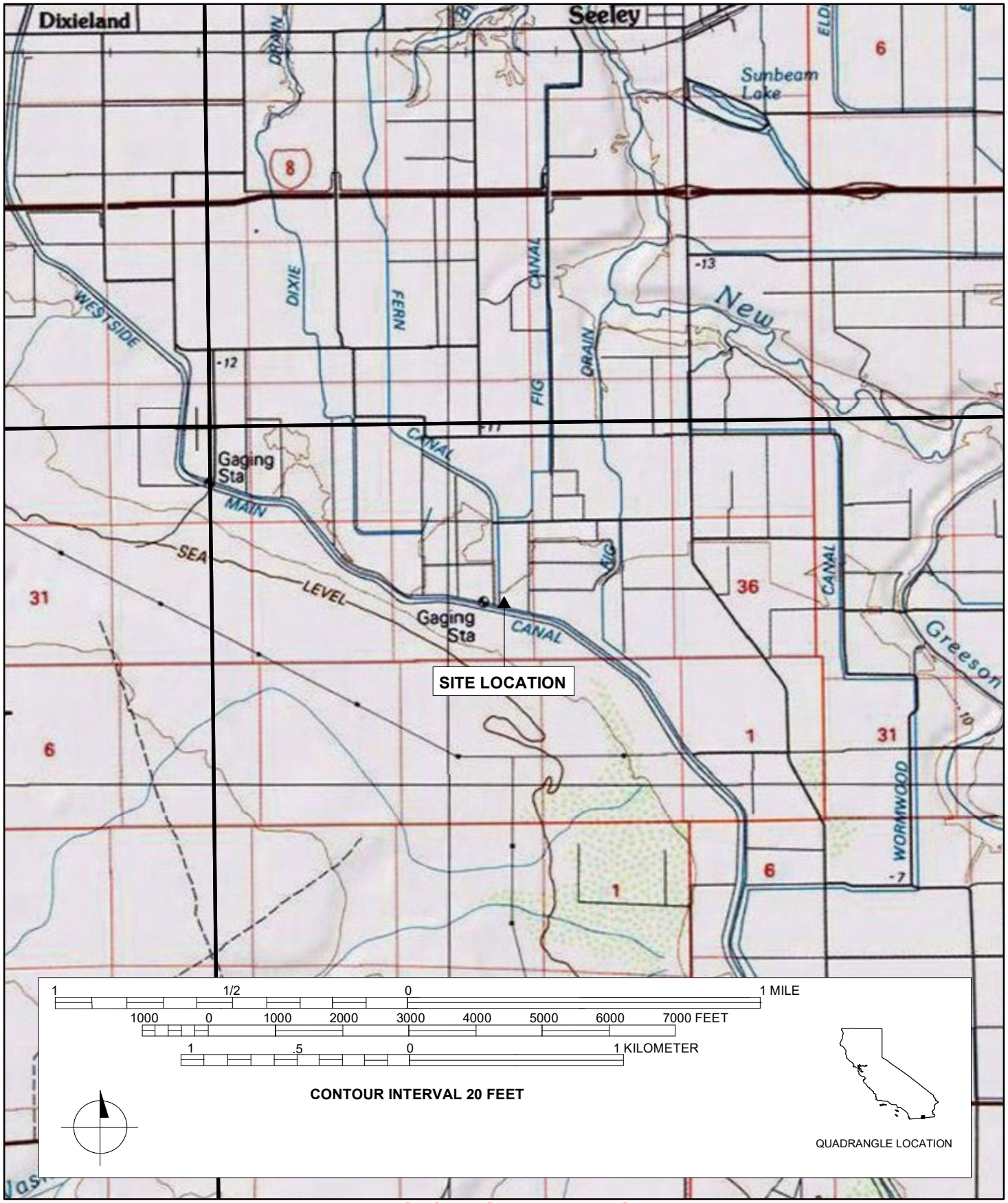
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # ~~P-13-013567~~ UPDATE
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) IID-051-350-017

* Map Name: USGS 7.5' TOPO QUAD MOUNT SIGNAL * Scale: 1:24,000 * Date of Map: 1976



DPR 523J (1/95)

PC ORIGINAL PKG

*Required Information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

P-13-013567

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 of 2 ***Resource Name or #:** Building 4
P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Mount Signal **Date** 1957 **T** 16S **R** 12E; **¼ of** **1/4** **of Sec** 34;S.B. **B.M.**
c. Address Unknown Number Liebert Road City Imperial Zip 92243
d. UTM: (give more than one for large and/or linear resources) Zone 11S, mE/ 620529.40 mN; 3622237.27
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN: 051-350-017-000

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The building on the south corner of Liebert Road and Westside Main Canal was constructed as a shed ca. 1940. The vernacular building is one-and-one-half stories located on the south side of Liebert Road. The shed is wood framed and rectangular in plan with a concrete foundation. The exterior is clad in vertical wood board siding. The roof is a front gable low-pitched roof with wide eaves. There is one entryway on the north elevation. A chain link fence surrounds the building. No other features could be seen from the road at the time of the survey.

(continued on page)

***P3b. Resource Attributes:** (List attributes and codes) HP4. Ancillary Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking south at the north elevation;
Picture taken March 22, 2011

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1940, visual observation

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded by:** (Name, affiliation, and address)
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
2034 Corte Del Nogal
Carlsbad, CA 92011

***P9. Date Recorded:** March 2011

***P10. Survey Type:** (Describe) Reconnaissance

***P11. Report Citation:** (cite survey report and sources, or enter "none.") Inventory, Evaluation, and Analysis of Effect on Historic Built Environment Properties within the Area of Potential Effect of the Imperial Solar Energy Center West, Imperial County, California

***Attachments:** ☐ NONE ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

***NRHP Status Code** 6Z
***Resource Name or #** (Assigned by recorder) Building 4

B1. Historic Name: N/A
B2. Common Name: N/A
B3. Original Use: Shed
B4. Present Use: Shed
***B5. Architectural Style:** None
***B6. Construction History:** **(Construction date, alterations, and date of alterations)** Unknown

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** None
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme** Agricultural Property **Area:** Imperial, CA

Period of Significance: 1940-1950 **Property Type:** Shed-Agricultural **Applicable Criteria:** None

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Building 4 was constructed as a shed building in circa 1940. It is a vernacular building, void of stylistic elements, and the architect is unknown. No historically significant people or events could be found in association with the property. Although Building 4 has retained integrity, the subject property is recommended not eligible for listing in the National Register of Historic Places as it fails to meet criteria A, B, C or D. It is also recommended not eligible for the California Register of Historic Resources as it fails to meet criteria 1, 2, 3 or 4.

(continued on page)

B11. Additional Resource Attributes: (List attributes and codes) None

***B12. References:** None

B13. Remarks: None

***B14. Evaluator:** Jennifer Krintz, Architectural Historian

***Date of Evaluation:** March 2011

(This space is reserved for official comments)

Sketch Map with north arrow required.



Map courtesy of Google Earth. Red outline indicates the subject property.

*Required Information

PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # P-13-014265
HRI #
Trinomial
NRHP Status Code(s) 6Z

*Resource Name or #: Building 6; Multiple Residence Compound at Libert and Wixem Road

☐ Continuation X Update

Map Reference Number: 7

P1. Other Identifier: 2094 West Wixom Road, El Centro, Imperial County, California. 92243.
e. Other Locational Data: Assessor Parcel Number (APN): 051-330-024-000

*P3a. Description: The subject property, sited at 2094 West Wixom Road, comprises two single-story residences, an ancillary building, and several shade structures. The first single-family residence is a single-story residence with a rectangular plan built in the Minimal Traditional architectural style. The side-gable roof, which features exposed rafter tails, is clad in composite roofing. The building is of brick construction that is clad in stucco, has double-hung windows with multi-pane glazing, louvered attic vents, and a pent roof over the center window on the main (west) elevation. The second single-family residence on the property is a single-story residence with an irregular plan that is clad in stucco. The roof has a medium-pitched, cross-gabled roof that has vented peaks. The second residence has a combination of aluminum-framed and vinyl-framed sliding-sashed windows. This property was originally recorded in 2012 by Chambers Group and there does not appear to be any changes to the resource since its original recordation (Photograph 1; Photograph 2).

*P3b. Resource Attributes: HP3. Multi Family Property; HP4. Ancillary Building

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property that encompasses APN 051-330-024 was likely constructed in ca. 1945 (Johnson 2012c: 1–3).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction, and did not appear to represent the work of a master, or possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On April 11, 2023, Dudek revisited the residential property at 2094 West Wixom Road and did not observe any noticeable alterations since the last recordation in 2012. Dudek concurs with the previous finding that the residence does not meet any of the criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

*B14. Evaluator: EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

*Date of Evaluation: August 15, 2023.

PC ORIGINAL PKG

Photograph(s):

Photograph 1. Overview of the first single-family residence located at 2094 West Wixom Road, view looking east. Photograph taken on April 11, 2023.



Photograph 2. The main (south) elevation of the second single-family residence located on the property, view looking north. Photograph taken on April 11, 2023.



References

Johnson, B.D. 2012c. "DPR form set for the Multiple Residence Compound at Liebert & Wixom Road." Chambers Group, Inc.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-014265
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 4 ***Resource Name or #:** Building 6

P1. Other Identifier: Multiple residence compound at Libert & Wixom Road

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Imperial
and
***b. USGS 7.5' Quad:** Mount Signal **Date:** 1981 **T** 5S;**R** 13W; **¼ of ¼ of Sec** 1; San Bernardino B.M.
c. Address: 2094 W. Wixom Road City: El Centro Zip: 92243
d. UTM: NAD83 Zone: 11N; 620546 mE/ 3623535 mN (G.P.S.)
e. Other Locational Data: Parcel # 051-330-024-000, Elevation: 0 ft.

***P3a. Description:** The resource consists of two single-story residences, an ancillary building, and some shade structures. The first building is a single-story residence with a rectangular plan built in a Minimal Traditional style with a side-gable roof with composite roofing, exposed rafter tails, brick construction with stucco cladding, double hung windows with multi-pane glazing, louvered attic vents, and a canopy roof extension over the primary window. The second residence on the property is a single-story residence with an irregular plan, built in an English Cottage style and constructed with river rocks clad in a rough daubed stucco. The roof has a medium-pitch and is cross-gabled with vented peaks, and the fenestration appears to be modern aluminum or vinyl replacement sliding sash windows.

***P3b. Resource Attributes:** HP3. Multiple Family Property

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View looking northwest toward the residences from the opposite side of the canal.
Photo taken 1/27/2012

***P6. Date Constructed/Age and Sources:**
☒ Historic
☐Prehistoric ☐Both
Date of construction is circa, 1940-50.

***P7. Owner and Address:**
The residences appears to be located on the Ocher Farm.

***P8. Recorded by:** (Name, affiliation, and address)
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***P9. Date Recorded:** 4/24/2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** A Built Environment Survey for the Silverleaf Solar LLC Photovoltaic Solar Project near the city of El Centro, Imperial County, California. March 2012

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒ Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: Unknown
B2. Common Name: None
B3. Original Use: Residential/Agricultural B4. Present Use: Same
***B5. Architectural Style:** Minimal Traditional and English Cottage style residences

***B6. Construction History:** No history of the buildings was discovered.

***B7. Moved?** ☐**No** ☐**Yes** ☒**Unknown** **Date:** **Original Location:**
***B8. Related Features:** N/A
B9a. Architect: N/A b. Builder: N/A
***B10. Significance: Theme:** Farm Houses and Ancillary Buildings **Area:** Western El Centro

Period of Significance: circa 1940-1950 **Property Type:** Farm Houses and Ancillary Buildings
Applicable Criteria: N/A
The community is located in the Imperial Valley, approximately 10 miles southwest of El Centro. The construction of a canal system from the Colorado River in 1901 brought water via the Encina Canal (Westside Main Canal) to the area, liberating the productivity of ancient silt deposits and alluvium that comprise the region. Farmers and speculators were soon attracted by the Federal Government's Desert Land Entry program that allowed individuals to file for ownership on 160 acres of desert ground, or 320 acres for married couples. Pioneering settlers to the region lived in simple tents and lean-to's covered with woven tule mats. The typical valley home consisted of a tent house, frame built with a floor, lumber sides three-feet high, and a canvas top with arrow weed built over the canvas. The first "proper" wood frame homes and masonry buildings would not be erected until the middle of the first decade.

B11. Additional Resource Attributes: HP2. Single Family Property: Farm Houses; HP4. Ancillary Building: Sheds

***B12. References:**
Ching, Francis D.K., *A Visual Dictionary of Architecture*, John Wiley & Sons, Inc., 1995
Imperial County Historical Society, 1956-1958. *The Valley Imperial, Book I and Book II*. Published by Imperial Valley Pioneers. Revised and Reprinted, June 1991
Howe, Edgar F. and Wilbur Jay Hall, *The Story of the First Decade In Imperial Valley, California*. Edgar F. Howe and Sons, 1910. Reprinted by Imperial County Historical Society, December 1998.
Nuffer, David, *Saga of Imperial Valley*. Self-published. 1990

B13. Remarks: None

***B14. Evaluator:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***Date of Evaluation:** 4/24/2012



(This space reserved for official comments.)

PC ORIGINAL PKG

*Recorded by: Brent D. Johnson *Date: 4/24/2012 ☒ Continuation ☐ Update

Integrity Statement

In regard to the seven aspects of integrity of location, design, setting, materials, workmanship, feel and association, it is not known if the buildings have retained their original location. The buildings' setting, feel and association appear to have remained intact since their construction. In addition, their original materials, and workmanship have remained intact. The integrity level of the property is good and the condition of the buildings is fair.

National Register of Historic Places Eligibility Evaluation

The property was assessed under the National Register Criterion A for its potential significance as part of an historic trend that may have made a significant contribution to the broad patterns of history. The subject property cannot be said to represent a significant historic trend or event. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.**

The property was considered under Criterion B for its association with the lives of persons significant in our past. No information was discovered that would indicate an association with the lives of persons significant in the past.**Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.**

The property was evaluated under Criterion C for embodying the distinctive characteristics of a type, period, or method of Modern construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components lack individual distinction. The building does not represent a significant and distinguishable entity whose components may lack individual distinction. The building does not serve as a significant example of the style to qualify for National Register status. The building does not include significant artistic values and does not represent the work of a master architect or craftsman. No builders or architects associated with the construction of the building could be identified.The building retains its basic integrity in terms of mass and form. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.**

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures and objects to be eligible under this criterion, they need to "be, or must have been, the principal source of information." This is not the case with this property. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.**

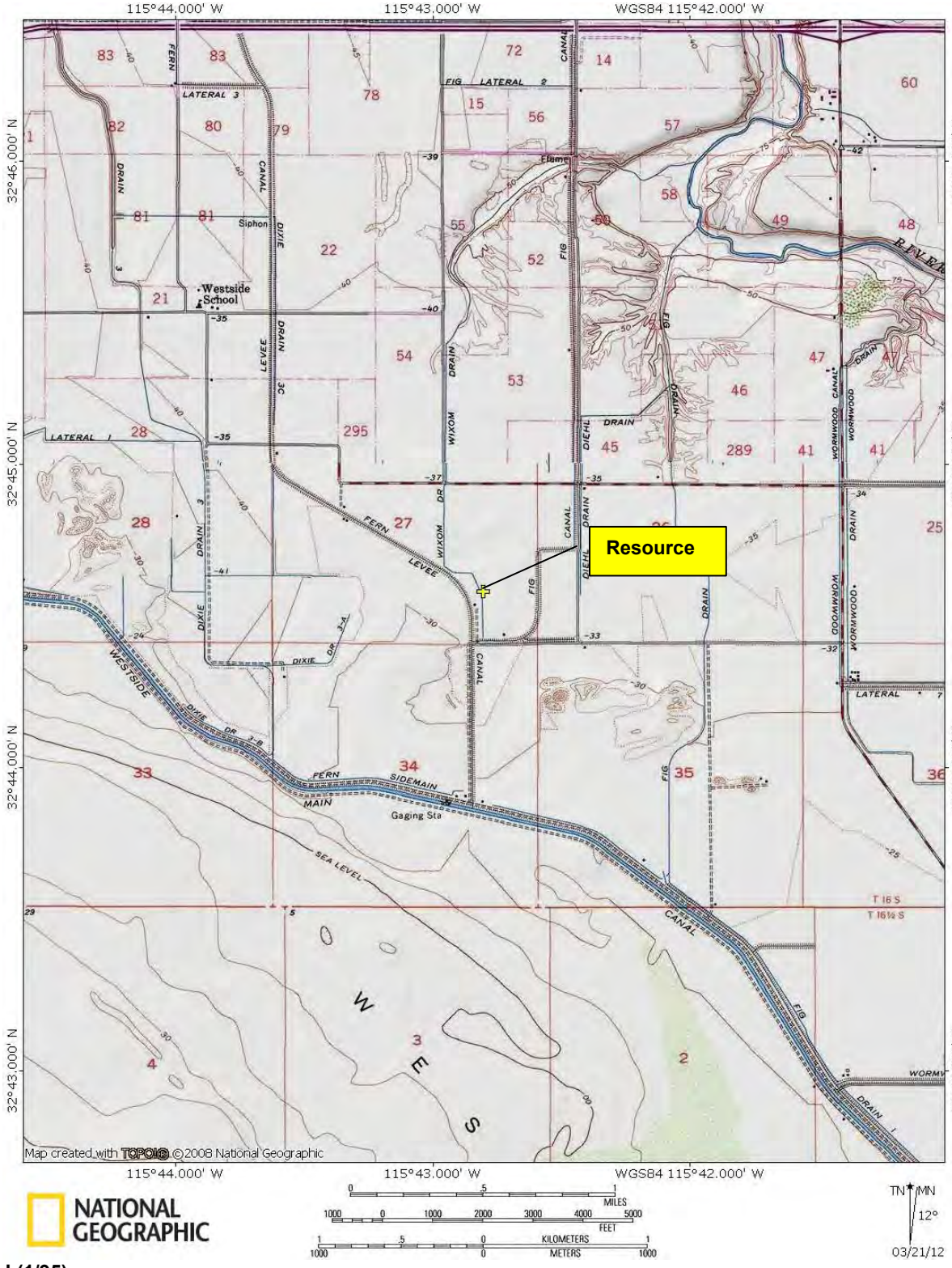
In summary, the property does not appear to qualify for the NRHP under Criterion A, B, C, and/or D. Therefore, the building is not potentially eligible for the NHPA.

PC ORIGINAL PKG

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial	P-13-014265

Page **4** of **4** *Resource Name or #: Building 6

***Map Name:** Mount Signal Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1990



DPR 523J (1/95)

PC ORIGINAL PKG

***Resource Name or #:** Building 7; Black Residence

☐ Continuation X Update

Map Reference Number: 9

P1. Other Identifier: 1905 Wixom Road, El Centro, Imperial County, California. 92243.
e. Other Locational Data: Assessor Parcel Number (APN): 051-360-038-000

***P3a. Description:** The subject property, sited at 1905 Wixom Road, consists of a one-story single-family residence with a rectangular plan. The building was designed in the Spanish Colonial architectural style with an arched gallery on the exterior elevations and an interior courtyard with a rectangular pool. The residence also features elements of the French Colonial style including a dual-pitched pavilion roof. The building is constructed from concrete masonry blocks reinforced with steel. A north–south-oriented rectangular building, which appears to be a garage built during the same period as the residence, is located east of the main building. This single-family residence was originally recorded in 2012 by Chambers Group and there does not appear to be any changes to the resource since its original recordation (Photograph 1).

***P3b. Resource Attributes:** HP2. Single Family Property; HP4. Ancillary Building

***P8. Recorded by:** Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

***P11. Report Citation:** Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

***B10. Significance:**

The property was previously evaluated in 2012 by Chambers Group and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that the property that encompasses APN 051-360-038 was constructed in ca. 1970 (Johnson 2012a: 1–3).

Chambers Group Historian Brent Johnson determined that the property did not appear to represent a significant historical trend or event and was not likely associated with the lives of persons significant to the community's, state's, or nation's past. As such, the property appeared ineligible for Criteria 1/A and 2/B. The property also appeared to lack the characteristics of a type, period, or method of construction. It did not appear to represent the work of a master, possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Consequently, Johnson found that the property did not appear eligible under Criterion 3/C. Johnson also determined that the property was unlikely to yield information important to prehistory or history and, therefore, was ineligible under Criterion 4/D. Johnson documented that the property had retained its integrity of location, feeling, association, materials, and workmanship.

On April 11, 2023, Dudek revisited the residential property at 1905 Wixom Road and observed no noticeable alterations to the main residence since the last recordation in 2012. A rectangular building, which is complementary and has similar building materials, is located directly east of the main residence. Dudek concurs with the previous finding that the residence does not meet any criteria for listing in the NRHP or CRHR. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject residence is not a historical resource for the purposes of CEQA. Dudek has assigned the subject residence a 6Z California Historical Resource status code.

***B14. Evaluator:** EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

***Date of Evaluation:** August 15, 2023.

PC ORIGINAL PKG

Photograph(s):

Photograph 1. Overview of the property located at 1905 Wixom Road, view looking northeast. Photograph taken on April 11, 2023.



References

Johnson, B.D. 2012a. "DPR form set for the Black Residence." Chambers Group, Inc.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-014266
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 4 ***Resource Name or #:** Building 7
P1. Other Identifier: The Black Residence

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Imperial
and
***b. USGS 7.5' Quad:** Mount Signal **Date:** 1981 **T** 5S;**R** 13W; **¼ of ¼ of Sec** 1; San Bernardino B.M.
c. Address: 1905 Wixom Road City: El Centro Zip: 92243
d. UTM: NAD83 Zone: 11N; 621800 mE/ 3623211 mN (G.P.S.)
e. Other Locational Data: Parcel # 051-360-038-000 Elevation: 0 ft.

***P3a. Description:** The resource is a one-story, single family residence with a rectangular plan located on 1.86 acres. The building was designed in the Spanish Colonial style with an arched gallery on the exterior and an interior courtyard, but has elements of the French Colonial style such as the dual-pitched pavilion roof. The manner of construction includes manufactured concrete blocks reinforced with steel.

***P3b. Resource Attributes:** HP2. Single Family Property.

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View looking south toward the north elevation of the building.
Photo taken 1/27/2012

***P6. Date Constructed/Age and Sources:**
☒ Historic
☐Prehistoric ☐Both
Date of construction is circa 1970.

***P7. Owner and Address:**
The property is located on the Childers Farm.

***P8. Recorded by:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***P9. Date Recorded:** 4/24/2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** A Built Environment Survey for the Silverleaf Solar LLC Photovoltaic Solar Project near the city of El Centro, Imperial County, California. March 2012

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒ Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

B1. Historic Name: Unknown
B2. Common Name: The Black Residence
B3. Original Use: Residential/Agricultural B4. Present Use: Same
***B5. Architectural Style:** Spanish Colonial

***B6. Construction History:** No history of the building was discovered.

***B7. Moved?** ☐**No** ☐**Yes** ☒**Unknown** **Date:** **Original Location:**
***B8. Related Features:** N/A
B9a. Architect: N/A b. Builder: N/A
***B10. Significance: Theme:** Farm House **Area:** Western El Centro

Period of Significance: circa 1970 **Property Type:** Farm House
Applicable Criteria: N/A
The community is located in the Imperial Valley, approximately 10 miles southwest of El Centro. The construction of a canal system from the Colorado River in 1901 brought water via the Encina Canal (Westside Main Canal) to the area, liberating the productivity of ancient silt deposits and alluvium that comprise the region. Farmers and speculators were soon attracted by the Federal Government's Desert Land Entry program that allowed individuals to file for ownership on 160 acres of desert ground, or 320 acres for married couples. Pioneering settlers to the region lived in simple tents and lean-to's covered with woven tule mats. The typical valley home consisted of a tent house, frame built with a floor, lumber sides three-feet high, and a canvas top with arrow weed built over the canvas. The first "proper" wood frame homes and masonry buildings would not be erected until the middle of the first decade.

B11. Additional Resource Attributes: HP2. Single Family Property: Farm House; HP4. Ancillary Building: Mobile home and shed structure

***B12. References:**
Ching, Francis D.K., *A Visual Dictionary of Architecture*, John Wiley & Sons, Inc., 1995
Imperial County Historical Society, 1956-1958. *The Valley Imperial, Book I and Book II*. Published by Imperial Valley Pioneers. Revised and Reprinted, June 1991
Howe, Edgar F. and Wilbur Jay Hall, *The Story of the First Decade In Imperial Valley, California*. Edgar F. Howe and Sons, 1910. Reprinted by Imperial County Historical Society, December 1998.
Nuffer, David, *Saga of Imperial Valley*. Self-published. 1990

B13. Remarks: None

***B14. Evaluator:**
Brent D. Johnson
Chambers Group, Inc.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

***Date of Evaluation:** 4/24/2012



(This space reserved for official comments.)

PC ORIGINAL PKG

*Recorded by: Brent D. Johnson *Date: 4/24/2012 ☒ Continuation ☐ Update

Integrity Statement

In regard to the seven aspects of integrity of location, design, setting, materials, workmanship, feel and association, the building has retained its original location. The building's setting, feel and association appear to have remained intact since its construction. In addition, its original materials, and workmanship have remained intact. The integrity level of the property is good and the condition of the building is good.

National Register of Historic Places Eligibility Evaluation

The property was assessed under the National Register Criterion A for its potential significance as part of an historic trend that may have made a significant contribution to the broad patterns of history. The subject property cannot be said to represent a significant historic trend or event. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.**

The property was considered under Criterion B for its association with the lives of persons significant in our past. No information was discovered that would indicate an association with the lives of persons significant in the past.**Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.**

The property was evaluated under Criterion C for embodying the distinctive characteristics of a type, period, or method of Modern construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components lack individual distinction. The building does not represent a significant and distinguishable entity whose components may lack individual distinction. The building does not serve as a significant example of the style to qualify for National Register status. The building does not include significant artistic values and does not represent the work of a master architect or craftsman. No builders or architects associated with the construction of the building could be identified.The building retains its basic integrity in terms of mass and form. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.**

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures and objects to be eligible under this criterion, they need to "be, or must have been, the principal source of information." This is not the case with this property. **Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.**

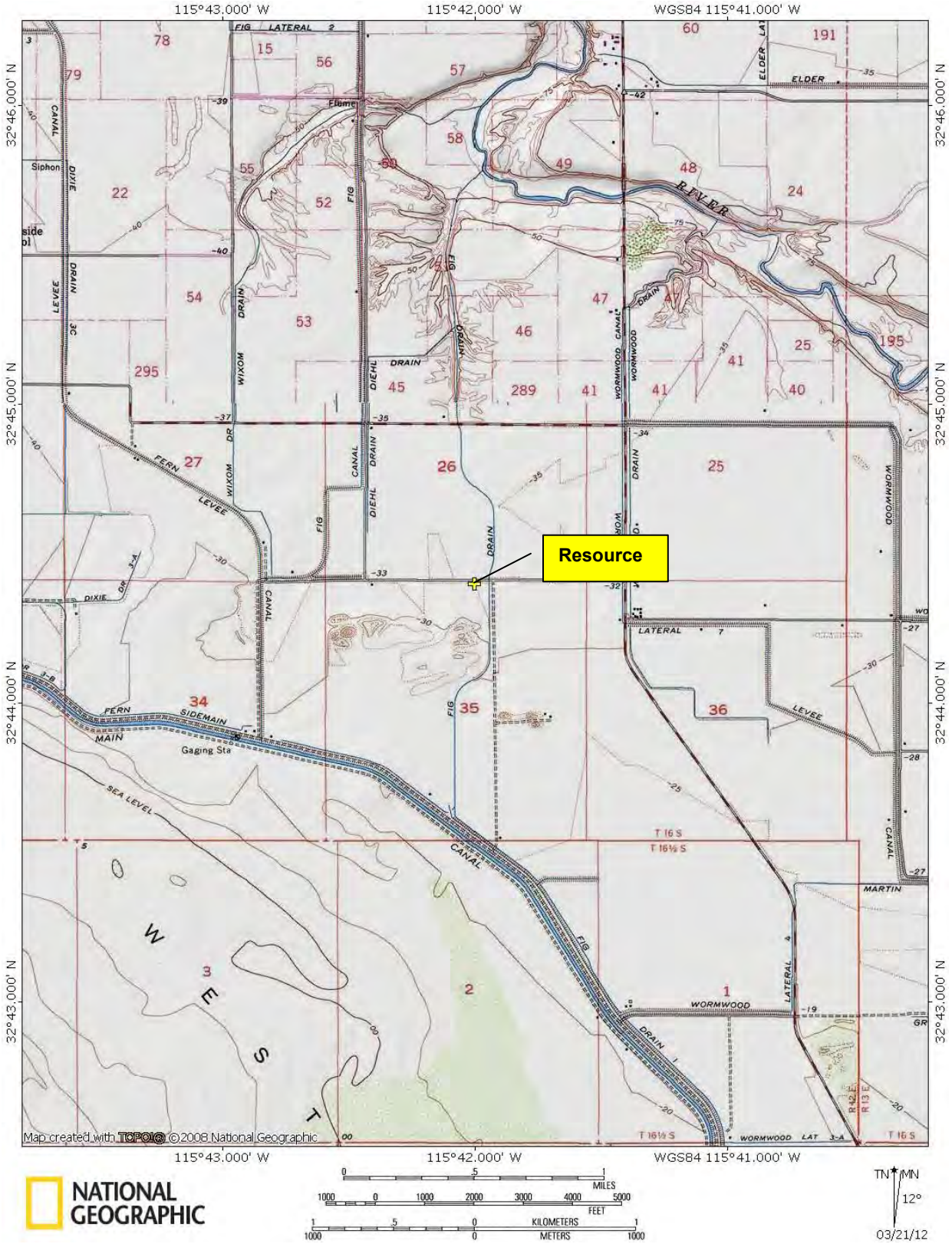
In summary, the property does not appear to qualify for the NRHP under Criterion A, B, C, and/or D. Therefore, the building is not potentially eligible for the NHPA.

PC ORIGINAL PKG

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial	P-13-014266

Page **4** of **4** *Resource Name or #: Building 7

***Map Name:** Mount Signal Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1990



DPR 523J (1/95)

PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # P-13-014975
HRI #
Trinomial
NRHP Status Code(s) 6Z

*Resource Name or #: Wixom Drain

☐ Continuation X Update

Map Reference Number: 10

P1. Other Identifier: N/A
e. Other Locational Data: North Datum: 11s, 620432.36 mE / 3625778.57 mN; Central Datum: 11s, 620289.97 mE / 3624767.05 mN; South Datum: 11s, 620529.20 mE / 3623256.37 mN

*P3a. Description: The Wixom Drain is an earthen-dug irrigation drainage ditch located east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixom Road. The 2-mile drainage ditch is approximately 10–20 feet wide and about 10–15 feet deep. Concrete weirs are located intermittently along the drain to control water flow. Wixom Drain was originally recorded in 2011 by ASM and there does not appear to be any changes to the resource since its original recordation (Photograph 1).

*P3b. Resource Attributes: HP20. Canal/Aquaduct

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

Wixom Drain was previously evaluated in 2011 by ASM and recommended as not eligible for listing in the NRHP or the CRHR. The property was assigned a status code of 6Z: found ineligible for the NRHP, CRHR, or local designation through survey evaluation. The previous recordation noted that Wixom Drain was constructed between 1922 and 1949 and assigned a construction date of ca. 1940 (Krintz 2011b: 1).

ASM Architectural Historian Jennifer Krintz determined that the Wixom Drain was a late, and modest, example of irrigation systems in Imperial Valley, California. The drain does not appear to be a significant representation of a significant historical trend or event and was recommended ineligible for Criteria 1/A. Krintz did not evaluate Wixom Drain for significance under Criteria 2/B, 3/C, or 4/D (Krintz 2011b: 1–3).

On April 11, 2023, Dudek revisited Wixom Drain and observed no noticeable alterations since the last recordation in 2011. Dudek concurs with the previous finding that the drain appears ineligible for Criteria 1/A. However, the drain is unlikely to be associated with the lives of persons significant to the community's, state's, or nation's past. As such, the drain appears ineligible for Criterion 2/B. The property also lacks the characteristics of a type, period, or construction method and does not appear to represent the work of a master, possess high artistic value, or represent a significant or distinguishable entity whose components lack individual distinction. Accordingly, the property does not appear eligible under Criterion 3/C. Wixom Drain is unlikely to yield information important to prehistory or history and, therefore, is recommended ineligible under Criterion 4/D. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code (Krintz 2011b: 1–3).

*B14. Evaluator: EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

*Date of Evaluation: August 15, 2023.

PC ORIGINAL PKG

Photograph(s):

Photograph 1. North section of Wixom Drain, view looking south. Photograph taken on April 11, 2023.



References

Krintz, J. 2011b. "DPR 523 Form set for the Wixom Drain." ASM Affiliates, Inc.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-014975
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** Wixom Drain
P1. Other Identifier:
***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County:** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Seeley **Date** 1957; 1976 **T** 16S **R** 13E; **¼ of** **of Sec** 54; S.B. **B.M.**
c. Address Vaughn and Jessup Roads City El Centro Zip 92243
d. UTM: (give more than one for large and/or linear resources) Zone 11S, 620299.60 mE/ 3624195.84 mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Wixom Drain is an earthen-dug irrigation drainage ditch constructed after 1922 and before 1949, possibly ca. 1940. It is located east of the Westside Main Canal and flows north to the New River from the Fig Canal at Liebert Road and West Wixcom Road in the Imperial Valley in Imperial County, CA. The two-mile drainage ditch is approximately 10-20 feet wide and about 10-15 feet deep.

(continued on page)

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/Aqueduct
***P4. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View of Wixom Drain looking south.
Photo taken November 2, 2011.

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
ca. 1940

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded by:** (Name, affiliation, and address)
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
2034 Corte Del Nogal
Carlsbad, CA 92011

***P9. Date Recorded:** November 2011

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.")
Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.

***Attachments:** ☐ NONE ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary #
HRI #

***NRHP Status Code** 6Z
***Resource Name or #** (Assigned by recorder) Wixom Drain

B1. Historic Name: Wixom Drain
B2. Common Name: Wixom Drain
B3. Original Use: Water Conveyance for Irrigation
B4. Present Use: Water Conveyance for Irrigation
***B5. Architectural Style:** None
***B6. Construction History:** **(Construction date, alterations, and date of alterations)**
ca. 1940
***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** None
B9a. Architect: None b. Builder: None
***B10. Significance: Theme** Agricultural Water Conveyances **Area:** Imperial Valley
Period of Significance: N/A **Property Type:** Irrigation Canal **Applicable Criteria:** N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Wixom Drain was an early irrigation drain for the agricultural fields of the Imperial Valley. The Wixom Drain was shown on 1949 aerial photos of the region, but was not present among the earliest irrigation systems known to exist by 1909. Drainage ditches were added to the Imperial Valley irrigation systems beginning in the 1920s to alleviate silt and build-up within the agricultural fields. Although the drainage ditch is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, this particular drain does not convey that theme as well as other similar resources such as the Westside Main and the All-American canals. Therefore, the Diehl Drain is recommended not eligible for the National Register of Historic Places nor the California Register of Historic Resources.

(continued on page)

B11. Additional Resource Attributes: (List attributes and codes) None

***B12. References:** None

B13. Remarks: None

***B14. Evaluator:** Jennifer Krintz

***Date of Evaluation:** November 2011

Sketch Map with north arrow required.

See Location Map on Next Page

(This space is reserved for official comments)

*Required Information

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Wixom Drain
***Map Name:** Location of Wixom Drain ***Scale:** 1:24,000 ***Date of Map:** November 15, 2011



*Required Information

PC ORIGINAL PKG

***Resource Name or #:** Portion of the Fig Canal

☐ Continuation X Update

Map Reference Number: 11

P1. Other Identifier: Fig Canal (portion), Fig Heading
e. Other Locational Data: East-west section- Datum A (west): 11s 620468.25 mE / 3623227.73 mN; Datum B (east) 11S 620796.90 mE / 3623236.10 mN. North-south section- Datum C (north): 11s 621096.18 mE / 3624595.66 mN; Datum D (south): 11s 621121.77 mE / 3623786.70 mN.

***P3a. Description:** This portion of the Fig Canal is a trapezoidal concrete-lined channel with various widths and depths as it meanders and follows along the boundaries of several agricultural fields along Derrick Road and Wixom Road before terminating at the Westside Main Canal. The Fig Canal spans more than 4 miles and is predominantly 10 feet wide and approximately 6 feet deep. Sections of the canal vary in width as it traces along the boundaries of nearby agricultural fields. The Fig Heading, comprising two concrete-lined winged wall culverts and two metal gate structures, is associated with the canal (Photograph 1).

***P3b. Resource Attributes:** HP20: Aqueduct/Canal

***P8. Recorded by:** Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

***P11. Report Citation:** Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

***B10. Significance:**
Five previous historical studies document the subject portion of the Fig Canal. In the 1983 draft report Lake Cahuilla (East Mesa Segment) Management Plan and Environmental Assessment, BLM recommended that the All-American Canal be found eligible for the NRHP as part of a district under Criteria A and C. BLM communicated with SHPO and addressed comments on boundaries, significance criteria, setting, and national versus local levels of significance. After the comments were addressed, SHPO elected not to comment on the undertaking. BLM presumed SHPO concurrence in accordance with a Programmatic Agreement between the two agencies (BLM 1983; Schaefer and O'Neil 2001: v).

In 2001, IID employed ASM to complete an inventory and evaluation report for the entire All-American Canal system. ASM employees Jerry Schaefer and Collin O'Neill conducted an inventory system composed of 148 miles of main canals, 1,438 miles of laterals, and 1,406 irrigation and drainage ditches. ASM concurred that the entire All-American Canal system (trinomial CA-IMP-7130H), including components under 50 years old, was eligible for the NRHP for its historical and engineering significance. ASM conducted preliminary research for "any future efforts to actually nominate the AAC [All-American Canal] to the National Register of Historical Places, possibly as part of a larger district that would include the Imperial Dam and distilling plant, the Coachella Canal, and all the mains, laterals, and drains throughout the Imperial Valleys" (Schaefer and O'Neil 2001: 1). ASM concluded that the All-American Canal is eligible for the NRHP, CRHR, and local level as a historic district under Criteria A and C because of its association with a major federal public works project, IID, and Imperial Valley. ASM recommended that although "all of the elements of the canal evaluated here [are] significant contributing elements of a district, even if they are less than 50 years old, additional research is required to determine if all the elements are contributory prior to any NR nomination submittals" (Schaefer and O'Neil 2001: 71).

In 2009, URS evaluated (but did not survey) a portion of the Fig Canal, a component of the All-American Canal irrigation system. URS documented that the subject portion of the 4-mile-long Fig Canal, constructed in ca. 1912 was altered over time through dredging and widening. Date stamps indicate that the concrete on the canal was updated in the mid-1950s. URS concluded that the subject portion of the Fig Canal appeared ineligible for the NRHP due to a lack of significant historical associations and historic integrity. URS stated that the canal was constructed several years after the All-American Canal opened, but substantial

PC ORIGINAL PKG

*B10. Significance(continued):

improvements and reconstruction do not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials).

In summary, in 2009, URS recommended that the portion of the Fig Canal near Evan Hewes Highway did not appear to be individually eligible for listing in the NRHP, CRHR, or considered a historical resource for purposes of CEQA. In 2011, ASM Architectural Historian Jennifer Krintz concurred with URS's recommendation that the canal be found ineligible for a lack of historical associations and integrity. In the same year, a subsequent study conducted by Chambers Group also concurred with URS's earlier recommendation (URS 2009a: 1-3; Krintz 2011d: 2; Johnson et al. 2011a: 1, 4).

On April 11, 2023, Dudek revisited the subject portion of the Fig Canal and did not observe any noticeable alterations since the last recordation. Dudek also reviewed all available documentation pertaining to this portion of the Fig Canal and concurs that the aqueduct does not meet any criteria for listing in the NRHP or CRHR. In 1983, BLM recommended that this ancillary canal may be eligible for the NRHP because of its association with the All-American Canal but requested that additional research be conducted to confirm its eligibility. ASM and URS conducted subsequent studies in 2001, 2009, and 2011 and recommended that the canal be found ineligible for recordation due to a lack of integrity. Dudek disagrees that routine maintenance, required to keep the aqueduct operational, disqualifies this portion of the Fig Canal from recordation on the NRHP. This portion of the Fig Canal is an ancillary extension of an extensive water conveyance system designed to irrigate individual, private agricultural ventures. The Fig Canal's mere association with the All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. This portion of the Fig Canal does not represent any significant historical trends associated with any important persons, architecturally significant, or likely to yield additional information about pre-history or history. As such, this portion of the Fig Canal appears ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

*B14. Evaluator: EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

*Date of Evaluation: August 15, 2023.

Photograph(s):

PC ORIGINAL PKG

Photograph 1. North section of Fig Canal, view looking south. Photograph taken on April 11, 2023.



References

BLM (Bureau of Land Management). 1983. *Draft Lake Cahuilla (Est) Mesa Segment) Management Plan and Environmental Assessment.*

Johnson, B.D., C. Bodmer, et al. 2011. "DPR Form set for the Fig Canal." Chambers Group, Inc.

Krintz, J. 2011. "DPR Form set for the Fig Canal and Drain Update." ASM Affiliates, Inc.

Schaefer, J., and O'Neil, C. 2001. *The All-American Canal: An Historic Properties Inventory and Evaluation.* Completed by ASM Affiliates for the Imperial Irrigation District (IID). On file at the San Joaquin Valley Information Center

URS Corporation. 2009. "DPR Form set for the portion of Fig Canal."

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 13-012693 Update
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

***Resource Name or #:** Portion of Fig Canal

P1. Other Identifier: N/A

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** Imperial

***b. USGS 7.5' Quad:** Mount Signal **Date:** 2010 **T** 16S; **R** 12E; SE ¼ **of Sec** 27; S.B.B.M.

c. Address: N/A City: N/A Zip: N/A

d. UTM: Zone: 11N; 620471mE/ 3623231mN (G.P.S.) NAD 83

e. Other Locational Data: Elevation: -9 m below sea level

The Fig Canal is located approximately ten miles south west from the town of El Centro. Approximately seven miles west of El Centro along Hwy 8 is the intersection of Drew Road. When traveling west on Hwy 8 towards this intersection, take exit 107 for Drew Road toward Seeley. Merge onto Drew Road heading south bound. Continue along Drew Road for 2.3 miles to reach W Wixom Road. Turn west onto W Wixom Road and continue on this road for 1.4 miles. Find a place to park at the intersection of W Wixom Road and Liebert Road. The Fig Canal is located in the north east corner of this intersection.

***P3a. Description:** Site 13-12693 is a portion of the Fig Canal, (ca. 1912?) that is a concrete-lined channel with various widths and depths as it meanders and follows along the boundaries of several agricultural fields along Derrick Road and Wixom Road within the APE before terminating at the Westside Main Canal. This structure was previously recorded in May of 2009 by USR Corporation. The Fig Canal spans over four miles with its termination points to the north at Fern Canal and to the south at the Westside Main Canal. The chanel is concrete lined with changing widths and depths tracing the boundaries of the nearby agricultural fields. Incorporated in a portion of the canal are two concrete lined winged wall culverts and two metal gate structures. A date stamp of 1954 was embossed on the south end of the concrete foundation. The condition of the site remains similar to the description provided by URS Corp previous site update.

***P3b. Resource Attributes:** HP20 Canal/Aqueduct

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☒Other (Isolates, etc.)

P5a. Photo



P5b. Description of Photo: Photo# 113845, Fig Canal, facing east

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:**
C.Bodmer, B. Bartram, B. Johnson
T. Murphy, S. Wintergerst
Chambers Group Inc.,
5 Hutton Centre Drive, Ste. 750,
Santa Ana, CA 92707

***P9. Date Recorded:** 11/19/2011

***P10. Survey Type:**
Pedestrian survey (15 meter transect intervals)

***P11. Report Citation:** A Class III Cultural Resources Inventory For The Agile Energy, Inc. Silverleaf Photovoltaic Solar Project Near The City Of El Centro Imperial County, California

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder) Fig Canal

B1. Historic Name: Fig Canal
B2. Common Name: Fig Canal
B3. Original Use: Irrigation Ditch
B4. Present Use: Irrigation Ditch

***B5. Architectural Style:** N/A

***B6. Construction History:** The construction date of Fig Canal is unknown at present;however, the canal is shown on maps as early as 1912. In the 1912 A.G. Thurston Irrigation District and Road Map, the Fig Canal follows the same general alignment as it does today. Review of the 1940 Brawley 15-minute USGS quadrangle map, 1949 USDA Aerial Photograph Collection, the 1957 Brawley and Seeley 7.5-Minute USGS quadrangle maps and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the canal has remained consistent for most of its history.

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** None

B9a. Architect: N/A
b. Builder: Imperial Irrigation District

***B10. Significance: Theme:** N/A **Area:** West El Centro, Imperial County
Period of Significance: N/A **Property Type:** Irrigation Ditch **Applicable Criteria:** N/A

In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A

***B12. References:**
See Continuation Sheet 523L (Page 6)

B13. Remarks:

(Sketch Map with north arrow required.)

See Continuation Sheet 523L (Page 5)

***B14. Evaluator:** Jeremy Hollins

***Date of Evaluation:** 5/19/2009

(This space reserved for official comments.)

PC ORIGINAL PKG

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States in approximately 1906 was intended to alleviate irrigation problems and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigaci_n y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

PC ORIGINAL PKG

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

The Fig Canal, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Fig Canal (which is a related feature to the larger Westside Main Canal and All-American Canal), appears to be NRHP- and CRHR-eligible. It does not appear to be associated with the lives of significant people or likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

Overall, the Fig Canal as a whole does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Fig Canal at the crossing of Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. There are numerous improvements from outside of the period of significance, 1941 to 1950, evidenced by the date stamped culverts. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal systems or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.

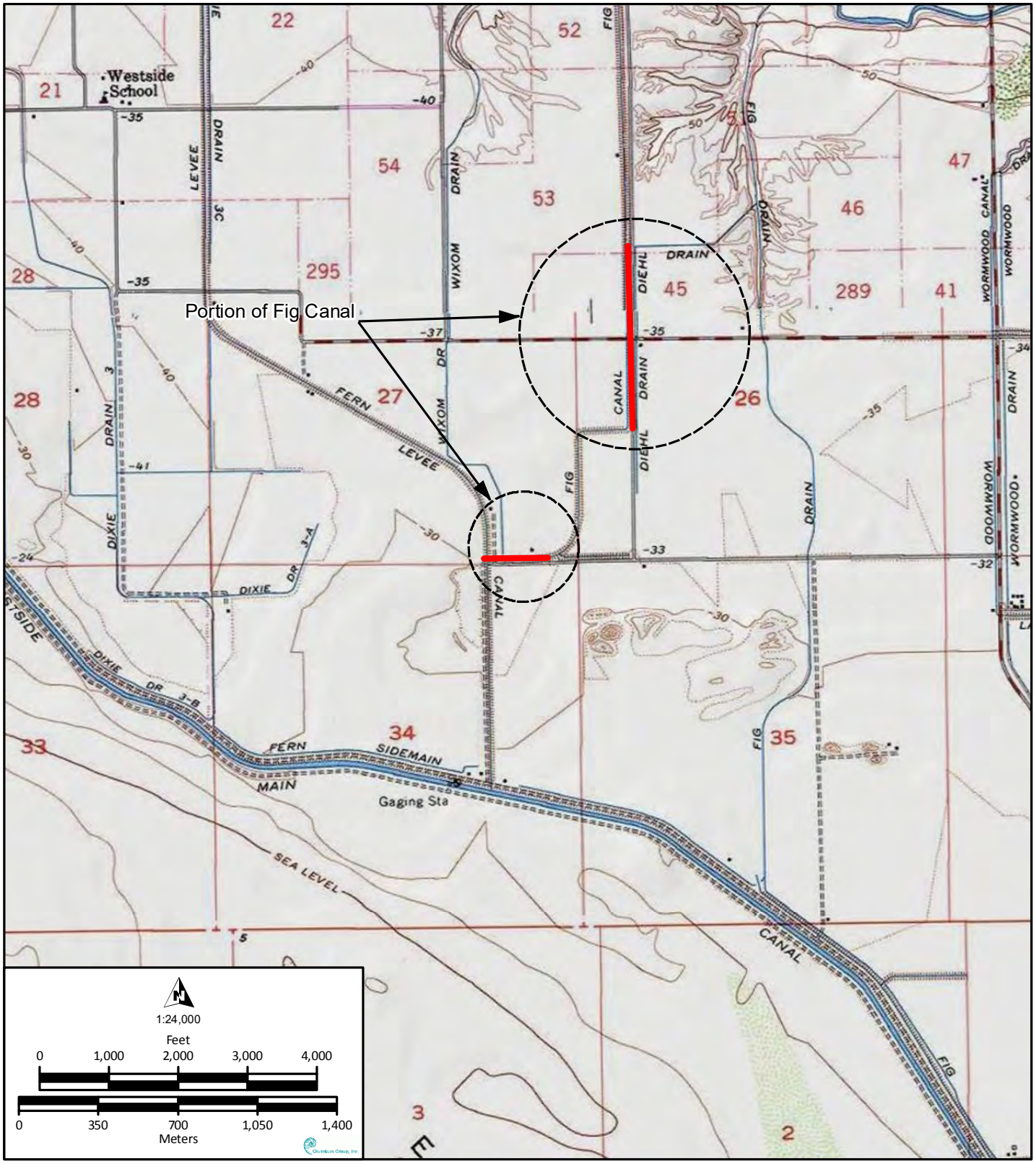
In summary, the portion of the Fig Canal does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed Solar Farm within the APE of the existing Fig Canal would not create a new adverse effect or significant impact to the portion of the historic period property.

PC ORIGINAL PKG

State of California — The Resources Agency	Primary # 13-12693
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 5 **of** 6 ***Resource Name or #:** Portion of Fig Canal

***Map Name:** Mount Signal ***Scale:** 1:24,000 ***Date of Map:** 2010



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program.

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway.
Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

PC ORIGINAL PKG

P-33-012693 is an irrigation feature, Fig Canal. In May of 2009, URS recorded a portion of this canal. The site was described as follows:

The portion of Fig Canal near Evan Hewes Highway is a concrete lined channel with varying widths and depths that range from approximately 5 to 15 feet wide , and 3 to 8 feet deep, respectively. The northern portion of the Fig Canal meanders and follows the boundaries of the nearby agricultural fields and unpaved roads adjacent to the canal. The canal appears to be trapezoidal and features concrete and earthen banks with very little vegetation. This portion of the canal also features two concrete winged wall culverts and two metal gate structures to control the flow of water. A 1951 date stamp appears on the wall of one of the culverts. The Fig Canal generally runs perpendicular to and beneath Evan Hewes Highway through a winged wall culvert. A short metal guardrail frames the highway crossing. The portion of Fig Canal south of the highway features a turnout with a wood and metal gate structure. A 1959 date stamp appears on the winged wall of the culvert south of the highway.

During a recent survey conducted by kp environmental (KPE), an additional segment of this canal as well as additional features related to this resource were documented. These consist of Fig Heading and a 1264' segment of Fig Canal and Levee. Fig Heading is situated at the intersection of Liebert Road and Wixom Road. The heading receives water from Fern Check/Canal adjacent to the west. As the water level rises, it is released into the lateral canal (Fig Canal) to the east and flows through several delvery gates (Gate 3) to be used for irrigation of crops located in fields to the north.



IMG_2777 View to West.
Fig Heading

PC ORIGINAL PKG

Fig Heading and Fig Canal, as a whole, are associated with the Westside Main Canal system and reflect the development associated with the construction and operation of the All-American Canal between 1941 and 1950.

An assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, found that the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. According to the BLM website, the All American Canal is eligible for State inclusion on the NRHP. By extension, the Westside Main Canal and the Fig Heading and Canal, both of which appear to retain sufficient historic integrity aspects of location and materials, appear to be NRHP- and CRHR- eligible.

URS Corporation however, entered a NRHP status code of 6Z. Meaning that the resource had been found ineligible for listing in the National Register through an evaluation process other than a determination by the Keeper of the National Register or through a consensus determination of a federal agency and the State Historic Preservation Officer. The reason stated on the site form is as follows:

"Overall, the Fig Canal as a whole does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Fig Canal at the crossing of Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. There are numerous improvements from outside of the period of significance, 1941 to 1950, evidenced by the date stamped culverts. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal systems or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA".

This resource has not been surveyed in its entirety; however, Shannon Davis (ASM Affiliates, Inc.) did evaluate the segments within the Campo Verde Solar Project APE and recommended the Fig Canal not eligible for the NRHP and CRHR. Although the Fig Canal is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, it does not convey that theme as well as other similar resources such as the Westside Main and the All-American canals, in part due to their loss of integrity (Davis et al. 2011; Mitchell 2011).

A Sketch map and Location map have been generated reflecting these additions.

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

PC ORIGINAL PKG

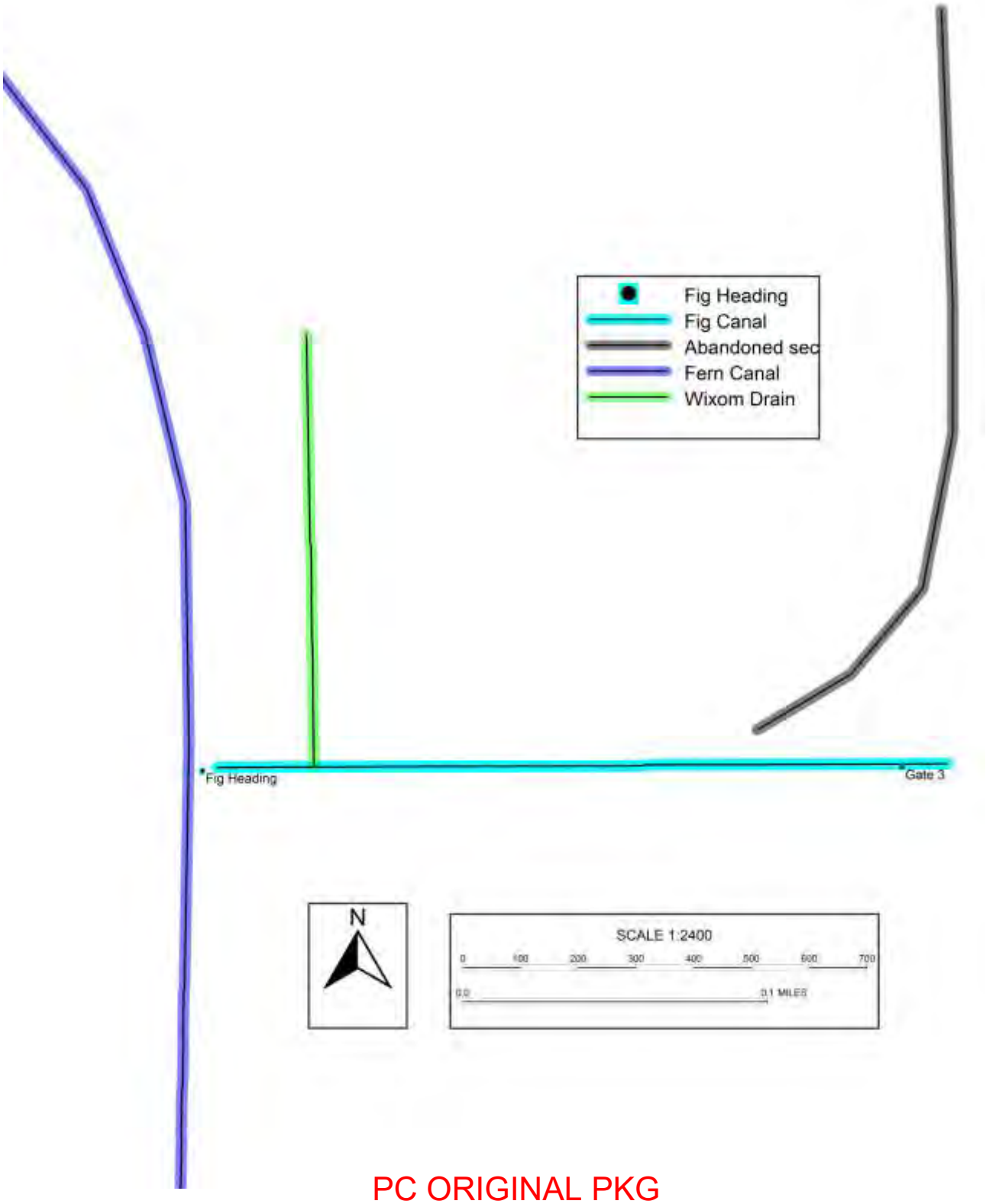
State of California — The Resources Agency **Primary #** P-13- 012693 UPDATE
DEPARTMENT OF PARKS AND RECREATION **HRI#**
PHOTOGRAPH RECORD **Trinomial**

Page 3 **of** 5 **Resource Name or #:** Fig Canal (portion), Fig Heading **Year** 2011

Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives Kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Subject/Description	View Toward	
11	03	2774	Fern check	N	
11	03	2775	1974 date stamp	D/N	
11	03	2776	Fern canal south side of Wixom	D/S	
11	03	2777	Fig Heading	W	
11	03	2778	Bridge to residence	W	
11	03	2779	Bridge to residence north of Wixom	N	
11	03	2780	Wixom drain	NW	
11	03	2781	Irrigation drain north of Wixom	W	
11	03	2782	Irrigation gate	N	
11	03	2783	Modern trash	D	
11	03	2784	Fig Canal looking towards heading	W	
11	03	2785	Concrete pillar WSM 11	NW	
11	03	2786	Siphon	N	
11	03	2787	Turnout 3 on Fig has drop gate		
11	03	2788	Culvert culvert feeds fields from turnout 3	N	
11	03	2789	Turnot at west end of concrete ditc	N	
11	03	2790	Memorial on south side of Diehl	S	
11	03	2791			

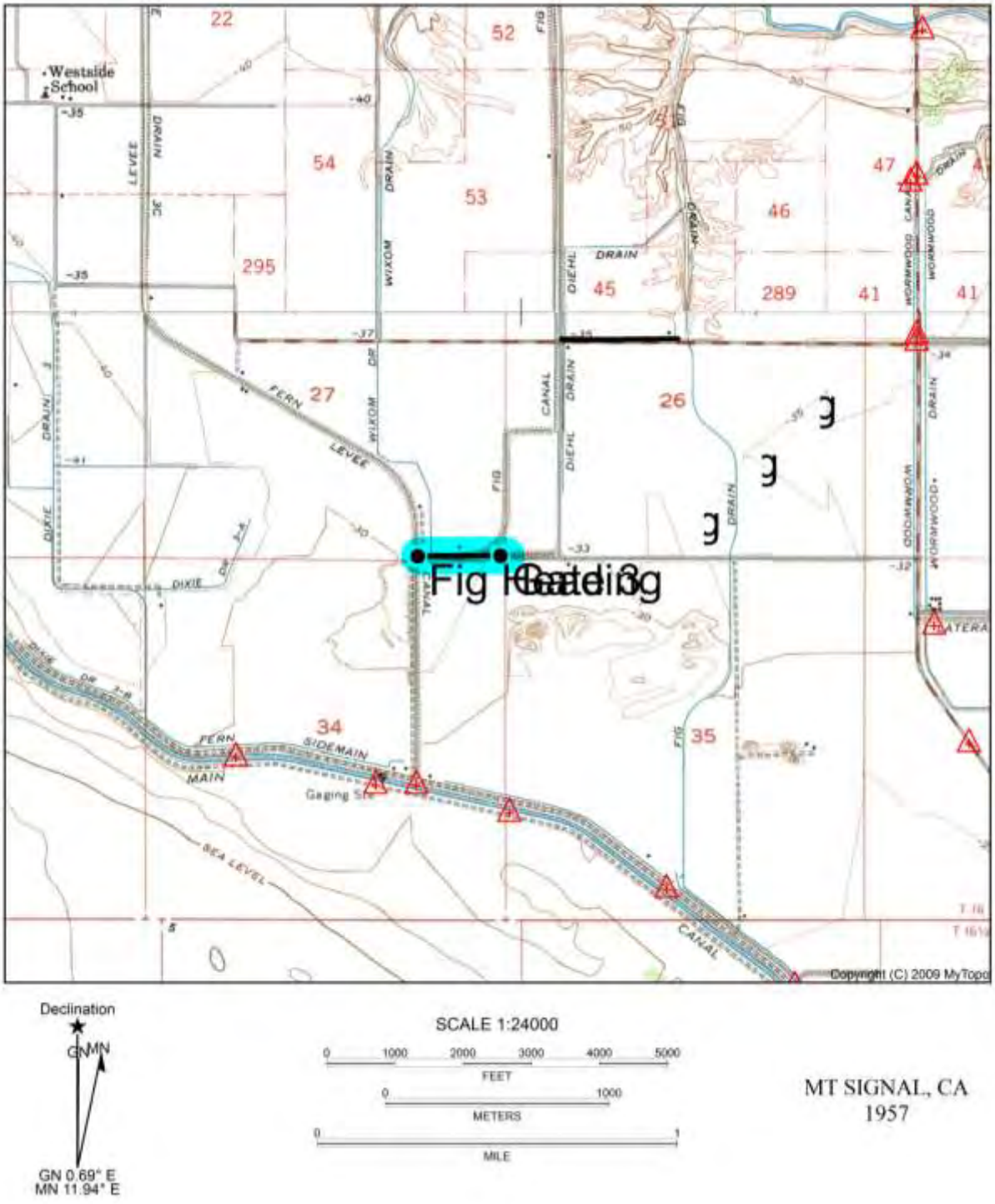
PC ORIGINAL PKG



PC ORIGINAL PKG

State of California — The Resources Agency **Primary #** P-13-012693 update
DEPARTMENT OF PARKS AND RECREATION **HRI#**
LOCATION MAP **Trinomial**
Page 5 **of** 5 ***Resource Name or #:** Fig Canal (portion), Fig Heading

***Map Name:** Mt. Signal, Calif ***Scale:** 1:24,000 ***Date of Map:** 1957



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial P-13-012693 (Fig Canal)
NRHP Status Code: 6Z

Page 1 of 3 ***Resource Name or # (Assigned by recorder)** Fig Canal and Drain
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

P1. Other Identifier:
***P2. Location:** ☒ Not for Publication ☐ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Seeley **Date:** 1957; **T** 16 S; **R** 12 E; **of Sec.** 26; S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; 621098.38**mE /** 3623261.99**mN**;
***P3a. Description:** The Fig Canal is an irrigation canal constructed circa 1909. It is located east of the Westside Main Canal and flows north from the Fern Canal at Leibert Rd. and West Wixom Rd. to the Fig Spill around Evan Hewes Hwy. (Old Hwy. 80) near Seeley in the Imperial Valley in Imperial County, CA. The canal is approximately 10 feet wide and about 6 feet deep. The canal is lined with concrete. Modifications were added to the canal in the 1970s.

The Fig Canal system also includes drains that remove the salinity from agricultural lands. The Fig Drain is an earthen dug irrigation drainage ditch located between Drew and Derrick roads and flows north to the New River. The drain is approximately 10 ft. wide and about 6 ft. deep. It was originally constructed after 1922 and before 1949, possibly ca. 1940. The entire drain is approximately 4 miles long.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct
P5a. Photograph or Drawing:



P5b. Description of Photo:
View looking north at Fig Canal.
Photo taken November 2, 2011.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 2 of 3 ***Resource Name or # (Assigned by recorder)** Fig Canal and Drain
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

P5a. Photograph or Drawing:



P5b. Description of Photo:
View looking south at Fig Drain.
Photo taken November 2, 2011.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Fig Canal c. 1909, Fig Drain c. 1940
1909 El Centro 15-minute US Army Corps Topo map
1949 Imperial County Aerials, US Dept of Agriculture
1991 *The Use of Tile Drainage in the Reclamation of the Imperial Valley*. Master's Thesis. University of San Diego.
Date stamps in canal cement indicates modifications in 1970s

***P7. Owner and Address:**
Imperial Irrigation District
333 East Barioni Blvd.
Imperial, CA 92251

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** November 2011
***P10. Survey Type:** Intensive
P11. Report Citation: Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.

***B10. Significance: Theme:** Irrigation Water Conveyance Systems **Area:** Imperial Valley

Period of Significance: N/A **Property Type:** Irrigation System **Applicable Criteria:** N/A
Fig Canal was one of the earliest irrigation canals in the Imperial Valley, constructed in 1908 and the associated Fig Drain was constructed ca. 1940. According to a previous evaluation by URS Corporation, the Fig Canal was recommended not eligible for the NRHP or the CRHR for the loss of integrity from regular dredging and widening of the canals and drains over time to alleviate problems of silt and build-up. Although the canal is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, neither the Fig Canal nor the Fig Drain convey that theme as well as other similar resources such as the Westside Main Canal and the All-American canals—in part due to their loss of integrity. Therefore the Fig Canal is recommended not eligible for the National Register of Historic Places nor the California Register of Historic Resources.

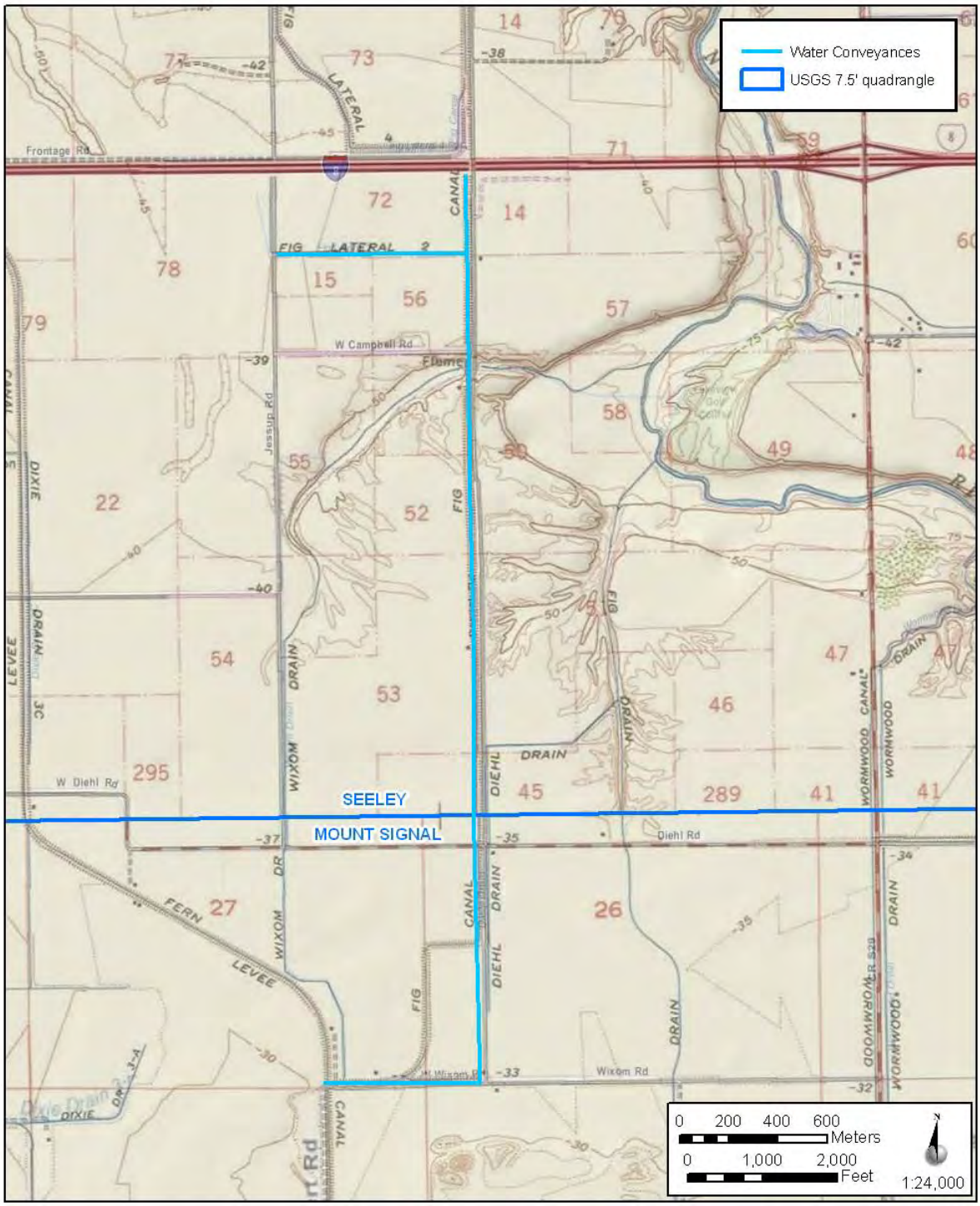
PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Fig Canal and Drain
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Fig Canal and Fig Drain



*Required Information
PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

*** a. County** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*** b. USGS 7.5'** Brawley **Date** 1957 **T** 16S **R** 12E ; ¼ ¼ **of** 11 ; SB **B.M.**

c. Address N/A City N/A Zip N/A

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 621032 mE/ 3628890 mN

e. Other Locational Data: (e.g., parcel I, directions to resource, elevation, etc., as appropriate)

The portion of the Fig Canal surveyed is a small segment of a larger historic-period linear property that travels generally north to south, perpendicular to Evan Hewes Highway for approximately four miles and is approximately one mile from the townsite of Seeley. The Fig Canal appears to terminate to the north at Fern Canal and to the south at the Westside Main Canal. The canal also possesses two laterals that extend west of the main Fig Canal and are located south of Evan Hewes Highway. The UTMs provided above is the approximate centerpoint of the portion of the canal surveyed.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The portion of Fig Canal near Evan Hewes Highway is a concrete lined channel with varying widths and depths that range from approximately 5 to 15 feet wide , and 3 to 8 feet deep, respectively. The northern portion of the Fig Canal meanders and follows the boundaries of the nearby agricultural fields and unpaved roads adjacent to the canal. The canal appears to be trapezoidal and features concrete and earthen banks with very little vegetation. This portion of the canal also features two concrete winged wall culverts and two metal gate structures to control the flow of water. A 1951 date stamp appears on the wall of one of the culverts. The Fig Canal generally runs perpendicular to and beneath Evan Hewes Highway through a winged wall culvert. A short metal guardrail frames the highway crossing. The portion of Fig Canal south of the highway features a turnout with a wood and metal gate structure. A 1959 date stamp appears on the winged wall of the culvert south of the highway. SEE CONTINUATION SHEET 523L (PAGE 3)

***P3b. Resource Attributes:** (List HP20. Canal/Aqueduct

***P4. Resources Present:** ☐ **Building** ☒ **Structure** ☐ **Object** ☐ **Site** ☐ **District** ☐ **Element of District** ☐ **Other** (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (view, date, accession #)
View of canal north of Evan Hewes Highway looking east, March 2009

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Approximately 1912 - 1912 A.G.
Thurston Irrigation District & Road Map

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:** (name, affiliation, and address)
URS Corporation
1615 Murray Canyon Rd., Suite 1000
San Diego, CA 92108

***P9. Date Recorded:** 05/2009

***P10. Survey Type:** (Describe)
Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Mutaw, Robert J. (Ph.D.), Elizabeth B. Roberts, Gordon C. Tucker Jr., Ph.D., Brian Shaw, Terrie Bagwell, Colin O'Hanlon, Rachael Nixon, Gary Fink, Jeremy Hollins, Mark Neal. 2010 Draft Final Class III Confidential Cultural Resources Technical Report for the Imperial Valley Solar (formerly Solar 2), Imperial Valley County. URS Corporation. Technical report prepared for Tessera Solar (Applicant). Submitted to the Bureau of Land Management – El Centro Field Office, El Centro, CA. Copies available from the Bureau of Land Management – El Centro Field Office, El Centro, CA.

***Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Are Record ☐ Artifact Record ☐ Photograph Record
☐ Other (List): _____

PC ORIGINAL PKG

*** Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # _____
HRI # _____

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

Page 2 of 8 *Resource Name or #: (Assigned by recorder) Portion of Fig Canal

B1. Historic Name: Fig Canal
B2. Common Name: Fig Canal
B3. Original Use: Irrigation Ditch B4. Present Use: Irrigation Ditch
*B5. **Architectural Style:** N/A
*B6. **Construction History:** (Construction date, alterations, and date of alterations)
Actual construction date of the Fig Canal is unknown at present, despite efforts to contact the Imperial Irrigation District for construction date and information. However, the canal is shown on maps as early as 1912. In the 1912 A.G. Thurston Irrigation District and Road Map, the Fig Canal follows the same general alignment as it does today. Review of the 1940 Brawley 15-minute USGS quadrangle map, 1949 USDA Aerial Photograph Collection, the 1957 Brawley and Seeley 7.5-Minute USGS quadrangle maps and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the canal has remained consistent for most of its history.
*B7. **Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
*B6. **Related Features:**
None

B9. Architect: N/A b. Builder: Unknown
*B10. **Significance: Theme** N/A **Area** Seeley, Imperial County
Period of Significance N/A **Property Type** Irrigation Ditch **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).
B11. Additional Resource Attributes: (List attributes and codes) N/A
*B12. **References:**
SEE CONTINUATION SHEET 523L (PAGE 6)

B13. Remarks:
None

(Sketch Map with north arrow required)
SEE CONTINUATION SHEET 523L (PAGE 5)

*B14. **Evaluator:** Jeremy Hollins
***Date of Evaluation:** 05/2009

(This space reserved for official comments)

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

Page 3 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal
***Recorded by:** URS Corporation ***Date:** 05/2009
☒ Continuation ☐ Update

P3a. Description (Continued)

The Evan Hewes Highway crossing at the Fig Canal shows evidence of chipping, cracking, and spalling due to environmental effects (sun and heat exposure) and travel. Overall, the portion of the Fig Canal that bisects Evan Hewes Highway is in good condition, but has been affected by non-historic period construction and features, including the crossing.

B10. Significance (Continued)

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States approximately 1906 was intended to alleviate irrigation problems, and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal
***Recorded by:** URS Corporation *** Date:** 05/2009
☒ Continuation ☐ Update

B10. Significance (Continued)

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigación y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. For example, the Fig Canal features several culverts and other structural improvement s from the 1950s. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

The Fig Canal, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Fig Canal (which is a related feature to the larger Westside Main Canal and All-American Canal), appears to be NRHP- and CRHR- eligible. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

Overall, the Fig Canal as a whole does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Fig Canal at the crossing of Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. There are numerous improvements from outside of the period of significance, 1941 to 1950, evidenced by the date stamped culverts. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal systems or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.

In summary, the portion of the Fig Canal near Evan Hewes Highway does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed water line perpendicular to the existing Fig Canal would not create a new adverse effect or significant impact to the portion of the historic-period property that bisects the Evan Hewes Highway.

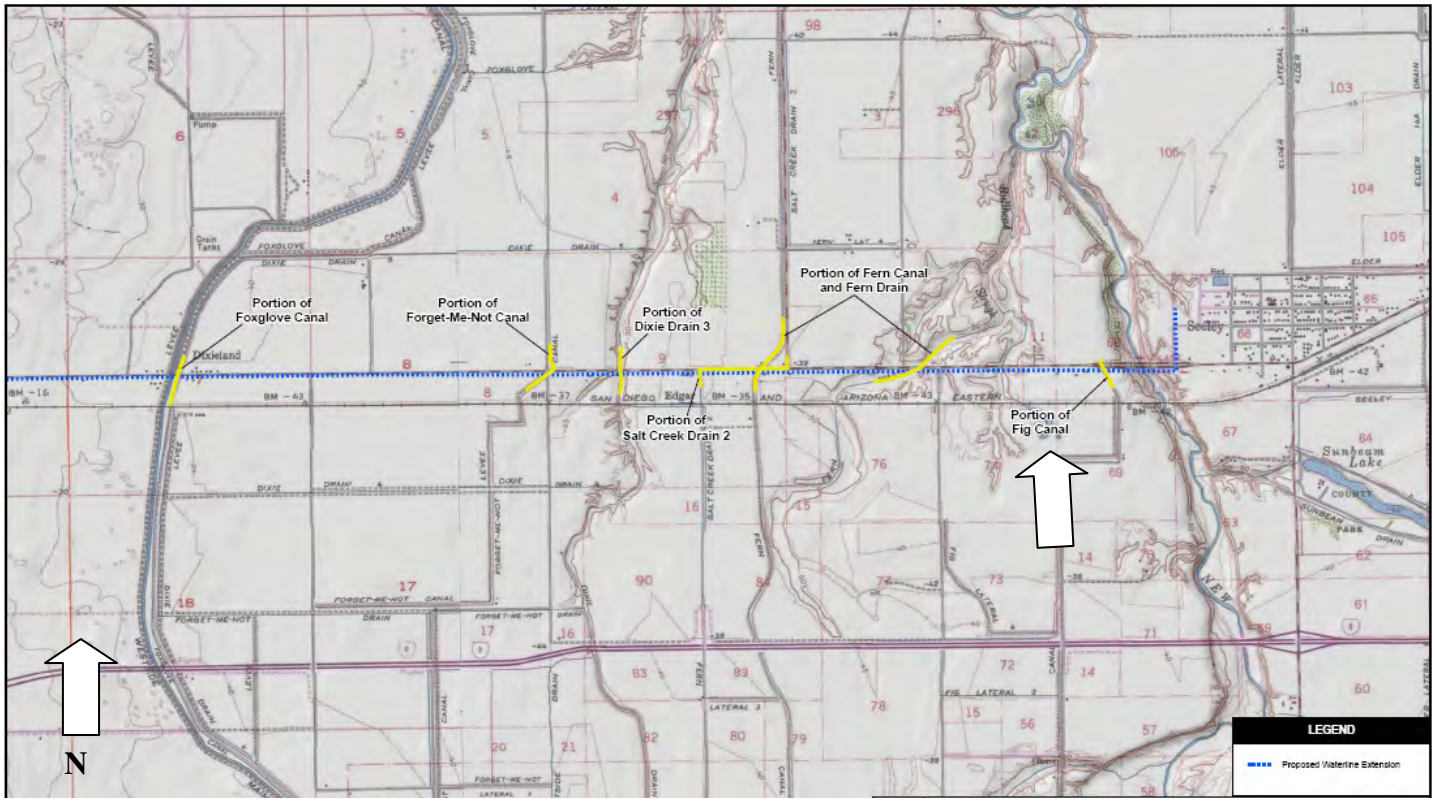
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

Page 5 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal
***Recorded by:** URS Corporation ***Date:** 05/2009
☒ Continuation ☐ Update

Sketch Map:

Not to scale



PC ORIGINAL PKG

* Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal
***Recorded by:** URS Corporation *** Date:** 05/2009
☒ Continuation ☐ Update

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

Page 7 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal
***Recorded by:** URS Corporation ***Date:** 05/2009
☒ Continuation ☐ Update

Additional Photos:



View of culverts and gate structures located in portion of canal north of Evan Hewes Highway



View looking south of Evan Hewes Highway

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

Page 8 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Fig Canal
***Recorded by:** URS Corporation ***Date:** 05/2009
☒ Continuation ☐ Update

Additional Photos:



View of gate structure and turnout in canal south of Evan Hewes Highway

*Resource Name or #: Portion of the Fern Canal and Fern Side Main

☐ Continuation X Update

Map Reference Number: 12

P1. Other Identifier: N/A
e. Other Locational Data: 900-foot segment of the northwest-southwest oriented segment directly north of Mandrapa Road. Datum A (north): 11S 620603.22 mE / 3622222.77 mN; Datum B (south): 11S 620862.78 mE / 3622162.48 mN.

*P3a. Description: This portion of the 10-mile-long Fern Canal system is a trapezoidal concrete-lined channel that is approximately 20 feet wide and 10 feet deep. The canal travels beneath Evan Hewes Highway through a concrete-lined winged wall culvert (stamped 1953) while the south portion has a wood and metal control gate constructed across the mouth of the culvert. The canal features a concrete and earthen bank (Photograph 1).

*P3b. Resource Attributes: HP20: Aqueduct/Canal

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

Five previous historical studies document the subject portion of the Fern Canal and Fern Side Main. In the 1983 draft report Lake Cahuilla (Est Mesa Segment) Management Plan and Environmental Assessment, BLM recommended that the All-American Canal be found eligible for the NRHP as part of a district under Criteria A and C. BLM communicated with SHPO and addressed comments on boundaries, significance criteria, setting, and national versus local levels of significance. After the comments were addressed, SHPO elected not to comment on the undertaking. BLM presumed SHPO concurrence in accordance with a Programmatic Agreement between the two agencies (BLM 1983; Schaefer and O'Neil 2001: v).

In 2009, URS reevaluated but did not survey the canal segments and recommended that they be ineligible for the NRHP and CRHR due to a lack of significant historical associations and historic integrity. URS disagreed with the U.S. Bureau of Reclamation (USBR) and OHP's determination that the canal is a contributing element or significant related feature/component to the larger linear All-American Canal. For integrity, URS stated that the canal was originally constructed in ca. 1909, but substantial improvements and reconstruction may have occurred since the 1940s, as evidenced by the date-stamped culverts. Routine dredging and widening of canals and drains were also conducted to alleviate problems of silt and buildup. URS also stated that the Fern Canal crossing at Evan Hewes Highway does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). In summary, In 2009, URS recommended that the portion of the Fern Canal near Evan Hewes Highway did not appear to be individually eligible for listing in the NRHP or CRHR nor considered a historical resource for purposes of CEQA. In 2011, ASM Architectural Historian Jennifer Krintz concurred with URS's recommendation that the canal be ineligible for a lack of historical associations and integrity. In the same year, a subsequent study conducted by Chambers Group also concurred with URS's earlier recommendation (URS 2009b: 1-3; Krintz 2011e: 2; Johnson et al. 2011b: 1, 4).

On April 11, 2023, Dudek revisited this portion of the Fern Canal and did not observe any noticeable alterations since the last recordation in 2011. Dudek also concurs that the aqueduct does not meet any of the criteria for listing in the NRHP or CRHR. In 1983, BLM recommended that this ancillary canal may be eligible for the NRHP because of its association with the All-American Canal. However, it requested that additional research be conducted to confirm its eligibility. URS and ASM conducted subsequent studies in 2009 and 2011 and recommended that the canal be found ineligible for recordation due to a lack of integrity and historical associations. Dudek disagrees that routine maintenance, required to keep the aqueduct operational, disqualifies this portion of the Fern Canal from recordation on the NRHP. This canal, however, is an ancillary extension of an extensive water conveyance system designed to irrigate individual, private agricultural ventures. The Fern Canal's mere association with the All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. This portion of the Fern Canal and the Fern Side Main does not represent any significant historical trends associated with any

PC ORIGINAL PKG

important persons, architecturally significant, or likely to yield additional information about pre-history or history. As such, this portion of the Fern Canal appears ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

***B14. Evaluator:** EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

***Date of Evaluation:** August 15, 2023.

Photograph(s):

Photograph 1. North section of Fern Canal, view looking south. Photograph taken on April 11, 2023.



References

BLM (Bureau of Land Management). 1983. *Draft Lake Cahuilla (Est) Mesa Segment) Management Plan and Environmental Assessment.*

URS Corporation. 2009. "DPR Form set for the portion of Fern Canal."

Krintz, J. 2011. "DPR Form set for the Fern Canal and Drain Update." ASM Affiliates, Inc.

Johnson, B.D., C. Bodmer, et al. 2011. "DPR Form set for the Fern Canal." Chambers Group, Inc.

PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

CONTINUATION SHEET

Primary # P-13-012689
HRI #
Trinomial

***Resource Name or #** Fern Canal and Fern Side Main
Recorded by: Joel Lennon **Date:** April 25, 2017

☐ Continuation ■ Update

P1. **Other Identifier:** Fern Canal and Fern Side Main
***P2.** **Location:** ☐ **Not for Publication** ☒**Unrestricted**
***a. County:** Imperial County
***b.USGS 7.5' Quad** Mount Signal **Date** 1979 **T** 16S; **R** 12E; ¼ **of** ¼ **of Sec** 34 and 35; **B.M.**
c. Address City Zip
d. UTM: Zone 11 S, 613474.85 mE/ 3628580.65 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc. as appropriate)

***P3a.** **Description:**
The Fern Canal was recorded as an irrigation canal, constructed circa 1909, with associated side mains, laterals and drains. It is approximately 10 miles long, 10 feet wide, and about 6 feet deep. It is lined with concrete and underwent modifications in the 1960s. Previously URS, Chambers, and ASM have recommended that portions of the canal were not eligible to the NRHP and the CRHR due to a lack of integrity. During the current survey ASM relocated a portion of the Fern Canal that was previously recorded along the east side of Liebert Road, extending from the southern end of Liebert Road, north for approximately 700 ft. This portion of the canal is in the same condition as the previous recordations. ASM also recorded a section of the Fern Side Main within the Project area, that was not included on the previous site forms, from the eastern side of intersection of Liebert and Mandrapa Road, extending east for approximately 905 ft. It filled with vegetation and approximately 15 feet wide and 10 ft. deep.

***P3b.** **Resource Attributes:** (List attributes and codes) HP. 20 Canal/Aqueduct
***P4.** **Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: (view, date, accession #) Camera facing north; Image _3693.
***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1909, updates in the 1960s
***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd
Imperial, CA 92251
***P8. Recorded by:**
Joel Lennen
ASM Affiliates, Inc.
2034 Corte del Nogal
Carlsbad, CA 92011
***P10. Survey Type: (Describe):**
Intensive Pedestrian

***P11.** **Report Citation:**
Castells, Shelby and Joel Lennen
2017 *Cultural Resource Inventory for the Vega SES LLC Solar Project, Imperial County, California*. Submitted to Vega SES LLC.

***Attachments:** ☐ NONE ■ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

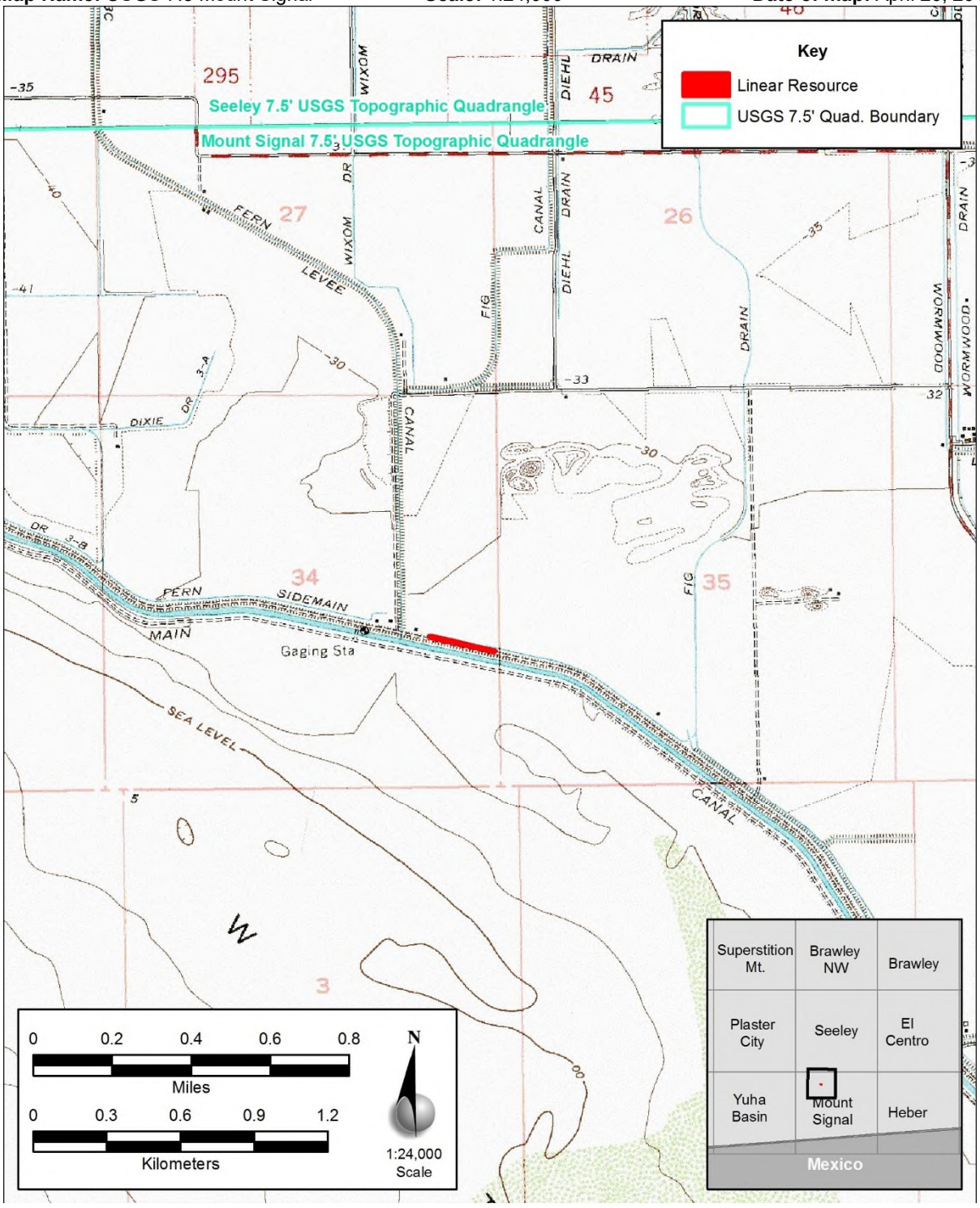
PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary# P-13-012689
HRI# _____
Trinomial _____

LOCATION MAP

***Resource Name or #** Fern Canal and Fern Side Main
* **Map Name:** USGS 7.5 Mount Signal
***Scale:** 1:24,000
* **Date of map:** April 26, 2017



PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SKETCH MAP

Primary # P-13-012689
HRI #
Trinomial

***Resource Name or #** Fern Canal and Fern Side Main
*** Drawn by:** Tony Quach, ASM Affiliates, Inc.
***** Date of map: April 26, 2017



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 1 of 3 ***Resource Name or # (Assigned by recorder)** Fern Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

P1. Other Identifier:
***P2. Location:** ☒ Not for Publication ☐ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Seeley **Date:** 1957; **T** 16 S; **R** 12 E; **of Sec.** 27; S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; 620471.52 **mE /** 3623214.57 **mN**;
***P3a. Description:** The Fern Canal is an irrigation canal constructed circa 1909. It is located west of Liebert Road, and flows north from the Westside Main Canal to a point north of the community of Seeley in the Imperial Valley in Imperial County, CA. The canal is approximately 10 feet wide and about 6 feet deep. The canal is lined with concrete. It was originally constructed in 1908 and extended years later. Modifications were made to the canal in the 1960s. The entire canal is approximately 10 miles long.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct
P5a. Photograph or Drawing:



P5b. Description of Photo:
View looking south at Fern Canal.
Photo taken November 2, 2011.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1909
1909 El Centro 15-minute US Army Corps Topo map,

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 2 of 3 ***Resource Name or # (Assigned by recorder)** Fern Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** November 2011
***P10. Survey Type:** Intensive
P11. Report Citation:
Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.

***B10. Significance: Theme:** Irrigation Water Conveyance Systems **Area:** Imperial Valley

Period of Significance: N/A **Property Type:** Irrigation System **Applicable Criteria:** N/A
The Fern Canal was one of the earliest irrigation canals in the Imperial Valley, constructed in 1909. According to a previous evaluation by URS Corporation, the Fern Canal was recommended not eligible for the NRHP or the CRHR for the loss of integrity from regular dredging and widening of the canals and drains over time to alleviate problems of silt and build-up. Although the canal is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, this particular canal does not convey that theme as well as other similar resources such as the Westside Main Canal and the All-American canals—in part due to their loss of integrity. Therefore the Fern Canal is recommended not eligible for the National Register of Historic Places nor the California Register of Historic Resources.
.

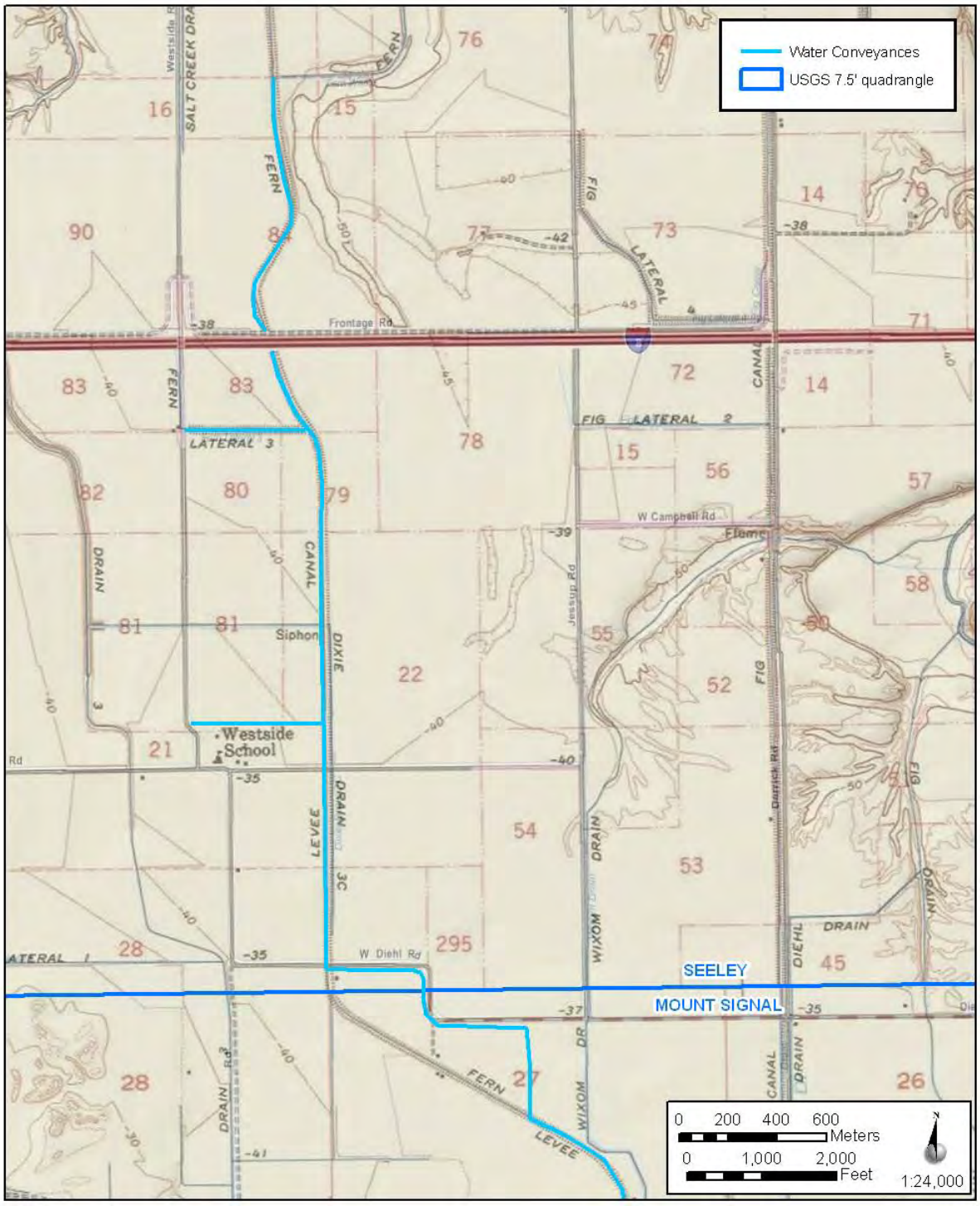
PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Fern Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Fern Canal (North)



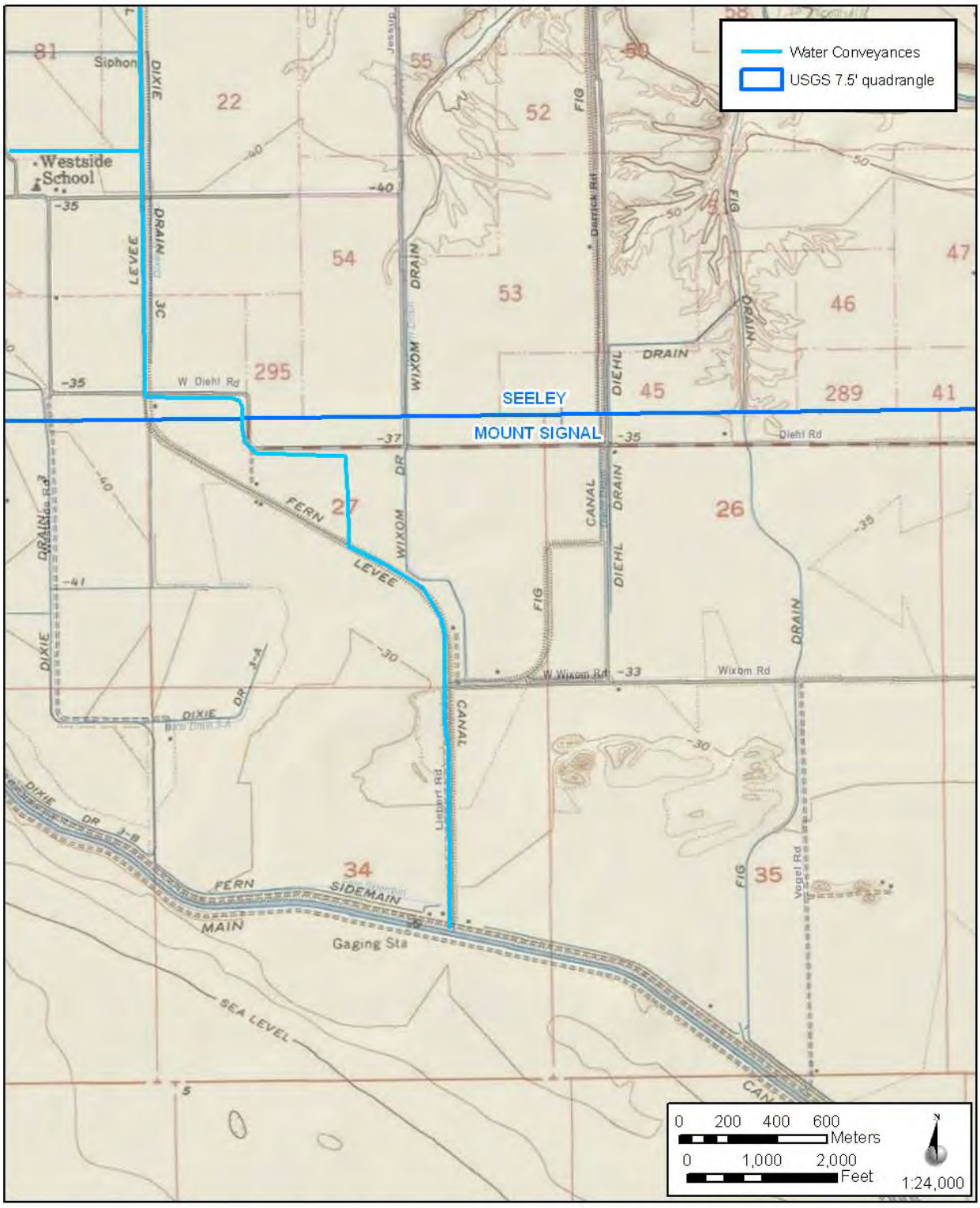
PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Fern Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Fern Canal (South)



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-012689 UPDATE
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

***Resource Name or #:** Portion of Fern Canal and Fern Drain

P1. Other Identifier: N/A

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** Imperial

***b. USGS 7.5' Quad:** Mount Signal **Date:** 2010 **T** 16S; **R** 12E; SE ¼ **of Sec** 27; S.B.B.M.

c. Address: N/A City: N/A Zip: N/A

d. UTM: Zone: 11N; 620470mE/ 3623225mN (G.P.S.) NAD 83

e. Other Locational Data: Elevation: -9 m below sea level

The Fern Canal is located approximately ten miles south west from the town of El Centro. Approximately seven miles west of El Centro along Hwy 8 is the intersection of Drew Road. When traveling west on Hwy 8 towards this intersection, take exit 107 for Drew Road toward Seeley. Merge onto Drew Road heading south bound. Continue along Drew Road for 2.3 miles to reach W Wixom Road. Turn west onto W Wixom Road and continue on this road for 1.4 miles. Find a place to park at the intersection of W Wixom Road and Liebert Road. The Fern Canal is located in the north east corner of this intersection.

***P3a. Description:** Site 13-12689, represents a portion of the Fern Canal and Drain system, part of the much larger Fern Canal drainage system constructed in the early half of the 1950s. The portion of the canal that passes through the APE is concrete lined and measures approximately ten to twelve feet across. The portion of the Fern Drain surveyed is a small segment of the drain located between Westside Rd. to the west, North Jessup Rd. to the east, and Vaughn Rd. to the north. A portion of Fern Canal and Fern Drain was previously recorded in May of 2009 by URS Corporation. The Canal segment runs North to South within the surveyed project boundary. The condition of the site remains similar to its most recent description by URS.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☒Other (Isolates, etc.)

P5a. Photo



P5b. Description of Photo: Photo # 113254, Fern Canal, facing north east.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:**
C.Bodmer,B.Johnson, B. Bartram, T. Murphy, S. Wintergerst
Chambers Group Inc.,
5 Hutton Centre Drive, Ste. 750,
Santa Ana, CA 92707

***P9. Date Recorded:** 11/19/2011

***P10. Survey Type:**
Pedestrian survey (15 meter transect intervals)

***P11. Report Citation:** A Class III Cultural Resources Inventory For The Agile Energy, Inc. Silverleaf Photovoltaic Solar Project Near The City Of El Centro, Imperial County, California

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder) Fern Canal and Drain System

B1. Historic Name: Fern Canal and Drain System
B2. Common Name: Fern Canal and Drain System
B3. Original Use: Irrigation Ditch B4. Present Use: Irrigation Ditch

***B5. Architectural Style:** N/A

***B6. Construction History:** (Construction date, alterations, and date of alterations)

The actual construction date of the Fern Canal and Drain is unknown; however, the Fern Canal appears on maps as early as the 1908 El Centro map. This map shows the canal in the same location and general configuration as today; however, the canal is labeled "Fern Ditch". A review of the 1912 A.G. Thurston Irrigation District and Road Map, the 1940 Brawley 15-minute USGS quadrangle map, the 1949 USDA Aerial Photograph Collection, the 1957 Brawley and Seeley 7.5-minute USGS quadrangle maps, and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the drain has remained consistent for most of its history. The outline of the Fern Drain appears on maps as early as 1940 on the 1940 Brawley 15-minute USGS quadrangle map; however the drain is not labeled. In the 1957 Seeley 7.5-minute USGS quadrangle map, the Fern Drain is labeled as "Fern Waste". Thus, from the review of these historic maps, it is difficult to pinpoint an approximate date of construction; however, it can be assumed that a smaller predecessor ditch existed in the general area during the early 20th century (by 1908), and was modified and improved throughout the mid-20th century (evidenced by date stamps from the 1950s to the 1980s) to support the All-American and Westside Main Canal system operations.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** N/A **Original Location:** N/A

***B8. Related Features:** None

B9a. Architect: N/A b. Builder: Imperial Irrigation District

***B10. Significance: Theme:** N/A **Area:** West El Centro, Imperial County

Period of Significance: N/A **Property Type:** Irrigation Ditch **Applicable Criteria:** N/A

In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A

***B12. References:**

See Continuation Sheet 523L (Page 6)

B13. Remarks:

***B14. Evaluator:** Jeremy Hollins

***Date of Evaluation:** 5/19/2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet 523L (Page 5)

PC ORIGINAL PKG

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States in approximately 1906 was intended to alleviate irrigation problems and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigaci_n y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

PC ORIGINAL PKG

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

The Fern Canal, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Fern Canal (which is a related feature to the larger Westside Main Canal and All-American Canal), appear to be NRHP- and CRHR-eligible. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

The Fern Drain, although associated with the Westside Main Canal system, does not appear to reflect the development associated with the construction and operation of the All-American Canal between 1941 and 1950. Based on a review of historical maps, it is difficult to determine the construction date of the drain; however, it is likely that the drain may have been constructed outside of the 1941 to 1950 period of significance for the All-American Canal. Thus, it is most likely not associated with the development of irrigated commercial agriculture in Imperial County west of the New River (Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR). In addition, the drain does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history (Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR). Therefore, it does not appear to meet the eligibility criteria of the NRHP and the CRHR.

Overall, the Fern Canal and Drain does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Fern Canal also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.

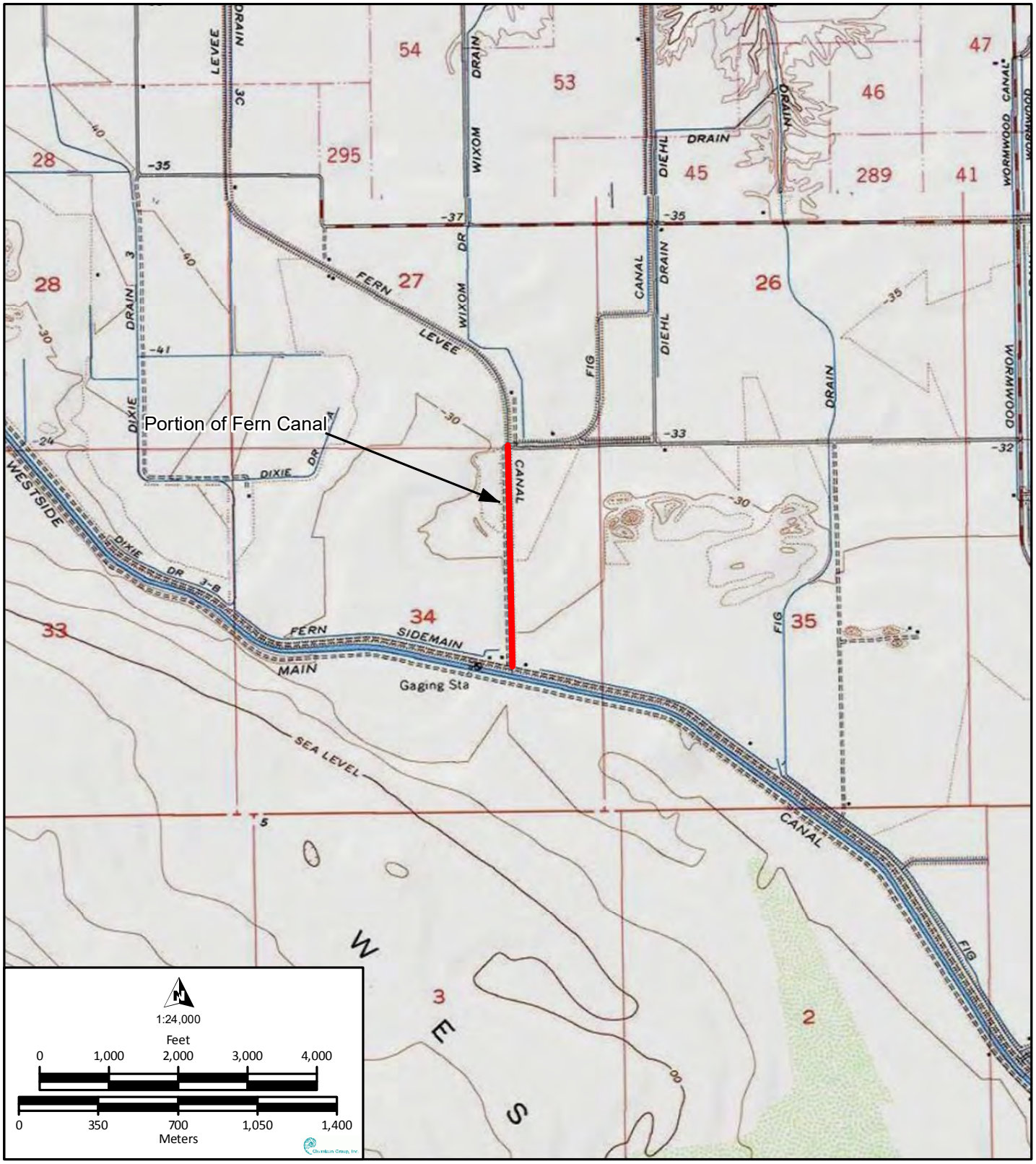
In summary, the portions of Fern Canal do not appear to be individually eligible for listing to the NRHP, CRHR, or considered historical resources for purposes of CEQA, and do not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed Solar Farm adjacent or perpendicular to the existing Fern Canal and Drain would not create a new adverse effect or significant impact.

PC ORIGINAL PKG

State of California — The Resources Agency	**Primary #** 13-12689
DEPARTMENT OF PARKS AND RECREATION	**HRI#**
LOCATION MAP	**Trinomial**

Page 5 **of** 6 ***Resource Name or #:** Portion of Fern Canal

***Map Name:** Mount Signal ***Scale:** 1:24,000 ***Date of Map:** 2010



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program.

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway.
Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

PC ORIGINAL PKG

P-33-012689 consists of irrigation features, Fern Canal and Fern Drain. In May of 2009, URS recorded a portion of these drainage features. The site was described as follows:

> *The portion of the Fern Canal that intersects Evan Hewes Highway is a trapezoidal concrete lined channel that appears to be approximately 20 feet wide and 10 feet deep. The canal travels beneath Evan Hewes Highway through concrete winged wall culverts. The culvert on the north portion has a 1953 date stamp while the culvert on the south portion has a wood and metal control gate constructed across the mouth of the culvert. The canal features a concrete and earthen bank with very little vegetation. A concrete winged wall culvert is located on the west bank of the canal north of Evan Hewes Highway with a 1984 date stamp and a metal gate to control water flow to a smaller, ancillary unidentified concrete-lined channel located adjacent to the Fern Canal. A concrete winged wall culvert is also located on the east bank of the canal south of Evan Hewes Highway, and features a 1959 date stamp on its wall and a wood and metal gate.*
>
> *The portion of the Fern Drain that intersects Evan Hewes Highway is an unlined earthen channel approximately 20 feet wide. The canal appears to retain a trapezoidal shape with earthen levees. The drain north of Evan Hewes Highway is approximately 10 feet deep. The banks of this north portion of the drain are littered with rock and portions of the channel bottom are overgrown with native vegetation. South of Evan Hewes Highway, the drain appears to be approximately 15 feet deep with steeper banks. Although areas of the channel bottom south of Evan Hewes Highway are overgrown with native vegetation, overall, this portion of the drain appears to be better maintained than the portion north of Evan Hewes Highway. The Fern Drain travels beneath Evan Hewes Highway through concrete wing culverts. The wing culvert on the south side of Evan Hewes Highway has a drop structure. The portion of the Fern Canal and Drain that intersect Evan Hewes Highway show evidence of chipping, cracking, and spalling due to environmental effects (sun and heat exposure) and weed growth. Overall, the portion of the Fern Canal that bisects Evan Hewes Highway is in good condition, but has been affected by non-historic period construction and features, including the pipeline and the crossing. The portion of Fern Drain that bisects Evan Hewes Highway appears to be in worse condition than the Fern Canal. (URS 2009)*

During a recent survey conducted by KPE, additional features associated with this system were identified and subsequently documented. One of these features is a segment of concrete canal, Fern Lateral 3. This 961' segment is located just south of I-10 and runs parallel to Westside Drive on the west side of the road. At the northern end within the project area is gate 26 which opens to the north and gate 27 which is a turnout for irrigation water for a small irrigation canal to the west, used to irrigate adjacent fields. In front of the residence located at 1651 Westside Rd., are a check with two turnout gates and gate 25 that allows water to pass under the road and turns the canal to the east and out of the project area.

There is a stamp in the concrete near gates 26 and 27 which indicate 1966 as the year of manufacture for this particular segment.



IMG_1874; view to SE
Gates 26 and 27 with concrete irrigation canal to the right (west).

PC ORIGINAL PKG

Another feature, Fern check was identified at the intersection of Liebert Rd. and Wixom Road. A date stamp of 1974 was found stamped in the concrete, indicating that this feature has been modified within the last 35 years and is not historic.



IMG_2774; view to North.
Fern Heading at Wixom and Liebert.



IMG_1965; view to W
View of check and Gate 23

A sketch map and location map have been generated reflecting this new information can be found attached.

URS Corporation entered a NRHP status code of 6Z. This code means that the resource had been found ineligible for listing in the National Register through an evaluation process other than a determination by the Keeper of the National Register or through a consensus determination of a federal agency and the State Historic Preservation Officer.

This resource has not been surveyed in its entirety; however, Shannon Davis (ASM Affiliates, Inc.) did evaluate the segments within the Campo Verde Solar Project APE and recommended the Fern Canal not eligible for the NRHP and CRHR. Although the Fern Canal is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, it does not convey that theme as well as other similar resources such as the Westside Main and the All-American canals, in part due to their loss of integrity (Davis et al. 2011; Mitchell 2011).

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

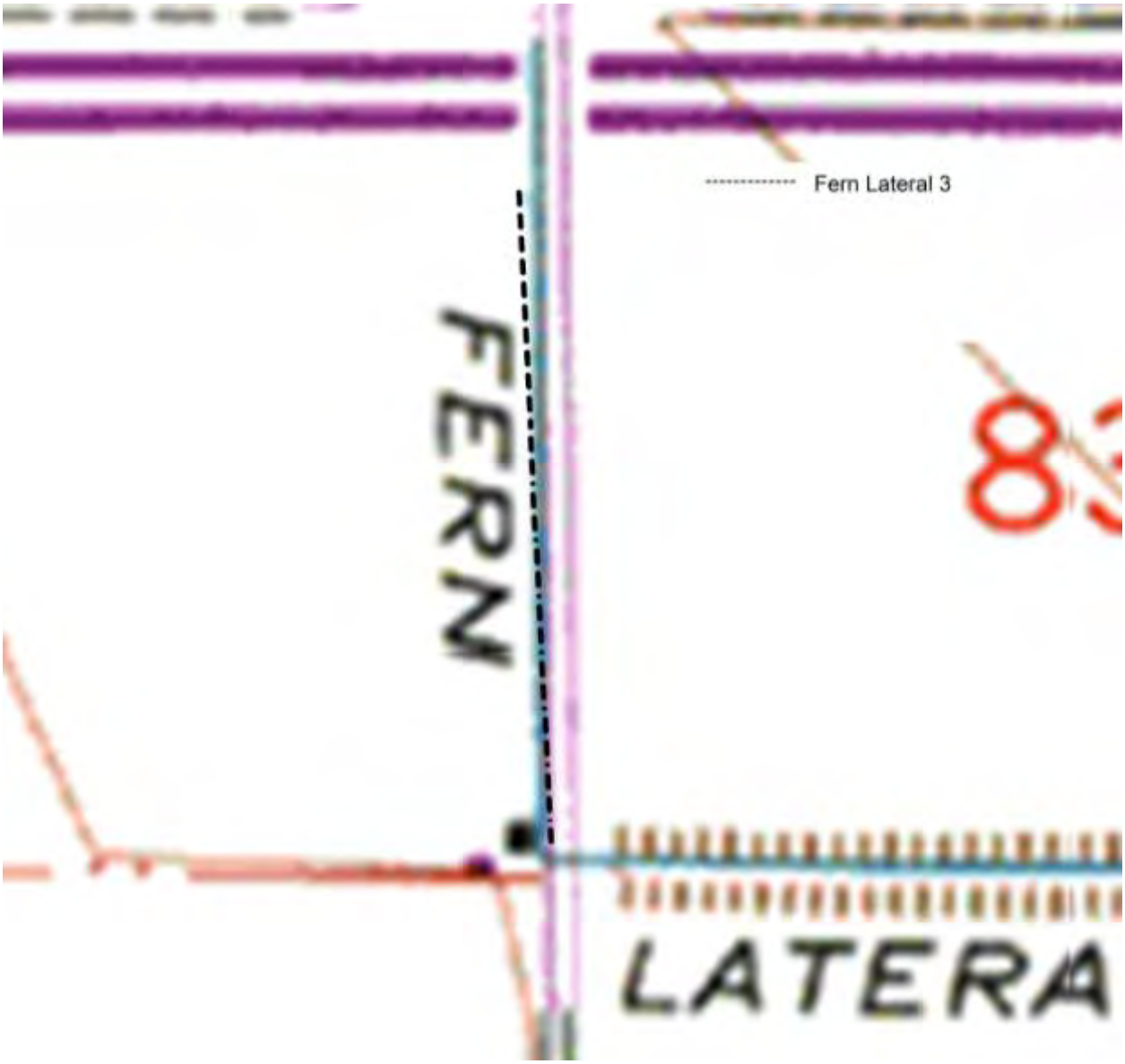
Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

PC ORIGINAL PKG

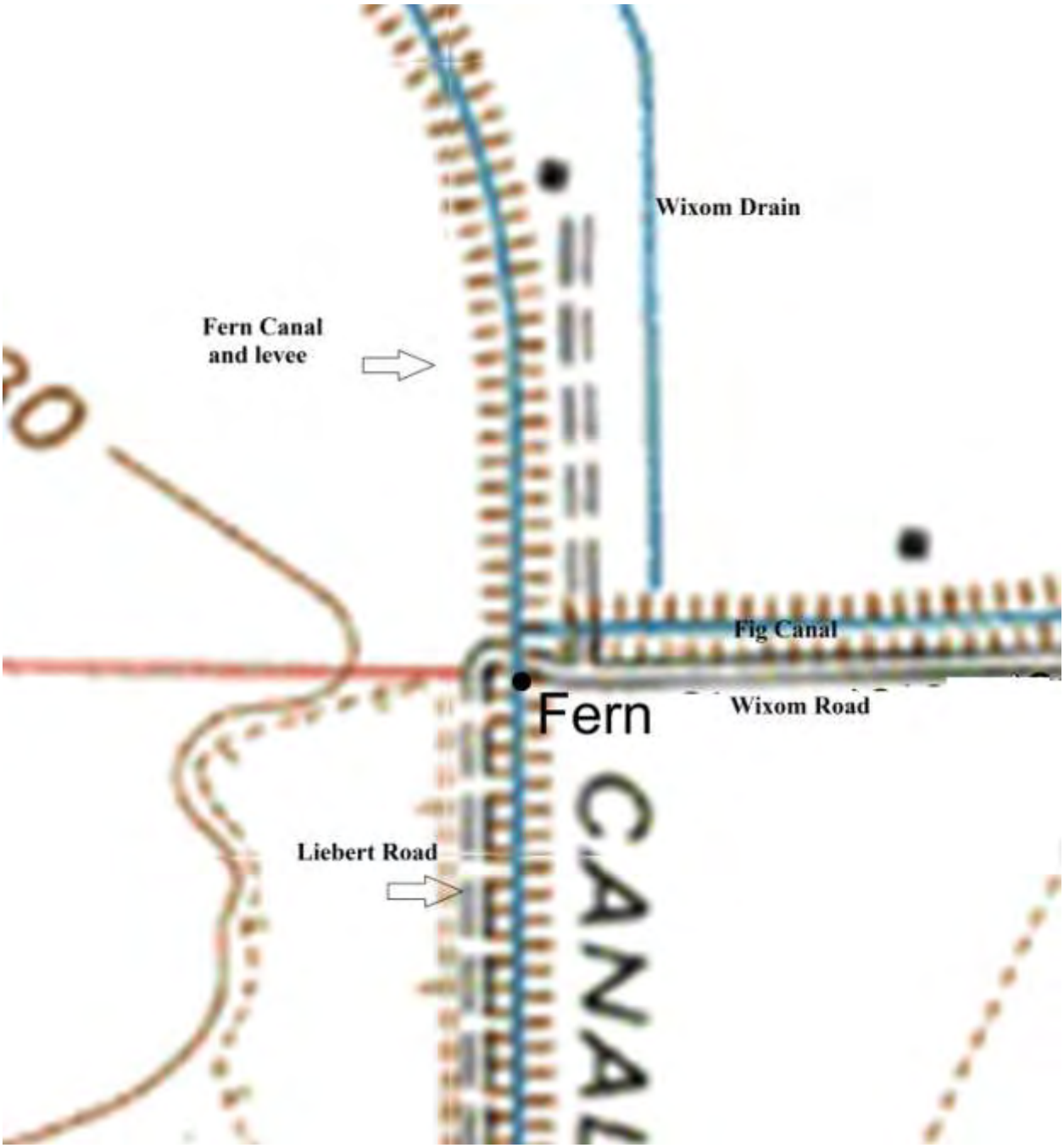
Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Subject/Description	View Toward
07	15	1851	Smaller concrete canal west of wormwood	N
07	15	1852	Fig Drain at Diehl south side	NW
07	15	1853	Fig Drain at Diehl south side	SE
07	15	1854	Shoe cemetery	
07	15	1855	Fig drain field crossing north side	W
07	15	1856	Fig drain south side	NW
07	15	1857	North middle corner siphon and turnout	SW
07	15	1858	North end of canal next to wormwood	
07	15	1859	Fig drain at southern end of western area	SE
07	15	1860	Same as above with tile line sign	
07	15	1861	East-west lateral at Derrick Drive & Wixom concrete ditch, check is out of project area on other side of road.	
07	15	1863	owl	
07	16	1873	Rykerson 1966	E
07	16	1874	Overview at NE corner of west area turnouts 26 & 27	ESE
07	16	1875	Turnout 27	W
11	03	2774	Fern check	N
11	03	2775	1974 date stamp	D/N
11	03	2776	Fern canal south side of Wixom	D/S

PC ORIGINAL PKG



PC ORIGINAL PKG



PC ORIGINAL PKG

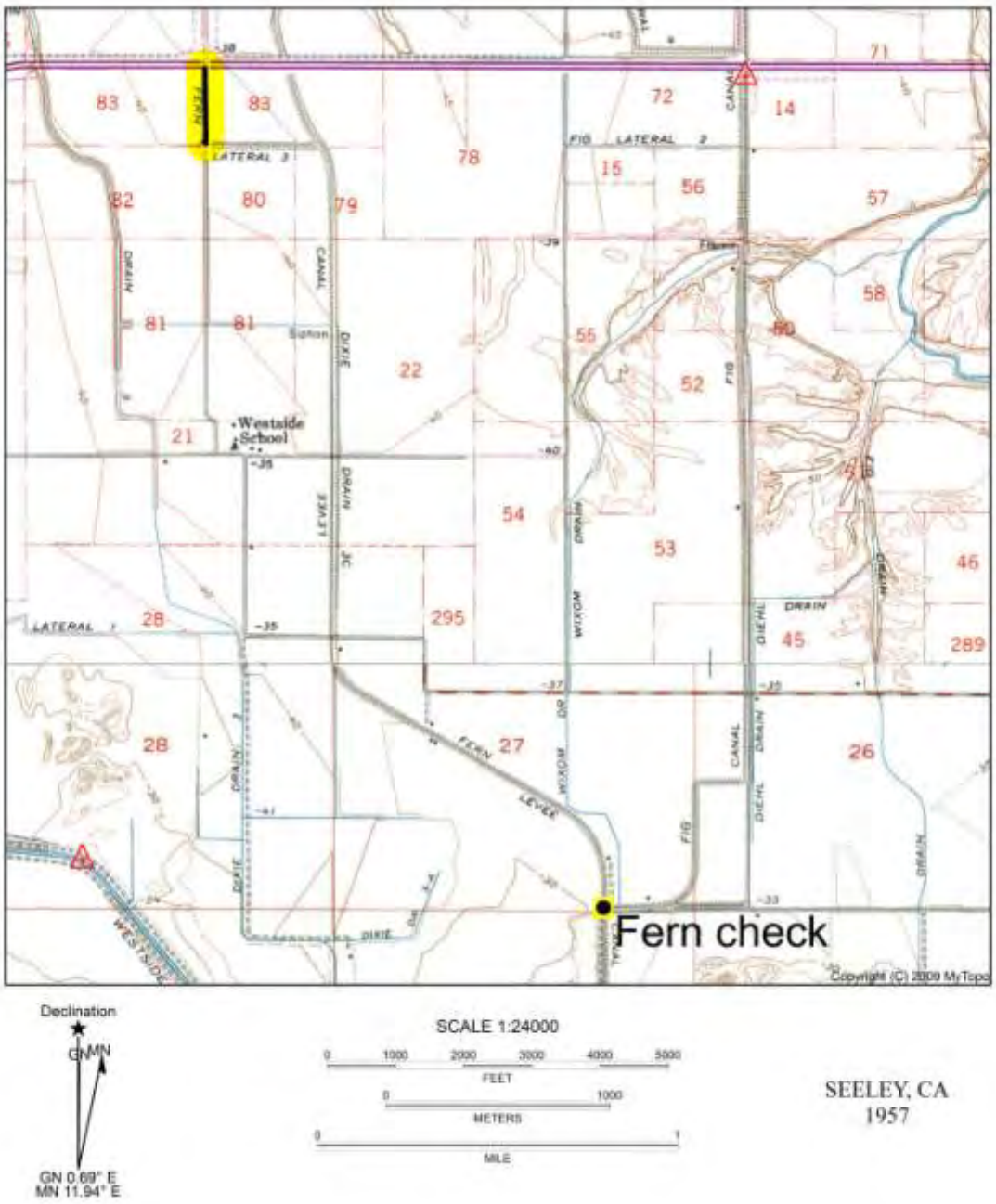
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Page 6 of 6

Primary # P-13-012689 update
HRI#
Trinomial
***Resource Name or #:** Fern Canal System (portion)

***Map Name:** Seeley, Calif.
***Scale:** 1:24,000
***Date of Map:** 1957



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-012689
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 **of** 10 ***Resource Name or #:** (Assigned by recorder) Portion of Fern Canal and Fern Drain

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

*** a. County** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*** b. USGS 7.5'** Brawley **Date** 1957 **T** 16S **R** 12E ; ¼ ¼ **of** 10 ; SB **B.M.**

c. Address N/A City N/A Zip N/A

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 619035 mE/ 3628855 mN

e. Other Locational Data: (e.g., parcel I, directions to resource, elevation, etc., as appropriate)

The Fern Canal and Drain are part of the larger Fern Canal drainage system. The portion of the Fern Canal surveyed is a small segment of a larger historic-period linear property that travels north to south, perpendicular to Evan Hewes Highway for approximately eight miles. The portion of the Fern Drain surveyed is a small segment of the drain that travels northeast from Fern Canal and intersects Evan Hewes Highway approximately 1,500 feet from Fern Canal. The TRS and UTM provided above is the approximate centerpoint of the portion of the canal surveyed.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The portion of the Fern Canal that intersects Evan Hewes Highway is a trapezoidal concrete lined channel that appears to be approximately 20 feet wide and 10 feet deep. The canal travels beneath Evan Hewes Highway through concrete winged wall culverts. The culvert on the north portion has a 1953 date stamp while the culvert on the south portion has a wood and metal control gate constructed across the mouth of the culvert. The canal features a concrete and earthen bank with very little vegetation. A concrete winged wall culvert is located on the west bank of the canal north of Evan Hewes Highway with a 1984 date stamp and a metal gate to control water flow to a smaller, ancillary unidentified concrete-lined channel located adjacent to the Fern Canal. A concrete winged wall culvert is also located on the east bank of the canal south of Evan Hewes Highway, and features a 1959 date stamp on its wall and a wood and metal gate.

SEE CONTINUATION SHEET 523L (PAGE 3).

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/Aqueduct

***P4. Resources Present:** ☐ **Building** ☒ **Structure** ☐ **Object** ☐ **Site** ☐ **District** ☐ **Element of District** ☐ **Other** (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (view, date, accession #)
View of canal north of Evan Hewes Highway, March 2009

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Approximately 1908
1908 El Centro USGS Quadrangle

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:** (name, affiliation, and address)
URS Corporation
1615 Murray Canyon Rd., Suite 1000
San Diego, CA 92108

***P9. Date Recorded:** 05/2009

***P10. Survey Type:** (Describe)
Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Mutaw, Robert J. (Ph.D.), Elizabeth B. Roberts, Gordon C. Tucker Jr., Ph.D., Brian Shaw, Terrie Bagwell, Colin O'Hanlon, Rachael Nixon, Gary Fink, Jeremy Hollins, Mark Neal. 2010 Draft Final Class III Confidential Cultural Resources Technical Report for the Imperial Valley Solar (formerly Solar 2), Imperial Valley County. URS Corporation. Technical report prepared for Tessera Solar (Applicant). Submitted to the Bureau of Land Management – El Centro Field Office, El Centro, CA. Copies available from the Bureau of Land Management – El Centro Field Office, El Centro, CA.

***Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

 *Resource Name or #: (Assigned by recorder) Portion of Fern Canal and Fern Drain

B1. Historic Name: Fern Canal and Fern Drain
B2. Common Name: Fern Canal and Fern Drain
B3. Original Use: Irrigation Ditch B4. Present Use: Irrigation Ditch
*B5. **Architectural Style:** N/A
*B6. **Construction History:** (Construction date, alterations, and date of alterations)
Actual construction date of the Fern Canal and Drain is unknown at present, despite efforts to contact the Imperial Irrigation District for construction date and information. However, the Fern Canal appears on maps as early as the 1908 El Centro map. This map shows the canal in the same location and general configuration as today; however, the canal is labeled "Fern Ditch". A review of the 1912 A.G. Thurston Irrigation District and Road Map, the 1940 Brawley 15-minute USGS quadrangle map, the 1949 USDA Aerial Photograph Collection, the 1957 Brawley and Seeley 7.5-minute USGS quadrangle maps, and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the drain has remained consistent for most of its history. The outline of the Fern Drain appears on maps as early as 1940 on the 1940 Brawley 15-minute USGS quadrangle map; however the drain is not labeled. In the 1957 Seeley 7.5-minute USGS quadrangle map, the Fern Drain is labeled as "Fern Waste". Thus, from the review of these historic maps, it is difficult to pinpoint an approximate date of construction; however, it can be assumed that a smaller predecessor ditch existed in the general area during the early 20th century (by 1908), and was modified and improved throughout the mid-20th century (evidenced by date stamps from the 1950s to the 1980s) to support the All-American and Westside Main Canal system operations.
*B7. **Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
*B6. **Related Features:**
None

B9. Architect: N/A b. Builder: Unknown
*B10. **Significance: Theme** N/A **Area** Imperial County
Period of Significance N/A **Property Type** Irrigation Ditch **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).
B11. Additional Resource Attributes: (List attributes and codes) N/A
*B12. **References:**
SEE CONTINUATION SHEET 523L (PAGE 6)

B13. Remarks:
None

(Sketch Map with north arrow required)
SEE CONTINUATION SHEET 523L (PAGE 5)

*B14. **Evaluator:** Jeremy Hollins
***Date of Evaluation:** 05/2009

(This space reserved for official comments)

PC ORIGINAL PKG
* Required information

P3a. Description (Continued)

Immediately south of the Evan Hewes Highway crossing is a non-historic period high-pressure gas pipeline approximately one-foot in diameter, which bisects the canal.

The portion of the Fern Drain that intersects Evan Hewes Highway is an unlined earthen channel approximately 20 feet wide. The canal appears to retain a trapezoidal shape with earthen levees. The drain north of Evan Hewes Highway is approximately 10 feet deep. The banks of this north portion of the drain are littered with rock and portions of the channel bottom are overgrown with native vegetation. South of Evan Hewes Highway, the drain appears to be approximately 15 feet deep with steeper banks. Although areas of the channel bottom south of Evan Hewes Highway are overgrown with native vegetation, overall, this portion of the drain appears to be better maintained than the portion north of Evan Hewes Highway. The Fern Drain travels beneath Evan Hewes Highway through concrete wing culverts. The wing culvert on the south side of Evan Hewes Highway has a drop structure.

The portion of the Fern Canal and Drain that intersect Evan Hewes Highway show evidence of chipping, cracking, and spalling due to environmental effects (sun and heat exposure) and weed growth. Overall, the portion of the Fern Canal that bisects Evan Hewes Highway is in good condition, but has been affected by non-historic period construction and features, including the pipeline and the crossing. The portion of Fern Drain that bisects Evan Hewes Highway appears to be in worse condition than the Fern Canal.

B10. Significance (Continued)

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States approximately 1906 was intended to alleviate irrigation problems, and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

B10. Significance (Continued)

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigación y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. For example, the Fern Canal features several culverts and other structural improvement s from the 1950s through the 1980s. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

The Fern Canal, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Fern Canal (which is a related feature to the larger Westside Main Canal and All-American Canal), appear to be NRHP- and CRHR- eligible. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

The Fern Drain, although associated with the Westside Main Canal system, does not appear to reflect the development associated with the construction and operation of the All-American Canal between 1941 and 1950. Based on a review of historical maps, it is difficult to determine the construction date of the drain; however, it is likely that the drain may have been constructed outside of the 1941 to 1950 period of significance for the All-American Canal. Thus, it is most likely not associated with the development of irrigated commercial agriculture in Imperial County west of the New River (Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR). In addition, the drain does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history (Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR). Therefore, it does not appear to meet the eligibility criteria of the NRHP and the CRHR.

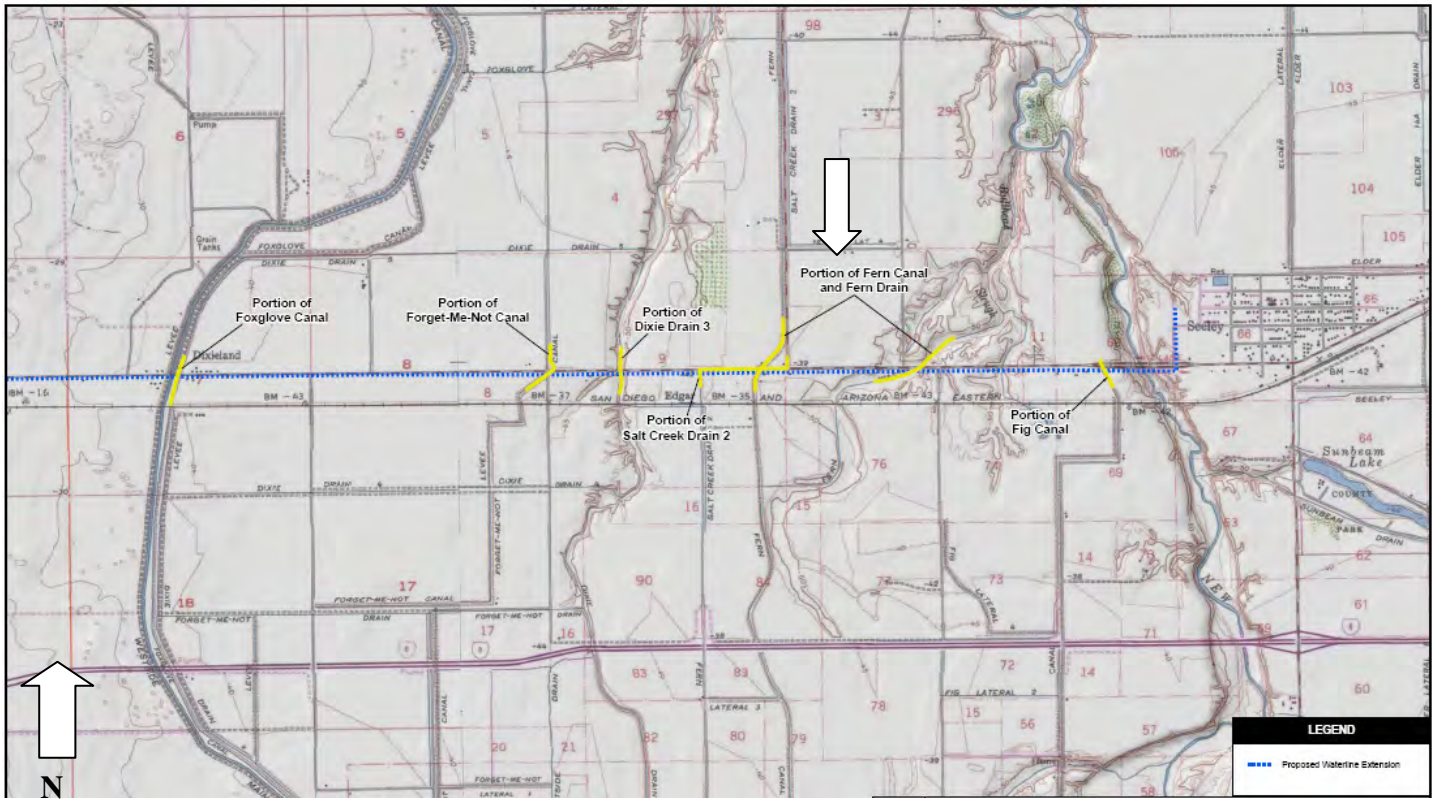
Overall, the Fern Canal and Drain does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Fern Canal and Drain at Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.

In summary, the portions of Fern Canal and Drain at Evan Hewes Highway do not appear to be individually eligible for listing to the NRHP, CRHR, or considered historical resources for purposes of CEQA, and do not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed water line adjacent or perpendicular to the existing Fern Canal and Drain would not create a new adverse effect or significant impact to the portion of the historic-period property that bisects the Evan Hewes Highway.

Page 5 **of** 10 ***Resource Name or #:** (Assigned by recorder) Portion of Fern Canal and Fern Drain
***Recorded by:** URS Corporation ***Date:** 05/2009
☒ Continuation ☐ Update

Sketch Map:

Not to scale



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

PC ORIGINAL PKG

Additional Photos:



View of north culvert at Evan Hewes Crossing



Wing culvert and gate structure on the west bank north of Evan Hewes Highway

Additional Photos:



View of gas pipeline south of Evan Hewes Highway



View of south culvert at Evan Hewes Crossing

Additional Photos:



View of culvert and gate structure on the east bank south of Evan Hewes Highway



View looking north of Evan Hewes Highway

Additional Photos:



View looking south of Evan Hewes Highway



View of south culvert with drop structure

Map Reference Number: 13

P1. Other Identifier: Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and Dixie Lateral
e. Other Locational Data: Located approximately ten miles southwest of El Centro, Imperial County, California. Segment begins north of Highway eight and terminates into the Westside Canal.

***P3a. Description:** The subject property is a system of drains and laterals that bisect the API along portions northeast of the Westside Main Canal. Dixie Drains 2, 3, 3A, 3B, and 3C and Lateral 1 are part of a larger drainage system that runs parallel to Mandrapa Road, Westside Road, and north-to-south perpendicular to West Vaughn Road. The Dixie Drain system is a series of earthen-dug canals that are approximately 10 feet wide and 6 feet deep and were built in 1911 and modified in ca. 1940. Dixie Lateral 1 is a concrete irrigation canal that extends east from the Westside Main Canal west of Hyde Road and south of West Vaughn Road. It is connected to Dixie Drain 3 at Diehl Road and Westside Road (Photograph 1 and 2).

***P3b. Resource Attributes:** HP20: Aqueduct/Canal

***P8. Recorded by:** Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

***P11. Report Citation:** Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

***B10. Significance:**

Five previous historical studies document Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral. In the 1983 draft report Lake Cahuilla (East Mesa Segment) Management Plan and Environmental Assessment, BLM recommended that all elements associated with the All-American Canal be found eligible for the NRHP as part of a district under Criteria A and C. BLM communicated with SHPO and addressed comments on boundaries, significance criteria, setting, and national versus local levels of significance. After the comments were addressed, SHPO elected not to comment on the undertaking. BLM presumed SHPO concurrence in accordance with a Programmatic Agreement between the two agencies (BLM 1983; Schaefer and O'Neil 2001: v).

In 2009, URS reevaluated, but did not survey, the canal segments and recommended that they be found ineligible for the NRHP and CRHR due to a lack of significant historical associations and historic integrity. URS disagreed with USBR and OHP's determination that the canal is a contributing element or significant related feature/component to the larger linear All-American Canal. For integrity, URS stated that the canal system has undergone significant improvements and that reconstruction may have occurred since the mid-twentieth century, as evidenced by the date-stamped culverts. Routine dredging and widening of the canals and lateral were also conducted to alleviate problems of silt and buildup. In summary, In 2009, URS recommended that the Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and Dixie Lateral did not appear to be individually eligible for listing in the NRHP or CRHR, nor considered a historical resource for purposes of CEQA. In 2011, ASM Architectural Historian Jennifer Krintz concurred with URS's recommendation that the canal be found ineligible for a lack of historical associations and integrity. In the same year, a subsequent study conducted by Chambers Group also concurred with URS's earlier recommendation (URS 2009c: 1-3; Krintz 2011c: 2; Johnson et al. 2011b: 1, 4).

On April 11, 2023, Dudek revisited Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral and did not observe any noticeable alterations since the last recordation in 2011. Dudek also concurs that the aqueduct does not meet any criteria for listing in the NRHP or CRHR. In 1983, BLM recommended that these ancillary canals may be eligible for the NRHP because of their association with the All-American Canal. However, it requested that additional research be conducted to confirm their eligibility. URS and ASM conducted subsequent studies in 2009 and 2011 and recommended that the drains and lateral

PC ORIGINAL PKG

be found ineligible for recordation due to a lack of integrity and historical associations. Dudek disagrees that routine maintenance, required to keep the aqueduct operational, disqualifies Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral from recordation on the NRHP. These canals, however, are ancillary extensions of a large water conveyance system designed to irrigate individual, private agricultural ventures. Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral's mere association with the All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral are not representative of any significant historical trends, associated with any important persons, architecturally significant, or likely to yield additional information about pre-history or history. As such, Dixie Drain 1, Dixie Drain 2, Dixie Drain 3, Dixie Drain 4, and the Dixie Lateral appear to be ineligible for the NRHP and CRHR due to a lack of historical significance. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

***B14. Evaluator:** EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

***Date of Evaluation:** August 15, 2023.

Photograph(s):

Photograph 1. West side of Dixie Lateral Drain 1, view looking east. Photograph taken on April 11, 2023.



PC ORIGINAL PKG

Photograph 2. North side of Dixie Lateral Drain 3, view looking south. Photograph taken on April 11, 2023.



References

Adame, M., and Thomson, H. 2011. "P-13-012688 UPDATE."

URS Corporation. 2009. "DPR Form set for the Portion of Dixie Drain 3."

Krintz, J. 2011. "DPR Form set for the Dixie Drains and Lateral 1 UPDATE." ASM Affiliates, Inc.

Johnson, B.D., C. Bodmer, et al. 2011. "DPR Form set for the Portion of Dixie Drain 3." Chambers Group, Inc.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial P-13-012688 (Dixie Drain 3)
NRHP Status Code: 6Z

Page 1 of 3 ***Resource Name or # (Assigned by recorder)** Dixie Drains and Lateral 1 UPDATE
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

P1. Other Identifier:
***P2. Location:** ☒ Not for Publication ☐ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Seeley **Date:** 1957; **T** 16 S; **R** 12 E; **of Sec.** 28; S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; 618816.06 **mE /** 3624370.74 **mN**;
***P3a. Description:**
Dixie Drains 2. 3, and 4 and Lateral 1 are part of a larger drainage system that includes Westside Drain, Forget-Me-Not Drain, and Salt Creek Drain in Imperial County, CA. This drainage system empties into the New River, south of Worthington Road. Salt Creek extended through the project area in 1909. Today the creek bed is part of the present-day Dixie Drain 3. The Dixie drains were constructed after 1922 and before 1949, possibly ca. 1940. The earthen dug drainage ditches are approximately 10 feet wide and about 6 feet deep. The Dixie Lateral 1 had been constructed before 1914. Dixie Lateral 1 is an irrigation canal lateral that extends eastward from the Westside Main west of Hyde Road and south of West Vaughn Road. It interconnects with the Dixie Drain 3 at Diehl Road and Westside Road. The earthen dug canal is approximately 10 ft. wide and about 6 ft. deep. Lateral 1 was extended to connect with Dixie Drain 3 in later years.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct
P5a. Photograph or Drawing:

P5b. Description of Photo:



View looking south at Dixie Drain 3.
Photo taken November 2, 2011.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 2 of 3 ***Resource Name or # (Assigned by recorder)** Dixie Drains and Lateral 1 UPDATE
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update



P5a. Photograph or Drawing:

P5b. Description of Photo:
View looking south at Dixie Lateral 1.
Photo taken November 2, 2011.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Dixie Lateral c. 1914, Dixie Drains c. 1940
1909 El Centro 15-minute US Army Corps Topo map,
1940 Brawley 15-minute USGS quad map,
1949 Imperial County Aerials, US Dept of Agriculture
1957 Seeley 7.5-minute USGS quad map

***P7. Owner and Address:**
Imperial Irrigation District
333 East Barioni Blvd.
Imperial, CA 92251

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** November 2011
***P10. Survey Type:** Intensive
P11. Report Citation: Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.

***B10. Significance: Theme:** Irrigation Water Conveyance Systems **Area:** Imperial Valley

Period of Significance: N/A **Property Type:** Irrigation System **Applicable Criteria:** N/A
Dixie drains and Dixie Lateral 1 are part of the Dixie Canal irrigation system. Dixie Lateral 1 had been constructed before 1914 and the Dixie drains were constructed after 1922 and before 1949, possibly ca. 1940. According to a previous evaluation by URS Corporation, the Dixie Drain 3 was recommended not eligible for the NRHP or the CRHR for the loss of integrity from regular dredging and widening of the canals and drains over time to alleviate problems of silt and build-up. Although the drainage ditch and lateral are associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, these particular waterways do not convey that theme as well as other similar resources such as the Westside Main and the All-American canals—in part due to their loss of integrity. Therefore the Dixie Drain 3 and the Dixie Lateral 1 are recommended not eligible for the National Register of Historic Places and the California Register of Historic Resources.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Dixie Drains and Lateral 1 UPDATE
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Dixie Drain 3



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Dixie Drains and Lateral 1 UPDATE
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Dixie Drain 2



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Dixie Drains and Lateral 1 UPDATE
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Dixie Drain 4



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Page 3 of 3 ***Resource Name or # (Assigned by recorder)** Dixie Drains and Lateral 1 UPDATE
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Dixie Lateral 1



*Required Information

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-012688 UPDATE
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

***Resource Name or #:** Portion of Dixie Drain 3

P1. Other Identifier: N/A

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** Imperial

***b. USGS 7.5' Quad:** Mount Signal **Date:** 2010 **T** 16S; **R** 12E; NE ¼ **of Sec** 28; S.B.B.M.

c. Address: N/A City: N/A Zip:N/A

d. UTM: Zone: 11N; 618816mE/ 3624401mN (G.P.S.) NAD 83

e. Other Locational Data: Elevation: -11 m below sea level

The Dixie Drain 3 is located approximately ten miles south west from the town of El Centro. Approximately seven miles west of El Centro along Hwy 8 is the intersection of Drew Road. When traveling west on Hwy 8 towards this intersection, take exit 107 for Drew Road toward Seeley. Merge onto Drew Road heading south bound. Continue along Drew Road for 1.7 miles to reach the cross road of W Diehl Road. Turn west onto West Diehl Road and continue down this road for 2.3 miles. The Dixie Drain 3 is visible on the south edge of the W Diehl Road, perpendicular to W Diehl Road.

***P3a. Description:** Dixie Drain 3 was previously recorded in May of 2009 by USR Corporation. The feature is a portion of the larger Dixie Canal system, which traces the Dixie area between Westside Main Canal (located to the west) and the Fern Canal (located to the east). Dixie Drain 3 appears to be approximately 10 ft. wide and 8 ft. deep with earthen side walls hosting grass and weed vegetation. The condition of the site is good with evidence of recent construction upgrades. Chambers Group was able to re-locate the resource using the provided locational data. The portion of the Dixie Drain 3 surveyed by Chambers Group is a small segment of the canal situated between North Hyde Rd. to the west, Vaughn Rd. to the north, and Westside Rd. to the east.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☒Other (Isolates, etc.)

P5a. Photo



P5b. Description of Photo: Photo # 1353, Dixie Drain 3, facing south

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:**
C.Bodmer,B.Johnson, B. Bartram, T. Murphy, S. Wintergerst
Chambers Group Inc.,
5 Hutton Centre Drive, Ste. 750,
Santa Ana, CA 92707

***P9. Date Recorded:** 11/19/2011

***P10. Survey Type:**
Pedestrian survey (15 meter transect intervals)

***P11. Report Citation:** A Class III Cultural Resources Inventory For The Agile Energy, Inc. Silverleaf Photovoltaic Solar Project Near The City Of El Centro, Imperial County, California

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder) Dixie Drain 3

B1. Historic Name: Dixie Drain 3
B2. Common Name: Same
B3. Original Use: Irrigation Ditch
B4. Present Use: Irrigation Ditch

***B5. Architectural Style:** N/A

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Actual construction date of the Dixie Drain 3 is unknown;however, the drain is shown on the 1957 Brawley and Seeley 7.5-minute USGS quadrangle maps. Review of the 1940 Plaster City 15-Minute USGS quadrangle map shows the existence of another Dixie Drain 4 (which is located one and half-miles to the west), but the drain does not extend far enough east to the location of Dixie Drain 3. The 1940 Brawley 15-minute USGS quadrangle map shows the general outline of the Dixie Drain 3 but the drain is not labeled. Based on this information, it can be assumed that Dixie Drain 3 was constructed by approximately 1940. A review of the 1949 USDA Aerial Photograph Collection, 1957 Brawley and Seeley 7.5-minute USGS quadrangle maps and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the canal has remained consistent for most of its history.

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**
Dixie Drain 5

B9a. Architect: N/A
b. Builder: Imperial Irrigation District

***B10. Significance: Theme:** N/A **Area:** West El Centro, Imperial County
Period of Significance: N/A **Property Type:** Irrigation Ditch **Applicable Criteria:** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A

***B12. References:**
See Continuation Sheet 523L (Page 6)

B13. Remarks:

***B14. Evaluator:** Jeremy Hollins

***Date of Evaluation:** 5/19/2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet 523L (Page 5)

PC ORIGINAL PKG

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999).The extension of the Westside Canal into the United States in approximately 1906 was intended to alleviate irrigation problems and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigaci_n y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

PC ORIGINAL PKG

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

Dixie Drain 3, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Dixie Drain 3 (which is a related feature to the larger Westside Main Canal and All-American Canal), appears to be NRHP- and CRHR- eligible. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

Overall, the Dixie Drain 3 does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Dixie Drain 3 at also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.

In summary, the portion of Dixie Drain 3 does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed Solar Farm adjacent or perpendicular to the existing Dixie Drain 3 would not create a new adverse effect or significant impact to the portion of the historic-period property.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

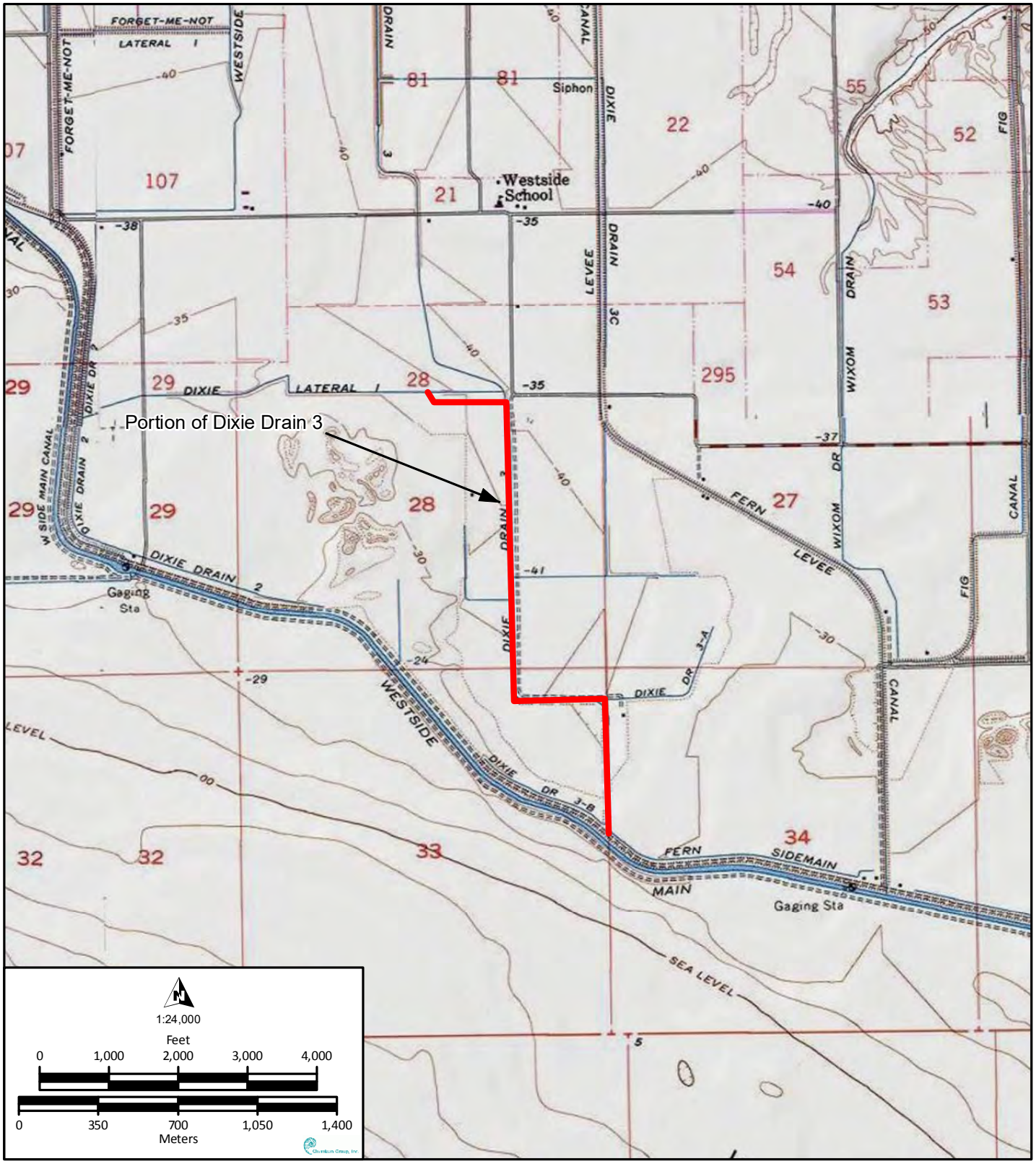
Primary # 13-12688
HRI#
Trinomial

*Resource Name or #: Portion Dixie Drain 3

*Map Name: Mount Signal

*Scale: 1:24,000

*Date of Map: 2010



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program.

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway.
Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

PC ORIGINAL PKG

P-33-012688 is an irrigation feature, the Dixie Drain 3. In May of 2009, URS recorded a portion of this drainage feature. The site was described as follows:

> *"The portion of Dixie Drain 3 north of Evan Hewes Highway is an unlined earthen channel that appears to be approximately ten-feet wide and eight-feet deep with a concrete circle culvert. The drain features earthen levees covered with dense, overgrown vegetation consisting of wild grasses and weeds. Due to the density of the vegetation, the shape of the drain is difficult to discern, but appears to be trapezoidal.*
> *Dixie Drain 3 intersects the Westside Drain, which is located on the west. Approximately one-half mile north of Evan Hewes Highway, Dixie Drain 3 intersects with Dixie Drain 5, a shallow earthen ditch approximately five feet wide, which runs parallel to the highway. South of Evan Hewes Highway, Dixie Drain 3 is a corrugated metal pipe. The pipe runs on the ground surface but is obscured by dense native vegetation. Overall, the portion of the Dixie Drain 3 that bisects Evan Hewes Highway is in good condition, but has been affected by nonhistoric period construction and features, including the crossing".*

When the All American Canal was completed in 1941, improvements were made to existing canal systems, drain ditches in particular. The drain system provides a drainage outlet for each governmental subdivision of approximately 160 acres. Approximately 16 percent of irrigation water delivered to fields is used for the leaching of salts accumulated in the soils. This water percolates to the tile drainage system where it is collected and conveyed to surface drains, which discharge to the Salton Sea either directly or via the New and Alamo Rivers. These drains also collect excess surface flow (tailwater) from agricultural fields, and operational discharge from canals and laterals.

P-33-012688 Dixie Drain 3 is one of these ditches. During a recent survey conducted by kp environmental (KPE), an additional segment of Dixie Drain 3, and sections of related features were documented. These include Dixie Lateral 1, Dixie Drain 2, Dixie Drain 3, and Dixie Drain 4.

PC ORIGINAL PKG

Dixie Lateral 1 consists of an unlined dirt channel with an average depth of 7 feet. The portion of Dixie Lateral 1 identified during the survey effort consists of an east/west segment approximately 3983' in length. An approximately 909' section in the western portion has been rerouted sometime after 1979.



IMG_1795
Dixie Lateral 1
Earthen ditch and concrete slab rubble.
View to west.

PC ORIGINAL PKG

Dixie Drain 2 is also an unlined dirt channel. Only the very northern end of this feature was located within the survey area.

Dixie Drain 3 is an unlined, dirt channel with an average depth of 8-11 feet. The segment inspected is approximately 1.7 miles in length, beginning just south of Interstate 8 and ending at the point where Dixie Drain 3 and Dixie Lateral 1 meet. West Diehl Road is adjacent to the east at the southern end. Extending out of the project area to the north and south, Dixie Drain 3 is channeled below several roads by way of culverts with concrete winged walls. In addition, there are several marked tailwater and tile lines along the length of the surveyed portion of the drain. An approximately 1123' section of the drain has been rerouted sometime after 1979.



IMG_1774
Dixie Drain 3 south of Interstate 8.
Concrete wing walls and view of concrete slab rubble used to stabilize the bank.
View to northeast.

PC ORIGINAL PKG



IMG_1823 - Dixie Drain 3
Tailwater Pipe and Tile Line
View to northwest.

Dixie Drain 4 is another unlined dirt channel. A segment approximately 422' in length is located within the survey area. Vegetation in each of the drains consists of invasive species such as saltgrass, salt bush, Bermuda grass, common reed, and salt cedar.



IMG_2825 - Dixie Drain 4
View to south.

PC ORIGINAL PKG

Dixie Drains 2, 3, 4 and Dixie Lateral 1 as a whole, are associated with the Westside Main Canal system and reflect the development associated with the construction and operation of the All-American Canal between 1941 and 1950.

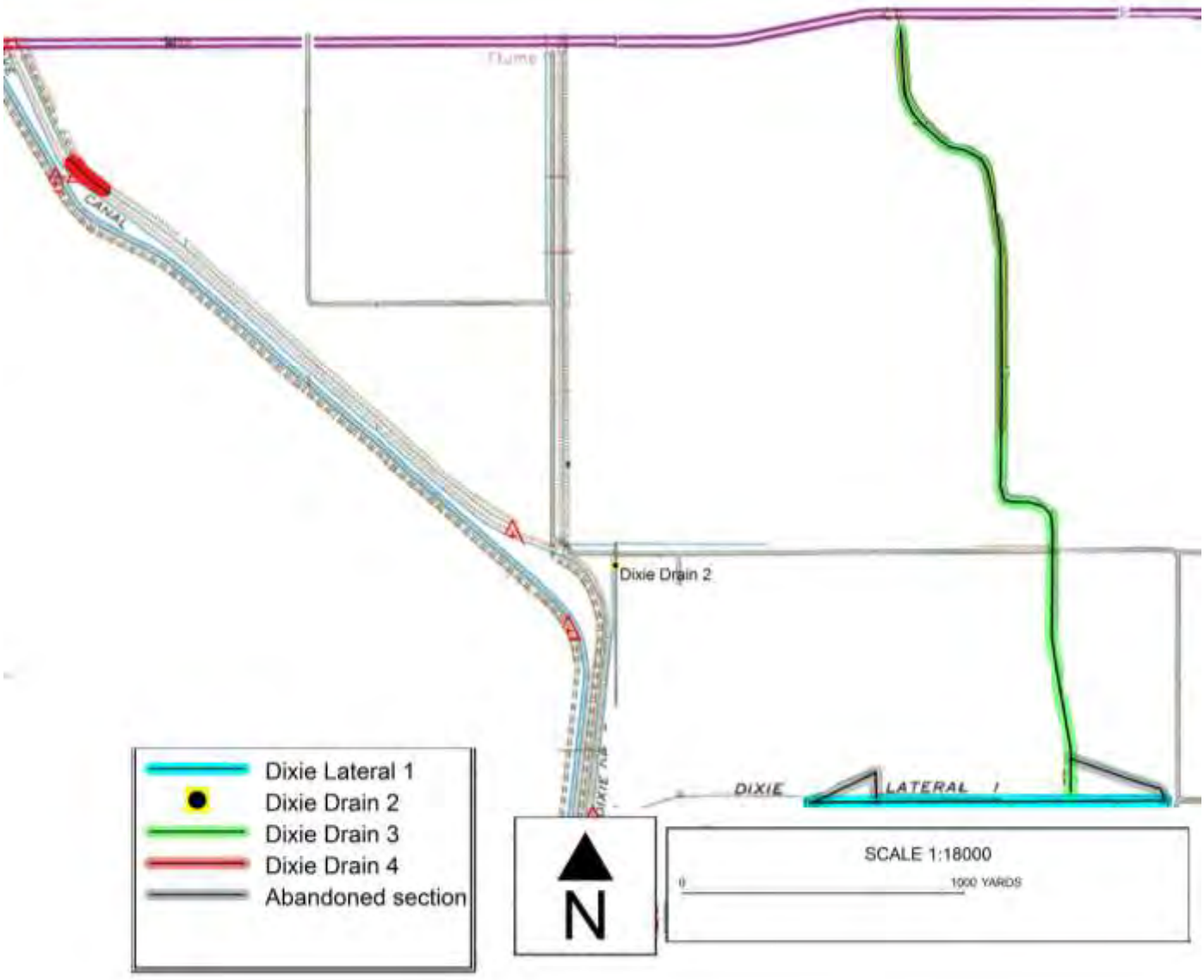
An assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, found that the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. According to the BLM website, the All American Canal is eligible for State inclusion on the NRHP. By extension, the Westside Main Canal system which includes Dixie Drain 3 and Dixie Lateral 1, both of which retain sufficient historic integrity aspects of location and materials, appear to be NRHP- and CRHR- eligible.

URS Corporation however, entered a NRHP status code of 6Z. Meaning that the resource had been found ineligible for listing in the National Register through an evaluation process other than a determination by the Keeper of the National Register or through a consensus determination of a federal agency and the State Historic Preservation Officer. The reason stated on the site form is as follows:

> *"….Overall, the Dixie Drain 3 does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Dixie Drain 3 at the crossing of Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.*

This resource has not been surveyed in its entirety; however, Shannon Davis (ASM Affiliates, Inc.) did evaluate the segments within the Campo Verde Solar Project APE and recommended the Dixie Drains 2, 3, & 4 / Dixie Lateral 1 not eligible for the NRHP and CRHR. Although they are associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, they does not convey that theme as well as other similar resources such as the Westside Main and the All-American canals, in part due to their loss of integrity (Davis et al. 2011; Mitchell 2011).

PC ORIGINAL PKG

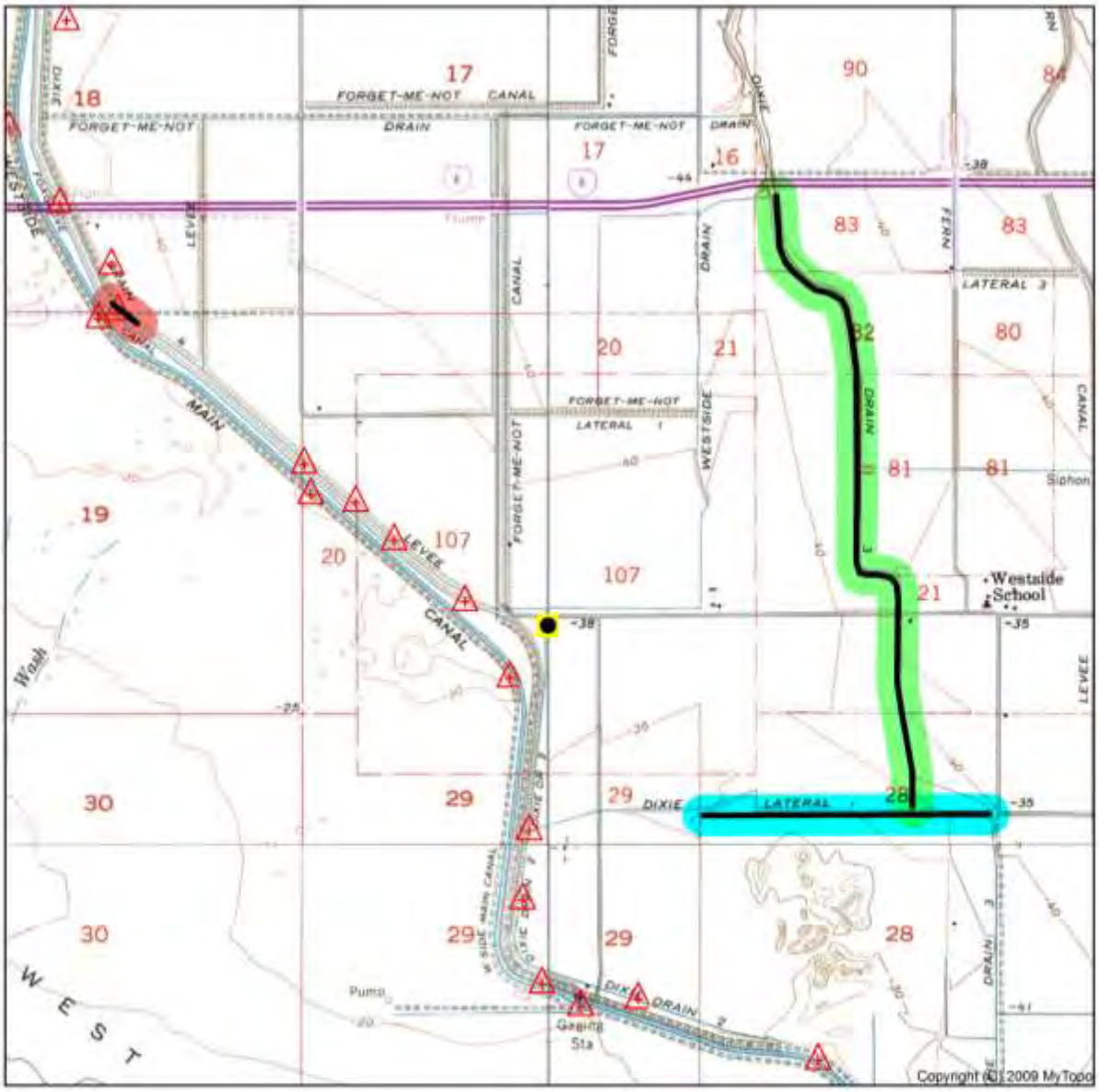


PC ORIGINAL PKG

LOCATION MAP

 *Resource Name or # (Assigned by recorder) Dixie Drains 2, 3, & 4 / Dixie Lateral 1 (portions)

***Map Name:** Plaster City, Calif ***Scale:** 1:24,000 ***Date of Map:** 1957



Declination
GN
MN
GN 0.67° E
MN 11.95° E

SCALE 1:24000
0 1000 2000 3000 4000 5000
FEET
0 1000
METERS
0 1
MILE

PLASTER CITY, CA
1957

PC ORIGINAL PKG

State of California — The Resources Agency **Primary #** 13-012688 update
DEPARTMENT OF PARKS AND RECREATION **HRI#**
PHOTOGRAPH RECORD **Trinomial**

Page 8 **of** 8 **Resource Name or #:** **Year** 2011

Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives Kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Subject/Description	View Toward
07	08	1772	Dixie Drain east side of area 2	S
07	08	1773	Dixie Drain east side of area2	N
07	08	1774	Culvert going under I-10 at north of project area.	N
07	08	1775	West Side Drain at north end of project area.	W
07	09	1776	Dixie Drain culvert going under W. Vaughn	S
07	09	1777	Dixie 3 Drain south of W. Vaughn.	S
07	09	1778	Dixie 3 Drain culvert	D/N
07	09	1779	Dixie 3 Drain	N
07	11	1796	Junction of Dixie Lateral 1 and West Side Drain	NE
07	11	1797	Fig Lake	E
07	11	1798	Fig Lake	E
07	11	1800	Dixie 3 Drain	S
07	11	1801	Dixie Lateral 1	E
07	12	1823	Dixie 3 Drain Tile Line & Tailwater Pipe	N
11	04	2825	West end west side drain	E

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-012688
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Dixie Drain 3

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

* **a. County** Imperial
* **b. USGS 7.5'** Brawley **Date** 1957 **T** 16S **R** 12E ; ¼ ¼ of 10 ; SB **B.M.**
c. Address N/A City N/A Zip N/A
d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 618020 mE/ 3628835 mN
e. Other Locational Data: (e.g., parcel I, directions to resource, elevation, etc., as appropriate)

Dixie Drain 3 is part of the larger Dixie Canal system, which traverses the Dixieland area between the Westside Main Canal, located to the west, and the Fern Canal, located to the east. The portion of the Dixie Drain 3 surveyed is a small segment of a larger historic-period linear property that travels north to south, perpendicular to Evan Hewes Highway for approximately eight miles. The Dixie Drain 3 terminates to the north at Dixie Drain 1 and to the south at the Westside Main Canal. The UTMs provided above are the approximate centerpoint of the portion surveyed.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The portion of Dixie Drain 3 north of Evan Hewes Highway is an unlined earthen channel that appears to be approximately ten-feet wide and eight-feet deep with a concrete circle culvert. The drain features earthen levees covered with dense, overgrown vegetation consisting of wild grasses and weeds. Due to the density of the vegetation, the shape of the drain is difficult to discern, but appears to be trapezoidal. Dixie Drain 3 intersects the Westside Drain, which is located on the west. Approximately one-half mile north of Evan Hewes Highway, Dixie Drain 3 intersects with Dixie Drain 5, a shallow earthen ditch approximately five feet wide, which runs parallel to the highway. South of Evan Hewes Highway, Dixie Drain 3 is a corrugated metal pipe. The pipe runs on the ground surface but is obscured by dense native vegetation. Overall, the portion of the Dixie Drain 3 that bisects Evan Hewes Highway is in good condition, but has been affected by non-historic period construction and features, including the crossing.

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/Aqueduct

***P4. Resources Present:** ☐ **Building** ☒ **Structure** ☐ **Object** ☐ **Site** ☐ **District** ☐ **Element of District** ☐ **Other** (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (view, date, accession #)
View of circle culvert north of Evan Hewes Highway, March 2009

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Approximately 1940
1940 Brawley 15-min USGS

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Baroni Boulevard
Imperial, CA 92251

***P8. Recorded by:** (name, affiliation, and address)
URS Corporation
1615 Murray Canyon Rd., Suite 1000
San Diego, CA 92108

***P9. Date Recorded:** 05/2009

***P10. Survey Type:** (Describe)
Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Mutaw, Robert J. (Ph.D.), Elizabeth B. Roberts, Gordon C. Tucker Jr., Ph.D., Brian Shaw, Terrie Bagwell, Colin O'Hanlon, Rachael Nixon, Gary Fink, Jeremy Hollins, Mark Neal. 2010 Draft Final Class III Confidential Cultural Resources Technical Report for the Imperial Valley Solar (formerly Solar 2), Imperial Valley County. URS Corporation. Technical report prepared for Tessera Solar (Applicant). Submitted to the Bureau of Land Management – El Centro Field Office, El Centro, CA. Copies available from the Bureau of Land Management – El Centro Field Office, El Centro, CA.

***Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

*Resource Name or #: (Assigned by recorder) Portion of Dixie Drain 3

B1. Historic Name: Dixie Drain 3
B2. Common Name: Dixie Drain 3
B3. Original Use: Irrigation Ditch B4. Present Use: Irrigation Ditch
*B5. Architectural Style: N/A
*B6. Construction History: (Construction date, alterations, and date of alterations)
Actual construction date of the Dixie Drain 3 is unknown, despite efforts to contact the Imperial Irrigation District for construction date and information. However, the drain is shown on the 1957 Brawley and Seeley 7.5-minute USGS quadrangle maps. Review of the 1940 Plaster City 15-Minute USGS quadrangle map shows the existence of another Dixie Drain 4 (which is located one and half-miles to the west), but the drain does not extend far enough east to the location of Dixie Drain 3. The 1940 Brawley 15-minute USGS quadrangle map shows the general outline of the Dixie Drain 3 but the drain is not labeled. Based on this information, it can be assumed that Dixie Drain 3 was constructed by approximately 1940. A review of the 1949 USDA Aerial Photograph Collection, 1957 Brawley and Seeley 7.5-minute USGS quadrangle maps and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the canal has remained consistent for most of its history.
*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: N/A Original Location: N/A
*B6. Related Features:
Dixie Drain 5

B9. Architect: N/A b. Builder: Unknown
*B10. Significance: Theme N/A Area Dixieland, Imperial County
Period of Significance N/A Property Type Irrigation Ditch Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A
*B12. References:
See Continuation Sheet 523L (Page 6)

B13. Remarks:
None

(Sketch Map with north arrow required)
See Continuation Sheet 523L (Page 5)

*B14. Evaluator: Jeremy Hollins
*Date of Evaluation: 5/19/2009

(This space reserved for official comments)

PC ORIGINAL PKG
* Required information

B10. Significance (Continued)

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States in approximately 1906 was intended to alleviate irrigation problems and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigación y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

B10. Significance (Continued)

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

Dixie Drain 3, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Dixie Drain 3 (which is a related feature to the larger Westside Main Canal and All-American Canal), appears to be NRHP- and CRHR- eligible. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

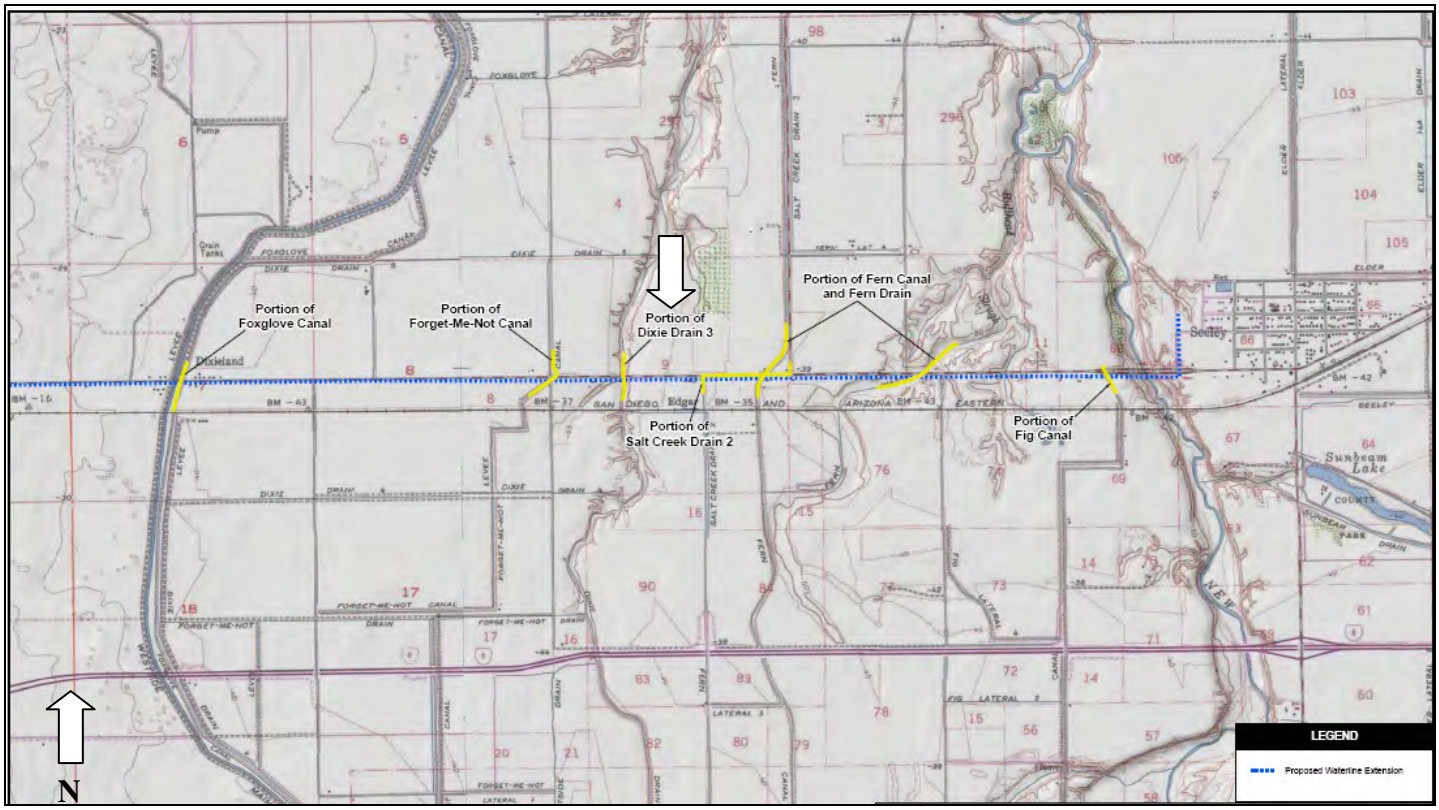
Overall, the Dixie Drain 3 does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire drain has not occurred. The portion of Dixie Drain 3 at the crossing of Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.

In summary, the portion of Dixie Drain 3 at the crossing of Evan Hewes Highway does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed water line adjacent or perpendicular to the existing Dixie Drain 3 would not create a new adverse effect or significant impact to the portion of the historic-period property that bisects the Evan Hewes Highway.

Page 5 **of** 8 ***Resource Name or #:** (Assigned by recorder) Portion of Dixie Drain 3
***Recorded by:** URS Corporation ***Date:** 05/2009
☒ Continuation ☐ Update

Sketch Map:

Not to Scale



PC ORIGINAL PKG

* Required information

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

PC ORIGINAL PKG

Additional Photos:



View of canal north of Evan Hewes Highway



View of pipe south of Evan Hewes Highway

Additional Photos:



View of Dixie Drain 5

*Resource Name or #: Westside Main Canal / IMP-7834
☐ Continuation X Update

Map Reference Number: 14

P1. Other Identifier: Westside Main Canal and Drain
e. Other Locational Data: south of Mandrapa Road, 1,400 feet east of Liebert Road

*P3a. Description: The 4-mile segment of the Westside Main Canal was identified using aerial images and observed from the right-of-way during the survey. The Westside Main Canal was constructed between 1906 and 1908 by the California Development Company and was extended into the API from a canal in Mexico. The earthen canal is approximately 75–80 feet wide and 10 feet deep. In 1941, the Westside Main Canal was incorporated into the All-American Canal system. Features along the Westside Main Canal include the Fern Check Bridge, built in 1947, and another spillway system, built in 1967, near the Fox Glove Canal. The segment observed is the main canal that feeds the Fig and Fern Canals and the Wixom and Dixie Drains (Photograph 1). The Westside Main Canal was constructed and incorporated into the All-American Canal in 1941, and the portions of the canal that were located in Mexico were removed from the IID (URS 2009d: 1–5).

*P3b. Resource Attributes: HP20: Aqueduct/Canal

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

The Westside Main Canal was incorporated into the All-American Canal upon its completion the following year in 1942 (Wlodarski 2006: 3; Johnson 2012e; URS 2009d; IID 2023)

BLM and IID have determined the All-American Canal is eligible for the NRHP as a historic district under Criterion A and Criterion C. According to report from 2001, BLM stated that the All-American Canal was found to be significant on local, state, and national levels due to its association with major federal public works projects, IID, and Imperial Valley. All elements of the canal are evaluated here as significant contributing elements of a district even if they are less than 50 years old. Additional research is required to determine if elements are contributory, prior to any NRHP nomination submittals. The All-American Canal is an ongoing and vital element of Imperial Valley's infrastructure that, since its construction, has required regular maintenance and upgrading (Schaefer and O'Neil 2001: 71).

Individual segments of the Westside Main Canal have been previously evaluated 12 times. The first evaluation in 1999 considered the Westside Main Canal, as a whole, significant under Criteria A and C for its association with the development of irrigated commercial agriculture in the Imperial Valley as a good example of an early large-scale irrigation canal system. However, the report mentioned that the segment within the project area did not possess sufficient integrity (Hupp 1999). One report from 2000 and three from 2007 considered the Westside Main Canal eligible for the NRHP under Criterion A/1 as an extension of the All-American Canal. In 2009 and 2010, URS and the IID Dixieland 203-kilovolt Transmission Line and Substation Expansion Project considered the Westside Main Canal not eligible for the NRHP under the NRHP Status Code 6Z (URS 2009d: 2-4; Bowden-Renna 2010: 1).

In 2011, ASM concurred in two separate updates with the 2007 report from SWCA Environmental Consultants recommending that the segment of the Westside Main Canal was eligible for the NRHP and CRHR under Criterion A/1 as a contributor to the All-American Canal for its association with the irrigation of the Imperial Valley (Davis 2011; Krintz 2011:1). Three additional

PC ORIGINAL PKG

reports in 2011 by KP Environmental, Chambers Group, and AECOM evaluated a portion of the Westside Main Canal that included the Pump 6 site location, which was located on the south side of Mandrapa Road. KP Environmental and Chambers Group concluded that the segment of the property was not eligible and does not appear to be a contributing element to the Westside Main Canal system (Johnson et al. 2011; Thomson 2011). AECOM concurred with the 1999 California Department of Transportation report that the 7-mile portion of the canal that crosses under Interstate 8 is not eligible due to lack of integrity. In 2017, ASM did not give an updated evaluation but conducted an intensive-level survey of the canal between Mandrapa and Vogel Roads to Mandrapa and Liebert Roads (Lennen 2017:1)

On April 11, 2023, Dudek revisited a portion of the Westside Main Canal adjacent to the Project APl and observed multiple alterations since the last recordation in 2017. Portions of the surveyed segment of the Westside Main Canal are included in past evaluations: the 2011 IID Dixieland 230-kilovolt Transmission Line and Substation Expansion Project (Thomson 2011); and the Imperial Valley Solar Farm Project, West Imperial County, California (Krintz 2011; URS 2009). A concrete bridge that spans over the Westside Main Canal 830 feet west of the Fern Check is present and leads to the entrance of the Imperial Valley Substation, built ca. 2022.

Dudek concurs with the previous findings that the canal does not meet the criteria for listing in the NRHP or CRHR due to lack of integrity. The 4-mile segment of the Westside Main Canal between West Vaughn Road and Liebert Road does not reflect its original construction through the construction of features outside of its period of significance (1908–1941). Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the segment of the Westside Main Canal is not a historical resource for the purposes of CEQA. Dudek has assigned the segment of the Westside Main Canal a 6Z California Historical Resource status code.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), either individually or as a contributing element to an existing or potential historic district.

***B14. Evaluator:** EJ (Erin) Jones, MA, Dudek. 1810 13th Street, Suite 110, Sacramento, CA. 95811.

***Date of Evaluation:** August 15, 2023.

PC ORIGINAL PKG

Photograph(s):

Photograph 1. Photo taken from bridge to substation, looking southeast toward the Fern Check Bridge.



PC ORIGINAL PKG

References

Bowden-Renna, Cheryl 2010 Cultural Resources Investigations Class III Report for the IID Dixieland 230 kV Transmission Line and Substation Expansion Project, Imperial County, California. Prepared by AECOM

Davis, S 2011. "Westside Main Canal and Drain." ASM Affiliates.

Hupp, Jill 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program

IID (Imperial Irrigation District). 2023. "Water History." Imperial County, California. Accessed June 2023. https://www.iid.com/about-iid/mission-vision-statements/iid-history.

Johnson, B. D., C. Bodmer, et al. 2011 "DPR Form set for the Westside Main Canal". Chambers Group Inc.

Johnson, B. D. 2012: DPR form set for Westside Main Canal." Chambers Group Inc.

Krintz, J. 2011. "DPR Form set for the Westside Main Canal." ASM Affiliates, Inc.

Lennen, J. 2017. "DPR 523 Form set for the Westside Main Canal." ASM Affiliates, Inc.

Schaefer, J., and O'Neil, C. 2001. *The All-American Canal: An Historic Properties Inventory and Evaluation.* Completed by ASM Affiliates for the Imperial Irrigation District (IID). On file at the San Joaquin Valley Information Center.

Thomson, H. 2011. "Westside Main Canal (portions)." State of California Department of Parks and Recreation.

Wlodarski, R.J. 2006. "Field Reconnaissance Report Cellular Archaeology Resource Evaluations C.A.R.E."

URS 2009. "DPR Form set for the Westside Main Canal."

PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

CONTINUATION SHEET

Primary # P-13-008334
HRI #
Trinomial IMP-7834

Page 1 of 1
Recorded by: Joel Lennen

***Resource Name or #** Westside Main Canal / IMP-7834
Date: April 25, 2017

☐ Continuation ■ Update

P1. **Other Identifier:** Westside Main Canal

***P2.** **Location:** ☐ **Not for Publication** ☒**Unrestricted**
***a. County:** Imperial County
***b.USGS 7.5'** Mount Signal **Quad Date** 1979 **T** 16S; **R** 12E; ¼ **of** ¼ **of Sec** 35; **B.M.**
c. Address City Zip
d. UTM: Zone 11 S, west side 620436.83 mE/ 3622228.39 mN; east side 620882.48 mE/ 3622133.77 mN
e. Other Locational Data: south of Mandrapa Road, from Liebert Road east for approximately 1,400 feet.

***P3a.** **Description:** P-13-008334/IMP-7834, the Westside Main Canal, is located immediately adjacent to the southern boundary of the Project area. Segments of this irrigation canal, which runs for approximately 40 miles through agricultural land in the Imperial Valley section of Imperial County, have been recommended eligible for listing in the NRHP and CRHR under Criterion A/1 for its significance in the development of the Imperial Valley. Although varying segments of the canal have been recommended as not eligible for the NRHP due to lack of integrity.

During the current survey, a small segment of the canal was identified, outside but adjacent to the Project area, beginning at the intersection of Mandrapa and Vogel Roads, heading west, ending at the intersection of Mandrapa and Liebert Roads. The canal is approximately 75 feet wide and is banked by earthen levees of vegetation. Dirt roads run along the levees on both sides of the canal for maintenance and dredging access. The canal was in the same condition as described by the previous recordations.

***P8.** **Recorded by:** (Name, affiliation, and address)
Joel Lennen
ASM Affiliates, Inc.
2034 Corte del Nogal
Carlsbad, CA 92011

***P10.** **Survey Type: (Describe):**
Intensive Pedestrian

***P11.** **Report Citation:**
Castells, Shelby and Joel Lennen
2017 *Cultural Resource Inventory for the Vega SES LLC Solar Project, Imperial County, California*. Submitted to Vega SES LLC.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7835 UPDATE
NRHP Status Code: 3D

 ***Resource Name or # (Assigned by recorder)** East Highline Canal at Bridge No. 58C-0115
Recorded by: Marilyn Novell, Architectural Historian **Date:** October 31, 2016
☐ Continuation ☒ Update

P1. Other Identifier: East Highline Canal at Bridge No. 58C-0115 and the adjacent delivery system associated with the East Highline Canal (segments of East Highline No. 1 Side Main and East Highline Lateral No. 1)
***P2. Location:** ☐ Not for Publication ☒ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Bonds Corner **Date:** 2015; **T** 16S; **R** 16E; **of Sec.** 26 and 35; S.B. **B.M**
c. Address: N/A **City:** Holtville **Zip:** N/A
d. UTM: Zone 11S 660290.84 **mE** / 362204.40 **mE** N
***P3a. Description:**
The East Highline Canal is a linear feature that runs from the Alamo River to just north of Niland. A small portion of the Canal measuring approximately 200 feet is within the project area, where it is crossed by Verde School Road at Kumberg Road. In and near the project area, the Canal varies between 95 and 105 feet in width and is contained within earthen banks capped by dirt access roads. Fairly dense, low vegetation lines the areas of the banks nearest the water. At the middle of the site, a bridge with wood railings spans the Canal. North of the bridge on the western bank of the Canal is a three-sided structure composed of fragments of bricks and mortar sitting on a base of stone and lined with concrete. Large pieces of broken concrete are leaning against the structure and scattered nearby. The East Highline No 1 Side Main parallels the East Highline Canal approximately 130 feet to the west of the western bank of the Canal. The sloping sides of the drain are lined with concrete. At the time of survey, it contained water from approximately 4 feet below ground level to an unknown depth, and the bottom of the waterway thus was not visible. Several feet from the point at which Verde School Road crosses the drain, check dams constructed of metal and concrete are incorporated into the crossing. At an irregularly shaped holding bay to the north of the road are three additional check dams on the east and west sides. To the south of the road three concrete walls channelize the water. At the time of survey, the canal was carrying water and appeared to be in operation. The Canal and associated features retain integrity.

(Continued on page 2)



***P3b. Resource Attributes:** HP20. Canal/Aqueduct
P5a. Photograph or Drawing:
P5b. Description of Photo: View northwest from the east bank of Canal south of bridge. September 22, 2016.

***P6. Date Constructed/Age and Sources:**
☒ Historic; constructed circa 1914
☐ Prehistoric ☐ Both

***P7. Owner and Address:**
Imperial Irrigation District
333 E Barioni Blvd, Imperial, CA 92251

***P8. Recorded By:**
Marilyn Novell, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** October 31, 2016

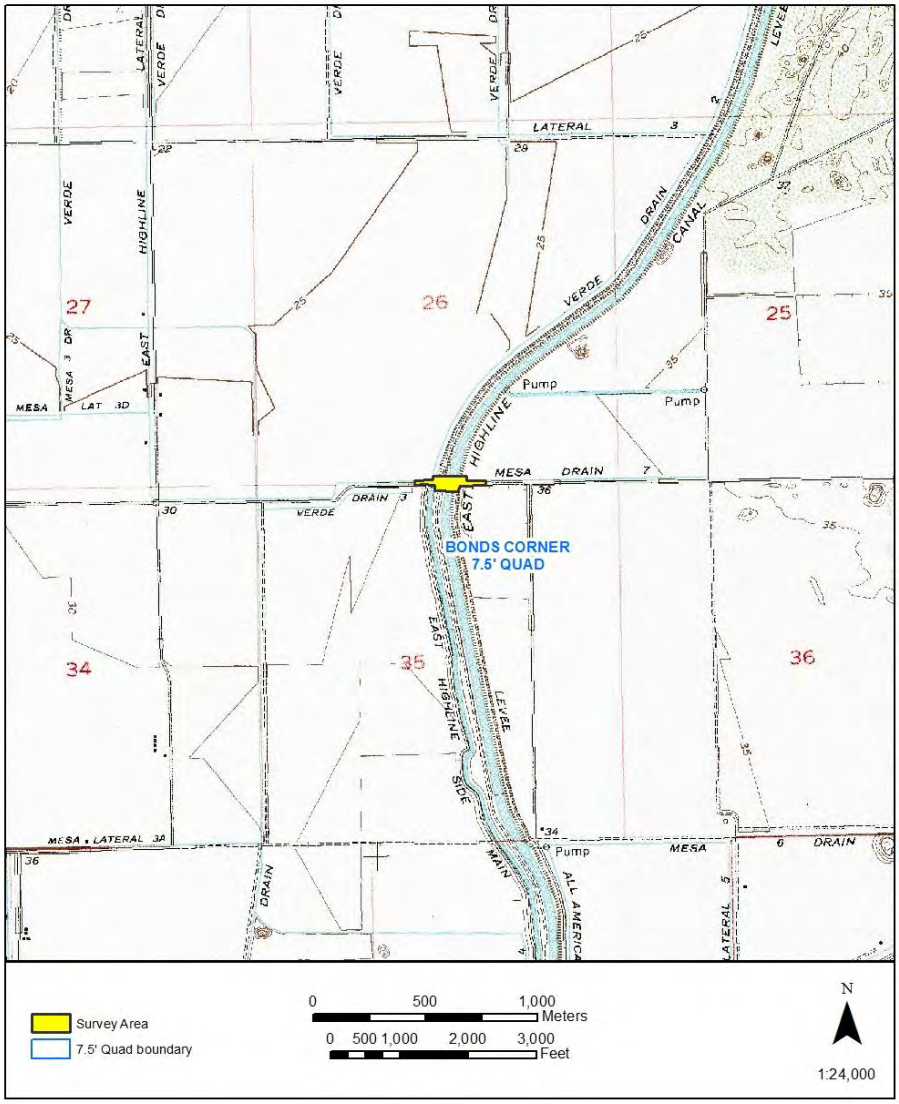
***P10. Survey Type:** Reconnaissance

P11. Report Citation: ASM Affiliates. 2017. *Historical Resources Evaluation Report for the Verde School Road Bridge Project, Imperial County, California.* Prepared for Caltrans District 11a. September 2017.

PC ORIGINAL PKG

***B10. Significance: Theme:** Agricultural Canal **Area:** Imperial County, CA
Period of Significance: 1914-1942 **Property Type:** Waterway **Applicable Criteria:** A/1, C/3
As a segment of the previous evaluated East Highline Canal, the East Highline Canal at Bridge No. 58C-0115 and the adjacent delivery system associated with the East Highline Canal (segments of East Highline No. 1 Side Main and East Highline Lateral No. 1) are recommended eligible for the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) under Criterion A/1 for association with the theme of *Development of Irrigated Agriculture in the Imperial Valley, 1900-1942* and under NRHP and CRHR Criterion C/3 as an example of early engineering design of canal systems in Imperial County, at the local level with a period of significance of 1914 (when this canal was constructed) and ending in 1942. The fragment of a former gate structure is a non-contributing element of the canal as it lacks integrity as a built-environment resource, does not contribute to the function of the canal (does not deliver water/irrigate), and does not possess any data potential.

Location Map



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-008334 Update
HRI # _____
Trinomial _____
NRHP Status Code _____
Other Listings _____
Review Code _____ **Reviewer** _____ **Date** _____

 ***Resource Name or #** Westside Main Canal

P1. Other Identifier: Westside Main Canal
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Imperial County
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5'** Plaster City **Quad Date** 1979 **T R**; **¼ of Sec** 7; SB **B.M.**
c. Address City Zip
d. UTM: Zone 11S; 613474.85 mE/ 3628580.65 mN (Northern terminus within the APE)
Zone 11S; 615427.74 mE/ 3628580.65 mN (Southern terminus within the APE)
e. Other Locational Data:

***P3a. Description:**
This site form updates a 7 mile segment of the forty mile Westside Main Canal alignment. The Westside Main Canal is an irrigation canal that runs though agricultural land in the Imperial Valley section of Imperial County. The northern terminus of the recorded segment is located .25 miles east of Centinela State Prison in Imperial, CA (UTMs Zone 11S; 613474.85 mE/ 3628580.65 mN). After the canal passes under Interstate 8 the route orients to the southeast. The remainder of the route curves and the southern terminus of the recorded segment ends .25 miles east of the intersection at Mandrapa and Liebert in Imperial, CA (UTMs Zone 11S; 615427.74 mE/ 3628580.65 mN). The canal is approximately 75 feet wide. It is banked by earthen levees of vegetation and is unlined. Dirt access roads run along the levees on both sides of the canal for maintenance and dredging access.

***P3b. Resource Attributes:** HP. 20 Canal/Aqueduct
***P4. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo:
Camera facing south; 07/20/2011; DSCN_9772

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
c. 1906/*IMP-98 HASR*, 1999.

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd
Imperial, CA 92251

***P8. Recorded by:**
AECOM
1420 Kettner Blvd., Suite 500
San Diego, CA 92101

***P9. Date Recorded:** 07/20/2011

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** *BUILT ENVIRONMENT SURVEY REPORT ADDENDUM TO THE CULTURAL RESOURCES INVESITGATIONS CLASS III REPORT FOR THE IID DIXIELAND 230 kV TRANSMISSION LINE AND SUBSTATION EXPANSION PROJECT, IMPERIAL COUNTIES, CALIFORNIA*, AECOM 2012

***Attachments:** NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☒ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) _____

PC ORIGINAL PKG

***Required Information**

L1. Historic and/or Common Name: Westside Main Canal

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**

b. Location of point or segment:

The northern terminus of the recorded segment can be reached from El Centro by taking Interstate 8 west for 7 miles and exit towards Seeley traveling on Drew Road for one mile. Turn left on Drew Road and go west for 4 miles. The northern terminus of the recorded segment begins .25 miles east of Centila State Prison at UTMs Zone 11S; 613474.85 mE/ 3628580.65 mN.

L3. Description:

This site form updates a 7 mile segment of the forty mile Westside Main Canal alignment. The Westside Main Canal is an irrigation canal that runs though agricultural land in the Imperial Valley section of Imperial County. The northern terminus of the recorded segment enters the Area of Potential Effects (APE) .25 miles east of Centinela State Prison in Imperial, CA (UTMs Zone 11S; 613474.85 mE/ 3628580.65 mN). After the canal passes under Interstate 8 the route orients to southeast. The remainder of the route curves and the southern terminus of the recorded segment ends .25 miles east of the intersection at Mandrapa and Liebert in Imperial, CA (UTMs Zone 11S; 615427.74 mE/ 3628580.65 mN). The canal is approximately 75 feet wide running perpendicular to Hwy 80. It is banked by earthen levees of vegetation and is unlined. Dirt access roads run along the levees on both sides of the canal for maintenance and dredging access.

L4e. Sketch of Cross-Section (include scale) Facing:

L4. Dimensions:

a.Top Width 75 feet
b. Bottom Width unknown
c. Height or Depth 10 feet
d. Length of Segment 7 miles

L5. Associated Resources:

The Fox Glove Canal runs parallel to the Westside Main Canal.

L6. Setting:

Located in between Plaster City and Seeley, the canal is surrounded by primarily irrigated agricultural land. A variety of crops grow along this segment, as well as rural vegetation along its banks. Dirt access roads run parallel to the canal along its berms.



PC ORIGINAL PKG

L7. Integrity Considerations:

The canal is currently in use and is regularly maintained to keep the banks properly groomed and the quantity of silt minimal.

L8b. Description of Photo, Map, or Drawing: Camera facing south; 07/20/2011; DSCN_8771

L9. Remarks:

L10. Form Prepared by:

AECOM
1420 Kettner Blvd., Suite 500
San Diego, CA 92101

L11. Date:

07/20/2011

This site form updates the 7-mile recorded segment of the larger 40 mile Westside Main Canal. P-13-008334 was recorded by Jill Hupp in 1999. During the current survey effort, the portion of the canal within the project area is earthen lined and is still in use today. While the canal has been recommended eligible for the National Register of Historic Places (NRHP), the portion of the canal within the proposed project area was examined in 1997 and 1998 and was recommended not eligible for the NRHP due to lack of integrity (Hupp 1999). Caltrans also evaluated a portion of the canal as it crosses under I-8. Caltrans determined that, under California Environmental Quality Act (CEQA), the portion of the canal under I-8 is not a historic resource and therefore is not eligible for the NRHP (Hupp 1999).

Bowden-Renna, Cheryl
2010 *Cultural Resources Investigations Class III Report for the IID Dixieland 230 kV Transmission Line and Substation Expansion Project, Imperial County, California*. Prepared by AECOM

Hupp, Jill
1999 P-13-008334 Site Form. Form on file at the South Coastal Information Center.

PC ORIGINAL PKG

UPDATE

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #: P-13-008334
HRI# _____
Trinomial CA-IMP-7834

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder)

***Recorded by:** C. Bowden-Renna ***Date:** 1/2010 ☐ Continuation ■ Update

Site P-13-008334 was recorded by Jill Hupp in 1999. This site is the Westside Main Canal, which was built about 1906 as a part of the Imperial Irrigation District canal system within Imperial Valley. During the current survey effort, the portion of the canal within the project area is earthen lined and is still in use today. While the canal has been recommended eligible for the National Register of Historic Places (NRHP), the portion of the canal within the proposed project area was examined in 1997 and 1998 and was recommended not eligible for the NRHP due to lack of integrity (Hupp 1999). Caltrans also evaluated a portion of the canal as it crosses under I-8. Caltrans determined that, under California Environmental Quality Act (CEQA), the portion of the canal under I-8 is not a historic resource and therefore is not eligible for the NRHP (Hupp 1999).

Bowden-Renna, Cheryl
2010 *Cultural Resources Investigations Class III Report for the IID Dixieland 230 kV Transmission Line and Substation Expansion Project, Imperial County, California.* Prepared by AECOM.

Hupp, Jill
1999 P-13-008334 Site Form. Form on file at the South Coastal Information Center.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-13-008334 Update
HRI #
Trinomial CA-IMP-7834 Update
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

 ***Resource Name or #:** Westside Main Canal

P1. Other Identifier: Westside Main Canal
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Imperial
***b. USGS 7.5' Quad:** Mount Signal **Date:** 2010 **T** 17S;**R** 12E/13E; of **Sec** 3, 2, 11, 12, 13, 24, 19, 20, 17, 21, **;S.B.B.M.**
c. Address: N/A City: N/A Zip: N/A
d. UTM: Zone: 11N; North end:620445mE/ 625496mN; South end: 625496mE/3613610mN (G.P.S.) NAD 83
e. Other Locational Data: Elevation: -7 m below sea level
Approximately seven miles west of El Centro along Hwy 8 is the intersection of Drew Road. When traveling west on Hwy 8 towards this intersection, take exit 107 for Drew Road toward Seeley. Merge onto Drew Road heading south bound. Continue along Drew Road for 2.3 miles to reach W Wixom Road. Turn west onto W Wixom Road and continue on this road for 1.4 miles to reach Liebert Road. Turn south onto Liebert Road and continue for 0.6 miles to reach Mandrapa Road. Turn west on Mandrapa Road; the Westside Main Canal flows adjacent to Mandrapa Road.

***P3a. Description:** Constructed in 1907, Site 13-8334 the Westside Main Canal, is part of the earliest irrigation system in the Imperial Valley, and was later integrated into the All-American Canal during the late 1930s. The All-American canal runs in an east-west direction just north of the international border with the U.S. and Mexico. The portion of the Westside Main canal as it passes through the APE is approximately 8 feet deep and 40 feet wide and is earthen lined. The portion of the Westside Main Canal that was surveyed includes a segment along the south side of Mandrapa Rd., between North Hyde Rd. to the west and Drew Rd. to the east. The Westside Main Canal was updated by Jennifer Krintz of ASM Affiliates in April 2011. The condition of the canal has not changed since its update by ASm Affiliates in April 2011.

***P3b. Resource Attributes:** HP20 Canal/Aqueduct

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☒Other (Isolates, etc.)

P5a. Photo



P5b. Description of Photo:
Westside Main Canal Facing east

***P6. Date Constructed/Age and Sources:** ☒Historic
☐Prehistoric ☐Both

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:**
C.Bodmer, B. Bartram, B. Johnson
T. Murphy, S. Wintergerst
Chambers Group Inc.,
5 Hutton Centre Drive, Ste. 750,
Santa Ana, CA 92707

***P9. Date Recorded:** 11/19/2011

***P10. Survey Type:** Pedestrian survey(15 meter transect intervals)

***P11. Report Citation:** A Class III Cultural Resources Inventory For The Agile Energy, Inc. Silverleaf Photovoltaic Solar Project Near The City Of El Centro, Imperial County, California

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder) Westside Main Canal

B1. Historic Name: Westside Main Canal
B2. Common Name: Westside Main Canal
B3. Original Use: Irrigation Ditch
B4. Present Use: Irrigation Ditch

***B5. Architectural Style:** N/A

***B6. Construction History:** The Westside Main Canal was constructed in 1908 as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of this portion of the Westside Main Canal was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** None

B9a. Architect: N/A
b. Builder: Imperial Irrigation District

***B10. Significance: Theme:** N/A **Area:** West El Centro, Imperial County
Period of Significance: N/A **Property Type:** Irrigation Ditch **Applicable Criteria:** N/A

In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A

***B12. References:**
See Continuation Sheet 523L (Page 6)

B13. Remarks:

(Sketch Map with north arrow required.)

See Continuation Sheet 523L (Page 5)

***B14. Evaluator:** Jeremy Hollins

***Date of Evaluation:** 04/2011

(This space reserved for official comments.)

PC ORIGINAL PKG

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States in approximately 1906 was intended to alleviate irrigation problems and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigacion y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

PC ORIGINAL PKG

The Westside Main Canal system distributes irrigation water throughout Imperial County using a large network of smaller canals and drains. By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

Based on Caltrans' earlier 1999 assessment, the Westside Main Canal, as a whole, reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. The canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in the Imperial County west of the New River and as a good example of an early large-scale irrigation canal system. It does not appear to be associated with the lives of significant people or likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR. The canal was associated only for a short period with the CDC, from 1905 to 1911, nearly ten years after the company was established. Additionally, the canal was already in operation upon the forming of the IID, and does not reflect or convey the contributions of the IID to Imperial County.

Overall though, research conducted as part of Caltrans' 1999 assessment of the system found that the canal as a whole (while significant) does not retain a sufficient amount of its historic integrity to convey its significance due to regular dredging, grading, widening, and reconstruction that has occurred since the 1950s, though, an intensive survey of the entire canal has not occurred. The portion of the Westside Main Canal within the historic architecture APE also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA. While still earthen, extensive dredging and grading since the 1960s has changed the basic configuration of the canal, which has impacted its design, setting, and feeling. The canal currently has a U-shaped profile, whereas historically it was trapezoidal.

The addition of a non-historic period pipeline, and highway and railroad crossings over the canal in the historic architecture APE disrupt the property's integrity aspects of setting and feeling, since these elements are outside of the property's period of significance, 1941 to 1950. Accordingly, due to these alterations, the workmanship and association of the historic-period property in the APE has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance, and the property is not sufficiently intact to convey the direct link between significant events and the canal.

In summary, the portion of the Westside Main Canal within the historic architecture APE does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed Solar Farm adjacent or perpendicular to the existing structure would not create a new adverse effect or significant impact.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

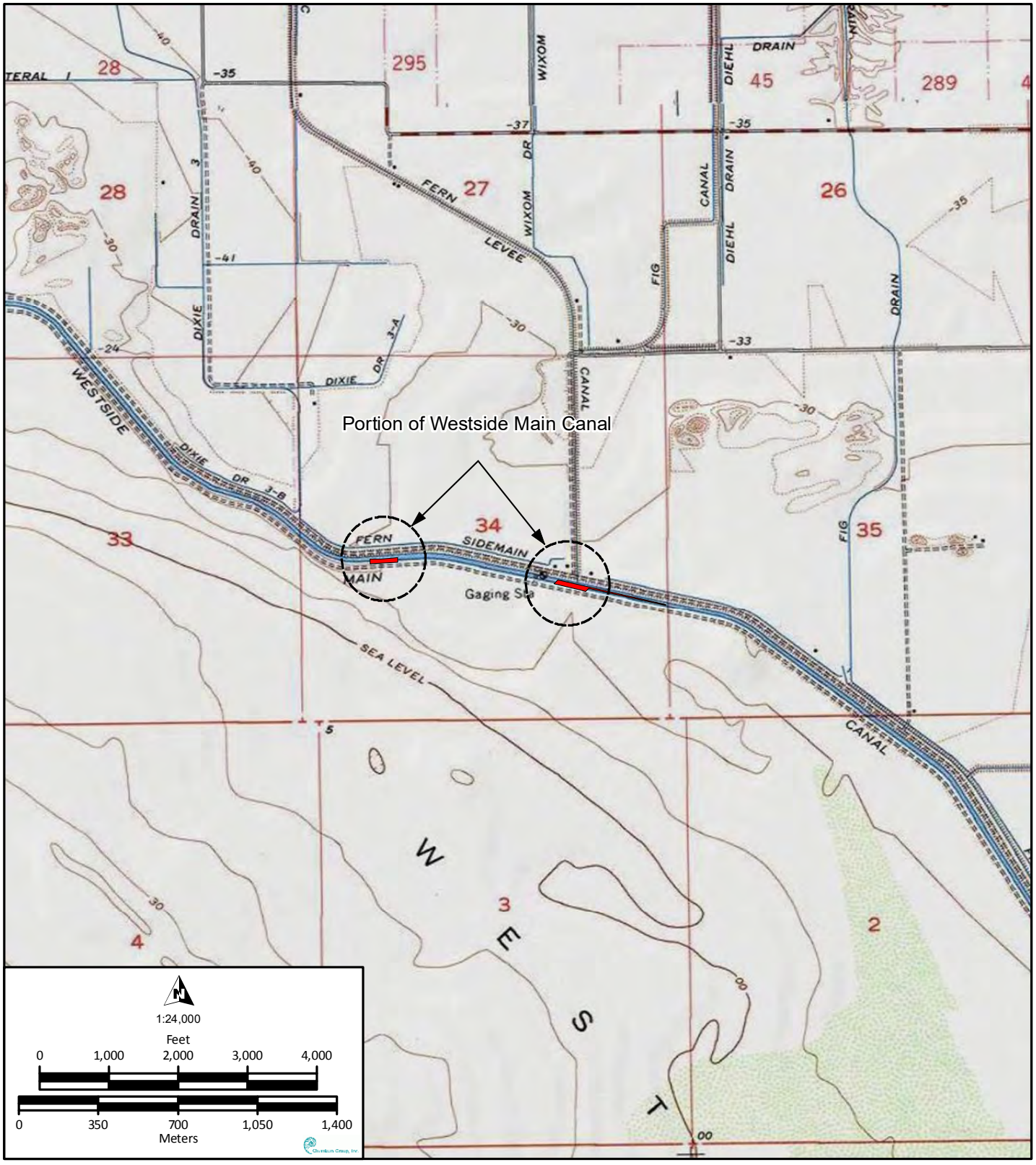
Primary # 13-8334
HRI#
Trinomial CA-IMP-7834

***Resource Name or #:** Westside Main Canal

***Map Name:** Mount Signal

***Scale:** 1:24,000

***Date of Map:** 2010



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program.

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway.
Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

PC ORIGINAL PKG

*Recorded by: Trish Mitchell, Erica Maier, and Heather Thomson: kp environmental, LLC and Alan Hatcher: Native American Monitor, Cocopah *Date: 01/24/2012 ☒ Continuation ☒ Update

CA-IMP-7834 was first recorded in 1999 by Jill Hupp who conducted extensive background research documenting the history of the Westside Main Canal. This resource has been recorded, evaluated, re-recorded, updated and re-evaluated nine times since it was first recorded in 1999. Each time only the portion of the canal within the project right-of-way was documented and ultimately evaluated for significance. As of 2011 (Davis et al. 2011; Mitchell 2011) the segments of the Westside Main Canal within the Campo Verde Solar Facility APE is determined eligible for listing in the NRHP and CRHR under Criterion A/1 for its significance in the development of the Imperial Valley. In 2001 the Bureau of Reclamation and the California SHPO concurred that the All-American canal is eligible for the NRHP under Criterion A and by extension the Westside Main Canal is as well (Hunt 2008). Davis concurred with this determination for the Campo Verde Solar Facility APE (Davis et al. 2011; Mitchell 2011). The Pump 6 segment of the Westside Main Canal that is recorded in the current survey area was not a part of Davis' 2011 evaluation. Chambers Group (2011) relocated the Pump 6 portion of the site during their November 2011 survey as previously recorded. KPE updated the Pump 6 site location to include a segment on the western end of the canal where the canal turns northwest and extends for another 900 feet.

Mitchell, Patricia T. 2012. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project BLM Gen-Tie Option Alternatives, Imperial County, California.

Chambers Group, Inc. 2011. Draft - A Class III Cultural Resources Inventory for the Silverleaf Photovoltaic Solar Project Imperial County, California.

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

Hunt, Kevin. 2008. Cultural Resources Survey of Alternatives for the Sunrise Powerlink Project in Imperial, Orange, Riverside, and San Diego Counties, California. SWCA Environmental Consultants. Report submitted to Bureau of Land Management, California Desert District, Moreno Valley, California.

Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

PC ORIGINAL PKG

Primary # P-13-008334 UPDATE
HRI#
Trinomial CA-IMP-7834
*Resource Name or # (Assigned by recorder) Westside Main Canal
*Date: 1/24/2012 ☐ Continuation ☒ Update



IMG 3385: Canal corner where it turns NW for 900 feet, View to E.



IMG 3387: Westside Main Canal Pump 6, View down.

PC ORIGINAL PKG

State of California —The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PHOTOGRAPH RECORD

Primary # P-13-008334 UPDATE
HRI#
Trinomial CA-IMP-7834

Page 3 of 5

Resource Name or #: Westside Main Canal – Pump 6
Year 2011

Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives Kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Subject/Description	View
1	23	3385	Canal corner where it turns NW for 900 feet.	E
1	23	3387	Westside Main Pump 6	D
1	23	3388	Westside Main Pump 6	S
1	23	3392	Siphon	E
1	23	3393	Siphon	W

PC ORIGINAL PKG



PC ORIGINAL PKG

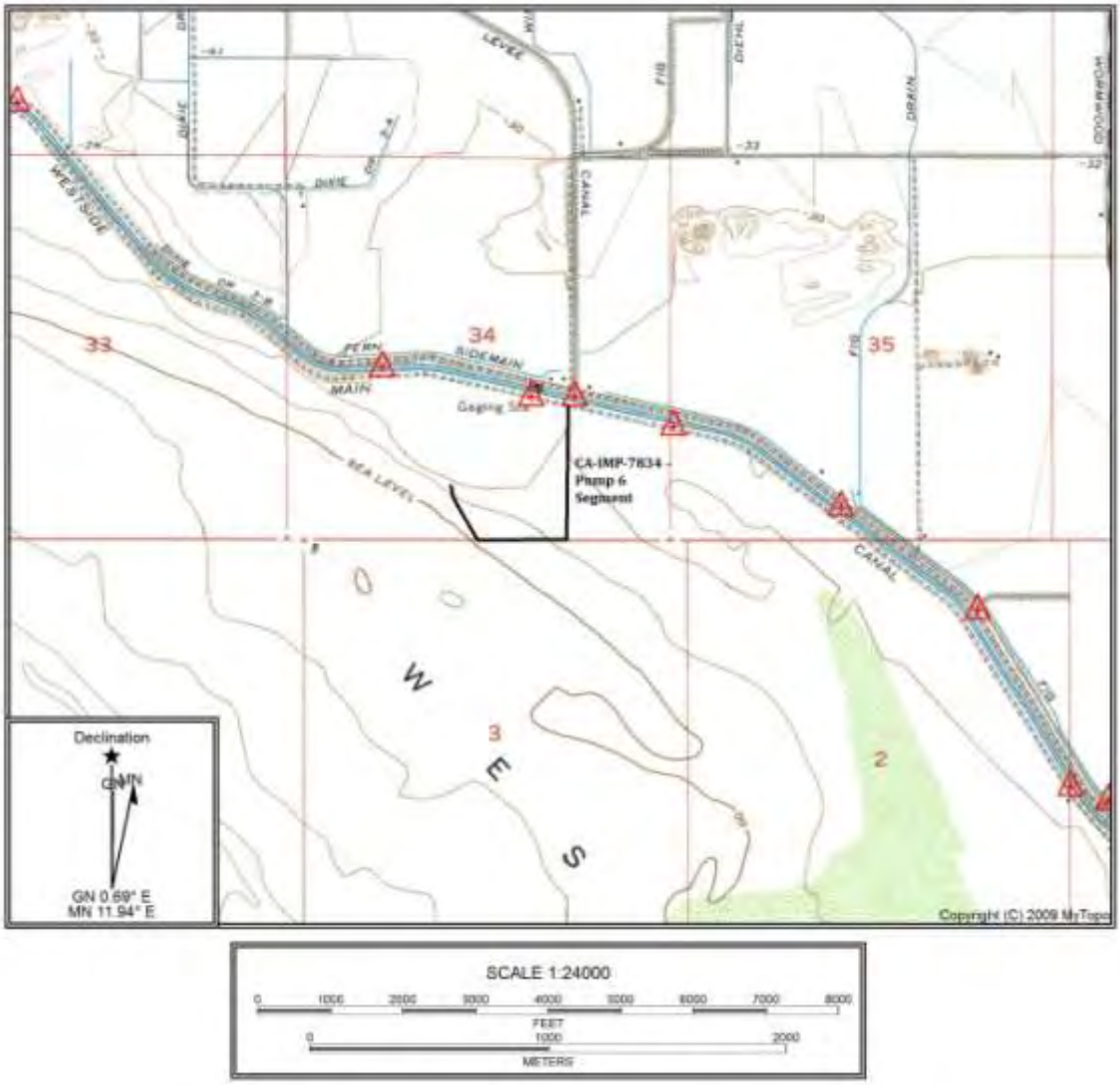
State of California —The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # P-13-008334 UPDATE
HRI#

LOCATION MAP

Trinomial CA-IMP-7834

***Map Name:** Mount Signal, Calif. ***Scale:** 1: 24,000 ***Date of Map:** 1957 (1976)



PC ORIGINAL PKG

P-13-08334 (CA-IMP-7834) is the West Side Main Canal, an irrigation feature. The canal was first recorded in 1999 by Jill Hupp who conducted extensive background research documenting the history of the Westside Main Canal. Later site updates have basically regurgitated this information, tailoring it to fit the project. As part of a historical context study focusing on Water Conveyance Systems in California, JRP and Caltrans nicely sums up the Imperial Valley canal history as follows:

> *"…..The newly named Imperial Valley begins to develop widespread irrigated agriculture after 1898-1899, when C. R. Rockwood and George Chaffey took an interest in the area.Even Chaffey's efforts in the Imperial Valley did not succeed totally until the federal Reclamation Service became involved. Chaffey and Rockwood's California Development Company built a canal to serve the Imperial Valley in 1900-1902. Because of unstable sandy soil west of the Colorado River, part of the canal alignment had to be constructed south of the border, and it ran through Mexican land before turning north into the Imperial Valley. Farmers irrigated 25,000 acres the first season, and 100,000 acres by the next.*
>
> *In an effort to avoid water rights issues raised by a hostile federal Reclamation Service, and to get around large accumulations of silt at the out-take on the Colorado River, on the American side of the border, the California Development Company cut a wide outlet with no head gate in the riverbank inside Mexico. Unusually high flood waters tore open this outlet in the winter of 1905, overwhelming the main canal.*
>
> *On and off for the next two years, the Colorado River flowed through the main canal, flooding large areas of the Imperial Valley, destroying many farms and parts of some communities, and ultimately filling the Salton Sink, creating the Salton Sea.*
>
> *As work developing the valley went ahead, the company organized smaller mutual water companies to build ditch systems drawing off the main canals. By 1906, over 130,000 acres were under irrigation, growing to 180,000 acres in 1910, but Chaffey and Rockwood's company had gone into receivership in 1909. As demand for an irrigation district grew among remaining settlers, the Imperial Irrigation District was created in 1911. It encompassed more than 600,000 acres, by far the largest in the state. The Southern Pacific railroad purchased the California Development Company's works in February 1916, and then sold them in turn to the Imperial Irrigation District in June. By 1919, total irrigated acreage in the valley reached 400,000 acres, dropping to 300,000 at the beginning of the Great Depression, and in 1960 climbed to 565,000 acres.*
>
> *The massive works of the Imperial Irrigation District encompass an elaborate 75-gate heading on the Colorado River, a main canal running through to Calexico, and a web of over 2,400 miles of canals and laterals, with attendant gates, checks, drops, and miscellaneous structures. In the 1920s, the canals were unlined. Until most of the district's canals and laterals were straightened and lined with concrete beginning in the 1950s, they were plagued by silting problems. For example, in 1927, the district cleaned sand and silt from 3,274 miles of canals and surface drains.*
>
> *Among the reasons for the USBR's involvement in irrigation development in the Imperial Valley was the constant danger of the canal system's being washed out during high water stages in the Colorado River. In addition, the canal alignment located partly in Mexico left the system vulnerable to international disputes. During the late 1930s the USBR headed the All-American Canal project to construct a new canal north of the border. When completed, the All-American Canal brought water to the Imperial Valley south of the Salton Sea, and a branch called the Coachella Canal irrigated the Coachella Valley north of the Salton Sea…."*

PC ORIGINAL PKG

Previous Site Records

This resource has been recorded, evaluated, re-recorded, updated and re-evaluated seven times since it was first recorded in 1999. Each time only the portion of the canal within the project right-of-way was documented and ultimately evaluated for significance. A summary of past recordation's follows.

May 24, 1999
Jill Hupp, Caltrans Environmental Program
The project APE was the area where State Route 98 crosses the Westside Canal. The site record shows a NRHP status code of 6. The significance statement is as follows:

> *…West side Main canal today, like the IID irrigation system overall, reflects the development that occurred as a result of the construction of the All American Canal in 1941, after which the system was considerably expanded and modernized. The Westside Main Canal appears to possess significance under criteria A and C for its association with the development of irrigated commercial agriculture in the Imperial Valley west of New River in the early 1900's and as a good example of an early large scale irrigation canal system. However, research to date appears to indicate that the canal as a whole, while significant, would not possess the requisite degree of integrity due to reconstruction and dredging activities since the 1950's, but no survey of the canal in its entirety has yet been undertaken. Caltrans architectural historian Frank Lortie, after an extensive study of the IID system in 1997, concluded that the elements in the IID that retain integrity for the period 1941-1950 could be contributors to a potentially eligible National Register historic district. The segment within the project vicinity does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association to represent the canals significance in itself or as a contributor to a larger property. While sill earthen, extensive dredging since the 1960's has changed the basic configuration of the canal, because modern dredging equipment created a different ditch profile, more U-shaped and with steeper sides. The canal was extended and widened over time as the IID attempted to keep up with its ever-expanding service area. Because of these alterations it reflects neither the period of significance outlined by Lortie (1941-1950) nor the earlier period of the canal systems history (1901-1907)…."*

June 2000
N. Harris and Michael Oberndorgf; HDR Engineering
The project APE was located approximately 1300' south of Dixieland at the ROW of the San Diego and Eastern Railroad. The site form states as follows:

> *"…As part of the All American Canal System, this canal is eligible for NRHP inclusion….The canal is part of the historic system of canals that make up the extensive hydraulic irrigation system in the Imperial Valley. These canals profoundly influenced the Euro-American land use, settlement patterns, economy, and the cultural landscape of southern California and continues to do so today."*

February 28, 2007
Jeanette A. McKenna
McKenna updated the site record at this time stating that the canal was considered a significant resource and as part of the All American Canal System, was recommended eligible for inclusion on the National Register of Historic Places. She recommended that monitoring be required during construction of the proposed pipeline and that the project be designed to avoid impacts to the resource during construction as well as maintenance activities.

PC ORIGINAL PKG

April 19, 2007
SWCA Environmental Consultants
SWCA examined a 300-foot long segment of the canal during survey activities conducted for alternatives related to the Sunrise Powerlink Project. The SWCA update for this resource states as follows:

> *"The Westside Main Canal has not been altered or modified since its last update 1999 (Jill Hupp), when it was found not eligible for listing in the National Register (NHRP) as a separate property or as a contributor to a district. However in 2001 the Bureau of Reclamation and California State Historic Preservation Officer concurred that the All American Canal is ELIGIBLE for the NRHP; by extension the Westside Main Canal is now recommended ELIGIBLE for NRHP and California Register of Historic Resources (CRHR) under Criterion A/1 for its significance in association of the Imperial Valley".*

In addition, resources associated with the Westmain Canal, the Fox Glove Canal and Dixie Drain were recommended eligible for inclusion as part of the NRHP-eligible All-American Canal System.

December 12, 2007
EPG
Robert A. Rowe evaluated a portion of the canal located within the APE of the Mount Signal Solar Hybrid Plant. Additionally, EPG identified and recorded several features related to the Westside Main canal system. A site record update for P-13-008334 includes: Fig Canal, Fern Canal, Wixom Drain, Diehl Drain, Fern Side Drain, Fig Drain, Dixie Drain 3, Dixie Drain 3A and Dixie Drain 3C. In addition, EPG includes other contributing elements such as concrete laterals and spiles. Regarding significance, EPG determined that the Westside Main canal is eligible under Criterion A, for its potential to provide information about the settlement and economic development in the area and thus the transition of desert lands into irrigated area, thus affecting the local economy and subsistence.

December 2009
URS Corporation
URS Corporation visited the canal during a Class III inventory related to a proposed solar project. Along with fieldwork, URS also examined and compared numerous historic maps of the area, including the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County. It was determined that the general course of the canal has remained consistent for most of its history.
Jeremy Hollins of URS evaluated the resource as follows:

> *"…Based on Caltrans' earlier 1999 assessment, the Westside Main Canal, as a whole, reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. The canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in the Imperial County west of the New River and as a good example of an early large-scale irrigation canal system. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR. The canal was associated only for a short period with the CDC, from 1905 to 1911, nearly ten years after the company was established. Additionally, the canal was already in operation upon the forming of the IID, and does not reflect or convey the contributions of the IID to Imperial County.*

PC ORIGINAL PKG

Overall though, research conducted as part of Caltrans' 1999 assessment of the system found that the canal as a whole (while significant) does not retain a sufficient amount of its historic integrity to convey its significance due to regular dredging grading, widening, and reconstruction that has occurred since the 1950s, though, an intensive survey of the entire canal has not occurred. The portion of the Westside Main Canal within the historic architecture APE also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA. While still earthen, extensive dredging and grading since the 1960s has changed the basic configuration of the canal, which has impacted its design, setting, and feeling. The canal currently has a U-shaped profile, whereas historically it was trapezoidal. The addition of a non-historic period pipeline and highway and railroad crossings over the canal in the historic architecture APE disrupt the property's integrity aspects of setting and feeling, since these elements are outside of the property's period of significance, 1941 to 1950. Accordingly, due to these alterations, the workmanship and association of the historic-period property in the APE has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance, and the property is not sufficiently intact to convey the direct link between significant events and the canal…"

"…..In summary, the portion of the Westside Main Canal within the historic architecture APE does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear Westside Main Canal system (if it is determined that such a resource exists)."

The significance statement for each of these resources regurgitates the same information found on the form for the Westside Main, inserting the name of the currently discussed resource.
The statement is as follows:

"…Overall, the _____ does not appear to retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire _____has not occurred. The portion of _____ also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Based upon historical documentation, regular dredging and widening of canals and drains were necessary and often performed to alleviate problems of silt and build-up. Due to these and other improvements over time, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance. Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear All-American Canal or Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA.
In summary, the portion of _____does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed water line adjacent or perpendicular to the existing _____would not create a new adverse effect or significant impact to the portion of the historic-period property that bisects the Evan Hewes Highway".

PC ORIGINAL PKG

January, 2010
C. Bowden-Renna
The canal was once again visited during a survey conducted by AECOM related to the IID Dixieland 230 kV Transmission Line and Substation Expansion Project. The resource was described as follows:

> *"…Site P-13-008334 was recorded by Jill Hupp in 1999. This site is the Westside Main Canal, which was built about 1906 as a part of the Imperial Irrigation District canal system within Imperial Valley. During the current survey effort, the portion of the canal within the project area is earthen lined and is still in use today. While the canal has been recommended eligible for the National Register of Historic Places (NRHP), the portion of the canal within the proposed project area was examined in 1997 and 1998 and was recommended not eligible for the NRHP due to lack of integrity (Hupp 1999). Caltrans also evaluated a portion of the canal as it crosses under I-8. Caltrans determined that, under California Environmental Quality Act (CEQA), the portion of the canal under I-8 is not a historic resource and therefore is not eligible for the NRHP (Hupp 1999").*

November 04, 2011
Heather Thomson
The canal was revisited again in November 2011 during a cultural resource survey related to the Campo Verde Solar Project. An approximately 341' section of the canal falls within the survey area. The section of canal inspected consists of an earthen, unlined canal. In addition, a turnout with concrete wing walls provides water to a large concrete block reservoir, which in turn flows into a lateral canal located west of the Westside Main. This lateral, the reservoir and the remains of an electrical panel and tin shed roof appear abandoned and no longer in use.

The Westside Main Canal joins the All-American Canal near the western edge of the Imperial Valley and serves the western part of the IID water service area. Water is released from the Westside Main canal into the heading of each lateral canal. From the lateral canals, zanjeros measure and divert the required amount of water from the lateral canal through individual customer delivery gates.

The All American Canal is eligible for State inclusion on the NRHP and by extension, the Westside Main Canal as well. The portion of Westside Main Canal inspected during the current survey found the resource appeared to retain sufficient historic integrity aspects of location and materials.

This resource has not been surveyed in its entirety; however, Shannon Davis (ASM Affiliates, Inc.) did evaluate the segments within the Campo Verde Solar Project APE and found that the Westside Main Canal "is eligible for listing in the NRHP and CRHR under Criterion A/1 for its significance in the development of the Imperial Valley. The earthen canal was integral to the development of irrigated commercial agriculture since its construction in the early 1900s. Under the themes of agriculture and economic development, ASM's professional, independent recommendation is that this section of the Westside Main Canal is eligible for the NRHP and CRHR on the local and state levels."

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

PC ORIGINAL PKG

Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives Kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Subject/Description	View
11	04	2820	West bank of Westside drain	
11	04	2821	Isolated white glassware no point	D
11	04	2822	Dr. Pepper bottle in bank of Westside Drain	D/E
11	04	2823	East end of concrete irrigation canal runs e-w	
11	04	2824	Mushrooms for Erica	
11	04	2825	West end west side drain	E
11	04	2826	West end of concrete irrigation canal fed by gate 1 on Forget me not	W
11	04	2827	Forget me not gate 2 feeds east-west concrete irrigation ditch to eat	W
11	04	2827	Irrigation ditch west end	W
11	04	2828/2829	Square box culvert on SW corner of Hyde and Hardy	
11	04	2830/2831	West main east bank	S/W
11	04	2832-2834	West side of west main concrete block reservoir feeds east-west concrete irrigation canal to west. It is no longer in use. Old tin shed roof and electric panel no longer in use	W-S
11	04	2835	Gate on west bank of west main	

PC ORIGINAL PKG

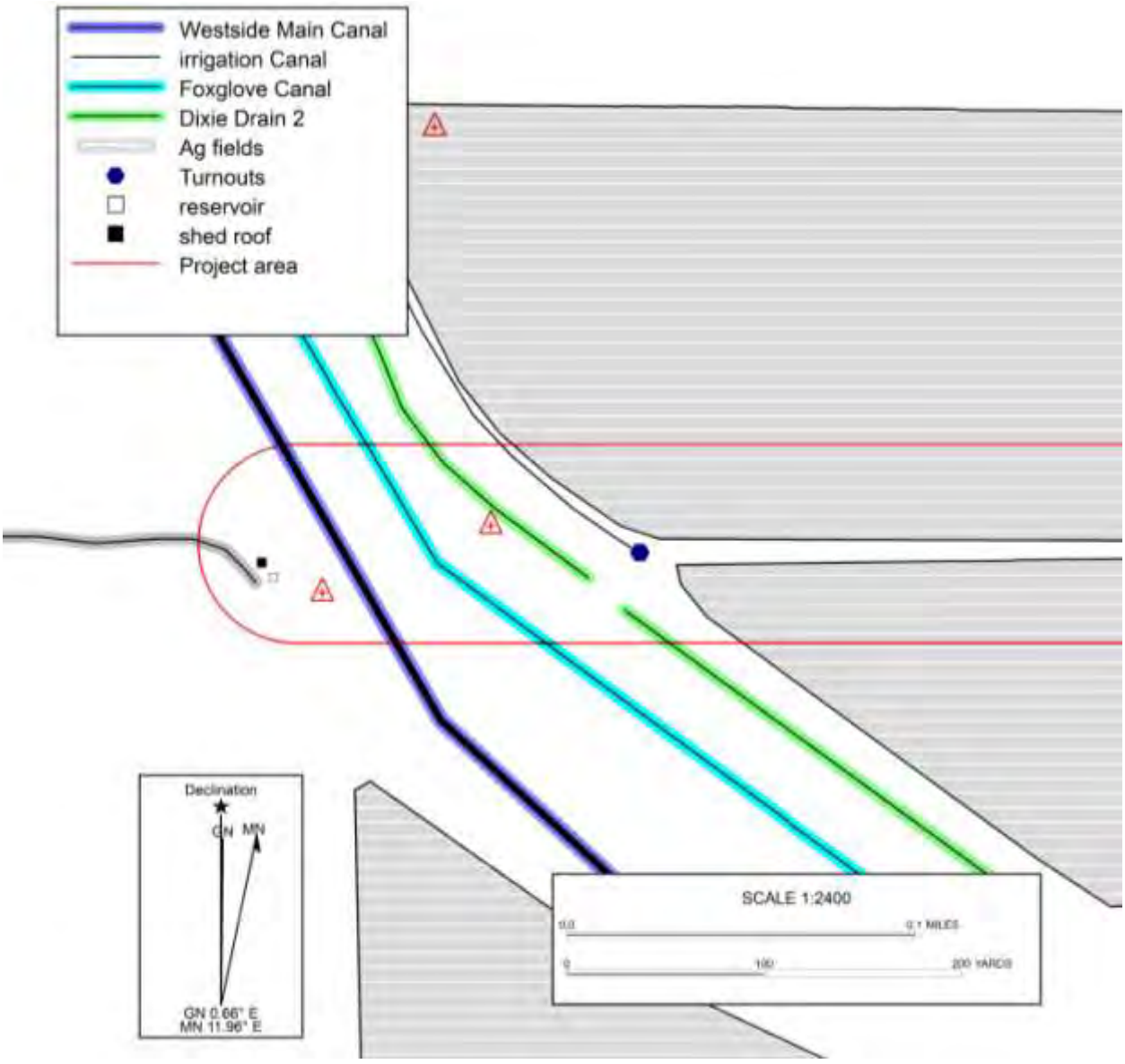


IMG_2830 view to south.
Westmain Canal taken from east bank.



IMG_2832 view to west.
Reservoir, shed roof and panel.

PC ORIGINAL PKG



PC ORIGINAL PKG

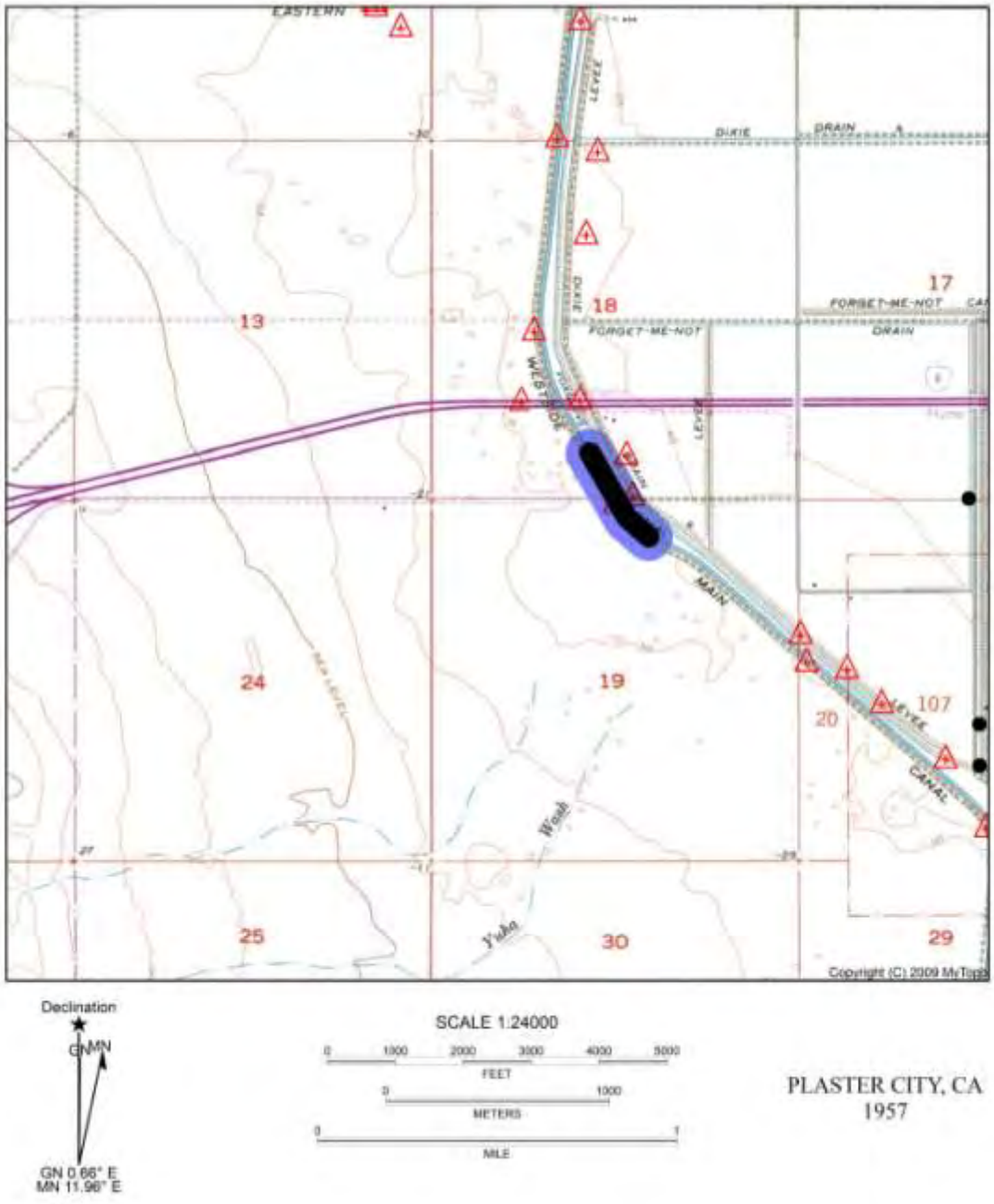
State of California —The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-13-008334 UPDATE
HRI#
Trinomial CA-IMP-7834

 *Resource Name or # (Assigned by recorder) Westside Main Canal (portion)

*Drawn By: Heather Thomson *Date: 11/07/2011



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334 UPDATE (Westside Main Canal)
HRI #
Trinomial CA-IMP-7834 UPDATE (Westside Main Canal)
NRHP Status Code: 3D (Westside Main Canal) 6Z (Westside Drain)

Page 1 of 3 ***Resource Name or # (Assigned by recorder)** Westside Main Canal and Drain
Recorded by: Jennifer Krintz, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

P1. Other Identifier: ***P2. Location:** ☐ Not for Publication ☒ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Plaster City, Seeley, Yuha Basin, Mount Signal **Date:** 1957; **T** 16S; **R** 11E; **of Sec.** Plaster City 7, 18, 19, 20, 107; Seeley 107; Yuha Basin 29; Mount Signal 29, 28, 33, 34, 35; S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; North end: 614961.43 **mE** / 3628012.34 **mN**; South end: 621656.46 **mE** / 3621746.51 **mN**

***P3a. Description:** Westside Main Canal was constructed in circa 1907 as one of four canals constructed for the earliest irrigation system in the Imperial Valley, in Imperial County, California It was later connected to the All-American Canal which extends westward from Yuma, Arizona north of the U.S.-Mexico border and terminates at the Westside Main Canal. The segment of the Westside Main Canal documented is approximately 5.5 mi. long, beginning just north of its intersection with Interstate extending southeast approximately .5 mi. past its intersection with Liebert Road and the Fern Canal in Imperial County, California. The canal is approximately 8 feet deep and approximately 40 feet wide. The integrity is good. The canal system also includes drains that remove the salinity from the agricultural lands the canal and its laterals irrigate.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct



P5a. Photograph or Drawing:

P5b. Description of Photo: View of Westisde Main Canal at Leibert Rd. looking south from northern side of the canal towards the Imperial Valley Substation; Picture taken November 2, 2011

***P6. Date Constructed/Age and Sources:**
Circa 1907, 1909 El Centro 15-minute US Army Corps Topo map,

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** November 2011
***P10. Survey Type:** Intensive
P11. Report Citation: Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.
***B10. Significance: Theme:** Agricultural Canal **Area:** Imperial County, CA
Period of Significance: 1907-1950 **Property Type:** Waterway **Applicable Criteria:** A/1
In 2007, J. Burkard, H. Thompson, and J. Covert of SWCA Environmental Consultants recommended the segment of the Westside Main Canal eligible for the National Register of Historic Places as a contributor to a larger National Historic District to include the All-American Canal. ASM concurs with this finding and recommends the Westside Main Canal eligible for the National Register of Historic Places and the California Register of Historic Resources under criteria A and 1, respectively for its association with the irrigation of the Imperial Valley.

PC ORIGINAL PKG

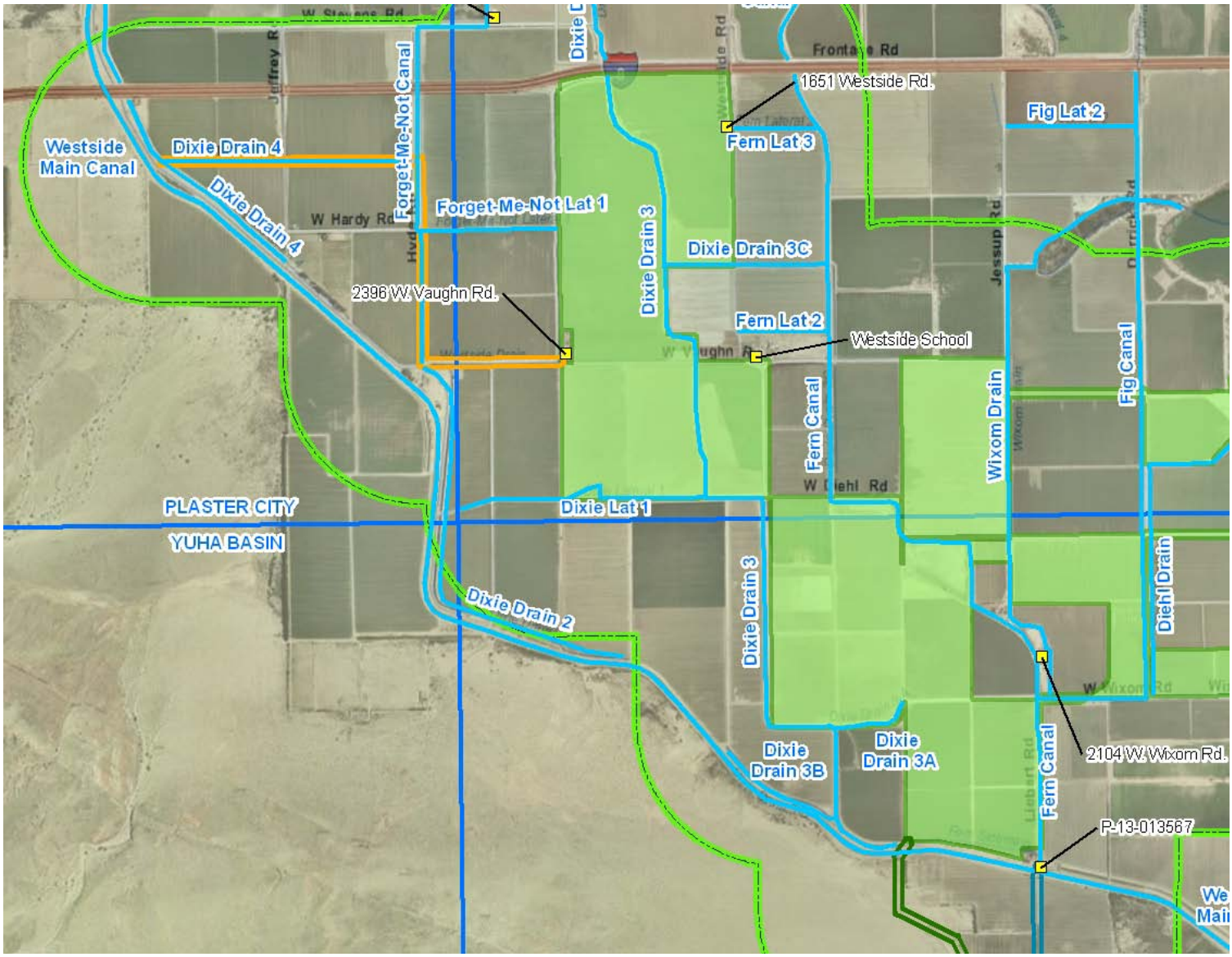


P5a. Photograph or Drawing:

P5b. Description of Photo: View of part of the canal taken looking south from the northern part of the property area; Picture taken March 22, 2011

PC ORIGINAL PKG

Location Map of the Westside Main Canal and Drain



PC ORIGINAL PKG

UPDATE

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7834 UPDATE
NRHP Status Code: 3D

 ***Resource Name or # (Assigned by recorder)** Westside Main Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** April 5, 2011
☐ Continuation ☒ Update

P1. Other Identifier: Westside Main Canal
***P2. Location:** ☐ Not for Publication ☒ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Mount Signal **Date:** 1957; **T** 17S; **R** 12E/13E; **of Sec.** 3, 2, 11, 12, 13, 24, 19, 20, 17, 21; S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; North end: 620445.09 **mE** / 3622260.40 **mN**; South end: 625496.13 **mE** / 3613610.51 **mN**

***P3a. Description:** Westside Main Canal was constructed ca. 1907 as part of the earliest irrigation system in the Imperial Valley. It was later connected to the All-American Canal which runs east-west north of the international U.S.-Mexican borderline, as one of three main canals that receive water from the All-American Canal. This segment of the Westside Main Canal is approximately 5 miles long, with the northern end point southeast of Liebert Road and the southern end point where the canal intersects with the All-American Canal in Imperial County, California. The canal is approximately 8 feet deep and approximately 40 feet wide. The integrity is good.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct



P5a. Photograph or Drawing:

P5b. Description of Photo: View of part of the canal taken looking south from the northern end of the property area; Picture taken March 22, 2011

***P6. Date Constructed/Age and Sources:**
Circa 1907

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** April 5, 2011

***P10. Survey Type:** Reconnaissance

P11. Report Citation: Inventory, Evaluation, and Analysis of Effect on Historic Built Environment Properties within the Area of Potential Effect of the Imperial Solar Energy Center South, Imperial County, California

***B10. Significance: Theme:** Agricultural Canal **Area:** Imperial County, CA
Period of Significance: Property Type: Waterway **Applicable Criteria:** A/1
In 2007, J. Burkard, H. Thompson, and J. Covert of SWCA Environmental Consultants recommended the segment of the Westside Main Canal eligible for the National Register of Historic Places as a contributor to a larger National Historic District to include the All-American Canal. ASM concurs with this finding and recommends the Westside Main Canal eligible for the National Register of Historic Places and the California Register of Historic Resources under criteria A and 1, respectively for its association with the irrigation of the Imperial Valley.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7834 UPDATE
NRHP Status Code: 3D

Page 2 of 2 ***Resource Name or # (Assigned by recorder)** Westside Main Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** April 5, 2011
☐ Continuation ☒ Update

Location Map of Westside Main Canal





Red line indicates subject property
Map courtesy of Google Earth

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7834 UPDATE
NRHP Status Code: 3D

Page 1 of 2 ***Resource Name or # (Assigned by recorder)** Westside Main Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** March 28, 2011
☐ Continuation ☒ Update

P1. Other Identifier: Westside Main Canal
***P2. Location:** ☐ Not for Publication ☒ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Plaster City, Seeley, Yuha Basin, Mount Signal **Date:** 1957; **T** 16S; **R** 11E; **of Sec.** Plaster City 7, 18, 19, 20, 107; Seeley 107; Yuha Basin 29; Mount Signal 29, 28, 33, 34, 35; S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; North end: 614961.43 **mE** / 3628012.34 **mN**; South end: 621656.46 **mE** / 3621746.51 **mN**

***P3a. Description:** Westside Main Canal was constructed in circa 1907 as part of a larger canal system in the Imperial Valley which started with the construction of the All-American Canal which runs east-west north of the international U.S.-Mexican borderline. The segment of the Westside Main Canal is approximately 5 miles long, with the northern end point just south of the community of Dixieland and the southern end point 1 mile southeast of Liebert Road in Imperial County, California. The canal is approximately 8 feet deep and approximately 40 feet wide. The integrity is good.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct



P5a. Photograph or Drawing:

P5b. Description of Photo: View of part of the canal taken looking south from the middle of the property area; Picture taken March 22, 2011

***P6. Date Constructed/Age and Sources:**
Circa 1907

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded By:**
Jennifer Krintz, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** March 28, 2011

***P10. Survey Type:** Reconnaissance

P11. Report Citation: Assessment of Visual Impacts on the Historic Built Environment Properties within the APE of the Imperial Valley Solar Farm Project West Imperial County, California

***B10. Significance: Theme:** Agricultural Canal **Area:** Imperial County, CA
Period of Significance: Property Type: Waterway **Applicable Criteria:** A/1
In 2007, J. Burkard, H. Thompson, and J. Covert of SWCA Environmental Consultants recommended the segment of the Westside Main Canal eligible for the National Register of Historic Places as a contributor to a larger National Historic District to include the All-American Canal. ASM concurs with this finding and recommends the Westside Main Canal eligible for the National Register of Historic Places and the California Register of Historic Resources under criteria A and 1, respectively for its association with the irrigation of the Imperial Valley.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7834 UPDATE
NRHP Status Code: 3D

Page 2 of 2 ***Resource Name or # (Assigned by recorder)** Westside Main Canal
Recorded by: Jennifer Krintz, Architectural Historian **Date:** March 28, 2011
☐ Continuation ☒ Update

Location Map of Westside Main Canal



Red line indicates subject property
Map courtesy of Google Earth

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

CONTINUATION SHEET

Primary #: P-13-008334
HRI# _____
Trinomial CA-IMP-7834

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder)

***Recorded by:** C. Bowden-Renna ***Date:** 1/2010 ☐ Continuation ■ Update

Site P-13-008334 was recorded by Jill Hupp in 1999. This site is the Westside Main Canal, which was built about 1906 as a part of the Imperial Irrigation District canal system within Imperial Valley. During the current survey effort, the portion of the canal within the project area is earthen lined and is still in use today. While the canal has been recommended eligible for the National Register of Historic Places (NRHP), the portion of the canal within the proposed project area was examined in 1997 and 1998 and was recommended not eligible for the NRHP due to lack of integrity (Hupp 1999). Caltrans also evaluated a portion of the canal as it crosses under I-8. Caltrans determined that, under California Environmental Quality Act (CEQA), the portion of the canal under I-8 is not a historic resource and therefore is not eligible for the NRHP (Hupp 1999).

Bowden-Renna, Cheryl
2010 *Cultural Resources Investigations Class III Report for the IID Dixieland 230 kV Transmission Line and Substation Expansion Project, Imperial County, California.* Prepared by AECOM.

Hupp, Jill
1999 P-13-008334 Site Form. Form on file at the South Coastal Information Center.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-IMP-7834H UPDATE
NRHP Status Code _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

 ***Resource Name or #:** (Assigned by recorder) Portion of Westside Canal (CA-IMP-7834H)

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

*** a. County** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*** b. USGS 7.5'** Plaster City **Date** 1976 **T** 16S **R** 12E ; ¼ ¼ **of** S7 ; SB **B.M.**

c. Address N/A City N/A Zip N/A

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 615024 mE/ 3628650 mN

e. Other Locational Data: (e.g., parcel l, directions to resource, elevation, etc., as appropriate)

The portion of the Westside Main Canal (CA-IMP-7834H) surveyed is approximately one mile long and runs north-south within the Dixieland area of Imperial County. The TRS and UTM provided above are the approximate centerpoint of the portion of the canal surveyed.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The portion of the Westside Canal in the historic architecture APE is a small portion of a much larger 20-mile historic-period linear property that ultimately travels from the International Border area to the Brawley-Westmoreland area. Accordingly, formal recordation of the entire Westside Canal was considered unnecessary and outside of the project scope, since the project would not directly affect (e.g., alter, remove, change use or physical features, cause deterioration) the entire 20-mile historic-period property. Rather, the portion of the historic-period property within the historic architecture APE was studied within the context of the whole property only.

This portion of the Westside Main Canal is an earthen-bank irrigation canal that is approximately 25 feet wide and 10 feet deep (portions of the canal outside of the APE feature concrete-lining). It primarily has a U-shaped form. SEE CONTINUATION SHEET 523L (PAGE 3).

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/Aqueduct

***P4. Resources Present:** ☐ **Building** ☒ **Structure** ☐ **Object** ☐ **Site** ☐ **District** ☐ **Element of District** ☐ **Other** (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (view, date, accession #)
View to northeast, Evan Hewes
Highway Crossing, March 2009

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Approximately 1908
1908 El Centro map

***P7. Owner and Address:**
Bureau of Reclamation
27708 Jefferson Ave., Ste. 202
Temecula, CA 92590

***P8. Recorded by:** (name, affiliation, and address)
URS Corporation
1615 Murray Canyon Rd., Suite 1000
San Diego, CA 92108

***P9. Date Recorded:** 12/2009

***P10. Survey Type:** (Describe)
Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Mutaw, Robert J. (Ph.D.), Elizabeth B. Roberts, Gordon C. Tucker Jr., Ph.D., Brian Shaw, Terrie Bagwell, Colin O'Hanlon, Rachael Nixon, Gary Fink, Jeremy Hollins, Mark Neal. 2010 Draft Final Class III Confidential Cultural Resources Technical Report for the Imperial Valley Solar (formerly Solar 2), Imperial Valley County. URS Corporation. Technical report prepared for Tessera Solar (Applicant). Submitted to the Bureau of Land Management – El Centro Field Office, El Centro, CA. Copies available from the Bureau of Land Management – El Centro Field Office, El Centro, CA.

***Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☐ Other (List): _____

PC ORIGINAL PKG

*** Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HRI #
Trinomial CA-IMP-7834H UPDATE

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

 *Resource Name or #: (Assigned by recorder) Portion of Westside Canal (CA-IMP-7834H)

B1. Historic Name: Encina Canal
B2. Common Name: Westside Main Canal
B3. Original Use: Irrigation Ditch B4. Present Use: Irrigation Ditch
*B5. **Architectural Style:** N/A
*B6. **Construction History:** (Construction date, alterations, and date of alterations)
Actual construction date of this portion of the Westside Canal is unknown at present. However, by 1908, this portion of the Westside Main Canal was constructed. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of this portion of the Westside Main Canal was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.
*B7. **Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
*B6. **Related Features:**
There is one related feature, the West side Main (WSM) Pump 6. The WSM Pump 6 is located in Township 17 South, Range 12 East, Section 3 and runs north-south from the south side of Mandrapa Road for approximately 0.34 miles, then east-west for approximately 0.25 miles. The WSM Pump 6 appears to be part of the larger West Side Main Canal and Fern Canal systems, which traverse the Dixieland area and converge in El Centro. SEE CONTINUATION SHEET 523L (PAGE 6)
B9. Architect: N/A b. Builder: Unknown
*B10. **Significance: Theme** N/A **Area** Imperial County
Period of Significance N/A **Property Type** Irrigation Ditch **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).
B11. Additional Resource Attributes: (List attributes and codes) N/A
*B12. **References:**
SEE CONTINUATION SHEET 523L (PAGE 6)

B13. Remarks:
None

(Sketch Map with north arrow required)
SEE CONTINUATION SHEET 523L (PAGE 5)

*B14. **Evaluator:** Jeremy Hollins
***Date of Evaluation:** 12/2009

(This space reserved for official comments)

PC ORIGINAL PKG

P3a. Description (Continued)

This portion runs perpendicular to Evan Hewes Highway (SH 80) and a San Diego and Arizona Railroad crossing (known as Union Pacific crossing 921-452D).

The banks feature earthen levees of natural vegetation, which have been reshaped and widened by modern dredging and grading activities. This portion is gravity-fed (since no control infrastructure was identified in the vicinity). Of note, immediately south of the Evan Hewes Highway crossing is a non-historic period gas pipeline (approximately one foot in diameter) which bisects the canal.

This pipeline disrupts the feeling, setting, visual narrative, and historic viewshed of this portion of the canal. Additionally, along the west bank are two non-historic period pumps, which are most likely used to divert water to/from nearby agricultural fields. The crossing at Evan Hewes Highway is an example of a non-historic period reinforced concrete girder bridge, characterized by a simple span, five abutments/bents (supported by five cylindrical columns), a metal guardrail, and square piers at the bridge portals. The crossing appears to be 40 years old. The crossing is in poor condition due to environmental effects (sun and heat exposure), exposed rebar, and a minimally-maintained travel surface. The crossing shows evidence of chipping, cracking, and spalling. The San Diego and Arizona Railroad crossing is also a non-historic period reinforced concrete girder bridge, and appears to be constructed within the past 30 years. The grade separation features a simple span, four abutments/bents (supported by three angular cylindrical columns), and cable-wire guardrails. The grade separation shows evidence of chipping and cracking, and shows extensive damage from insect infestation and environmental effects (sun and heat exposure). Overall, the portion of the Westside Main Canal is in good condition, but has been affected by dredging and grading activities and non-historic period construction and features, including the pipeline and the crossings.

B10. Significance (Continued)

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States approximately 1906 was intended to alleviate irrigation problems, and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the historic architecture APE. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the historic architecture APE was not significantly altered.

The Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink in 1907. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

B10. Significance (Continued)

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigación y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley.

The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. For example, the Fern Canal features several culverts and other structural improvement s from the 1950s through the 1980s. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

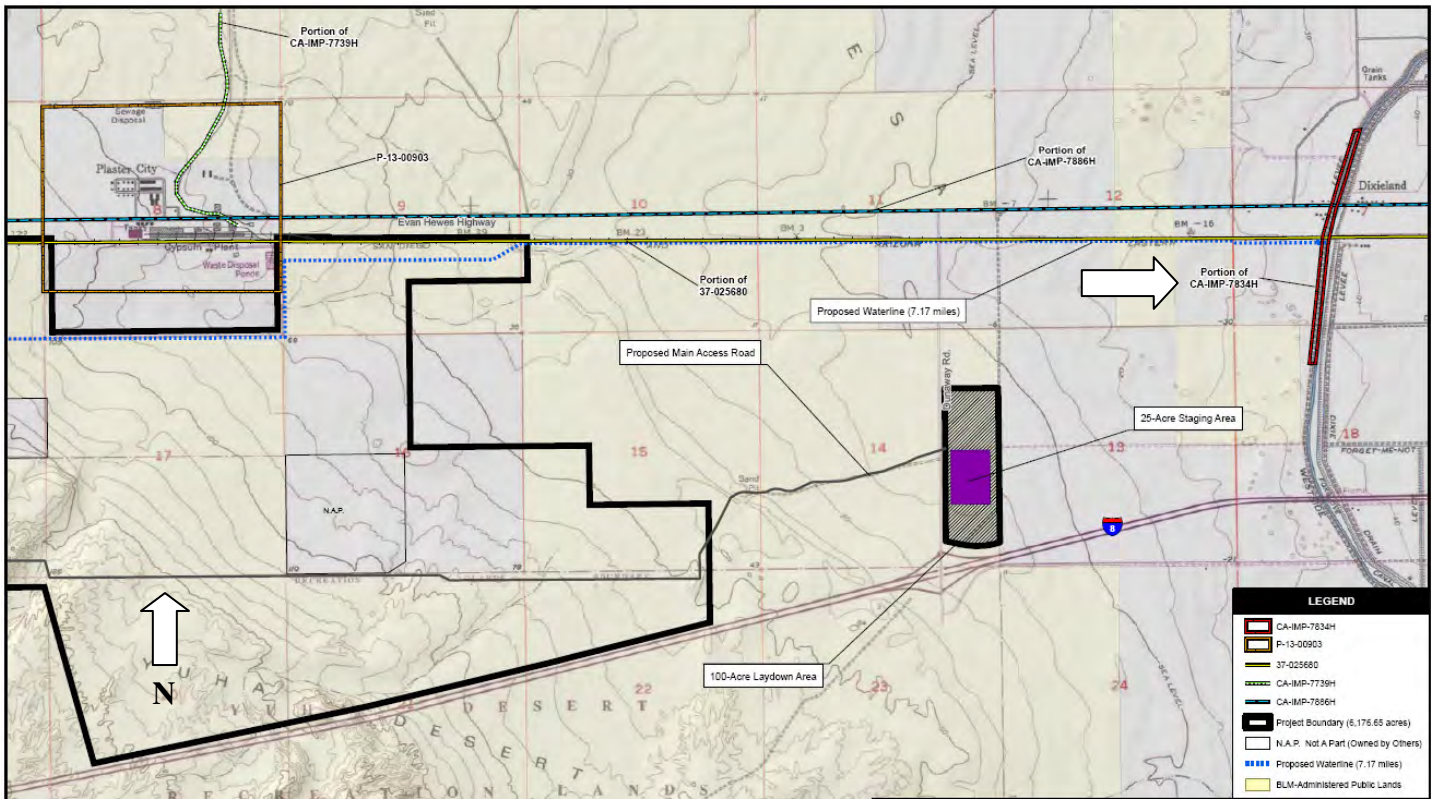
Based on Caltrans' earlier 1999 assessment, the Westside Main Canal, as a whole, reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. The canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in the Imperial County west of the New River and as a good example of an early large-scale irrigation canal system. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR. The canal was associated only for a short period with the CDC, from 1905 to 1911, nearly ten years after the company was established. Additionally, the canal was already in operation upon the forming of the IID, and does not reflect or convey the contributions of the IID to Imperial County.

Overall though, research conducted as part of Caltrans' 1999 assessment of the system found that the canal as a whole (while significant) does not retain a sufficient amount of its historic integrity to convey its significance due to regular dredging grading, widening, and reconstruction that has occurred since the 1950s, though, an intensive survey of the entire canal has not occurred. The portion of the Westside Main Canal within the historic architecture APE also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (though it still retains sufficient historic integrity aspects of location and materials). Accordingly, it does not appear to be a contributing element or significant related feature/component to the larger linear Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA. While still earthen, extensive dredging and grading since the 1960s has changed the basic configuration of the canal, which has impacted its design, setting, and feeling. The canal currently has a U-shaped profile, whereas historically it was trapezoidal. The addition of a non-historic period pipeline, and highway and railroad crossings over the canal in the historic architecture APE disrupt the property's integrity aspects of setting and feeling, since these elements are outside of the property's period of significance, 1941 to 1950. Accordingly, due to these alterations, the workmanship and association of the historic-period property in the APE has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance, and the property is not sufficiently intact to convey the direct link between significant events and the canal.

In summary, the portion of the Westside Main Canal within the historic architecture APE does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear Westside Main Canal system (if it is determined that such a resource exists).

Sketch Map:

Not to scale



B12. References

Blackburn, O.V. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

Blackburn, O.V. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon. 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey. 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill. 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on 27 April 2007.

Imperial Irrigation District. 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on 27 April 2007.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway Research Program Transportation Research Council.

Smith, Karen J. 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L. 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

Thurston, Albert G. 1914. Imperial Valley Tract Map.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge Plaster City 7.5-minute USGS Quadrangle Maps.

B6. Related Features (Continued)

However, formal recordation of the entire Westside Main Canal and Fern Canal systems was considered unnecessary and outside of the project scope, since the project would not directly affect (e.g., alter, remove, change use or physical features, cause deterioration) the historic-period properties.

The north-south portion of the WSM Pump 6 is a concrete-lined channel that appears to be approximately five-feet wide and three-feet deep with concrete levees and earthen banks. This portion of the WSM Pump 6 is covered with dense, overgrown vegetation consisting of wild grasses and weeds. Due to the density of the vegetation, the shape of the channel is difficult to discern, but appears to be trapezoidal. This north-south channel shows evidence of heavy chipping, cracking, and spalling due to use and environmental effects. The north-south portion of the WSM Pump 6 terminates approximately 0.34 miles south of Mandrapa Road in a concrete ring culvert, which directs the flows westward through an inverted siphon into the east-west portion of the WSM Pump 6 (per conversation with Stephen Castillo from the Imperial Irrigation District on March 16, 2010). A metal drum pumping station is located at this terminus. Similar to the north-south portion, the east-west portion of the WSM Pump 6 is a trapezoidal concrete-lined channel that appears to be approximately five-feet wide and three-feet deep with concrete levees and earthen banks.

A metal check with slide gate is located at the origin of the east-west channel. Immediately west of the metal check, the channel bends slightly to the south then heads west again. This portion of the WSM Pump 6 is also covered with vegetation, although less overgrown than the north-south portion, and is in better condition. To the south of the origin of the east-west portion of the WSM Pump 6, there is a concrete-line structure appears to be a spillway or an intake structure, which has been filled with silt and dense vegetation, and is no longer in use.

The exact construction date of the WSM Pump 6 is unknown. However, the WSM Pump 6 appears on the 1953 aerial maps of the area but not on the 1949 aerial maps. Based on this information, it can be assumed that The WSM Pump 6 was constructed sometime between 1949 and 1953. The Imperial Irrigation District (IID) has records of a request to line the channels with concrete in 1956; thus, it can be assumed that prior to 1956, the WSM Pump 6 was an earthen channel.

In summary, the WSM Pump 6 does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be a contributing element or significant related feature/component to the larger linear All-American or Westside Main Canal system (if it is determined that such a resource exists). Further, the WSM Pump 6 is not located within the project APE and would not be affected.

Additional Photos/Images:



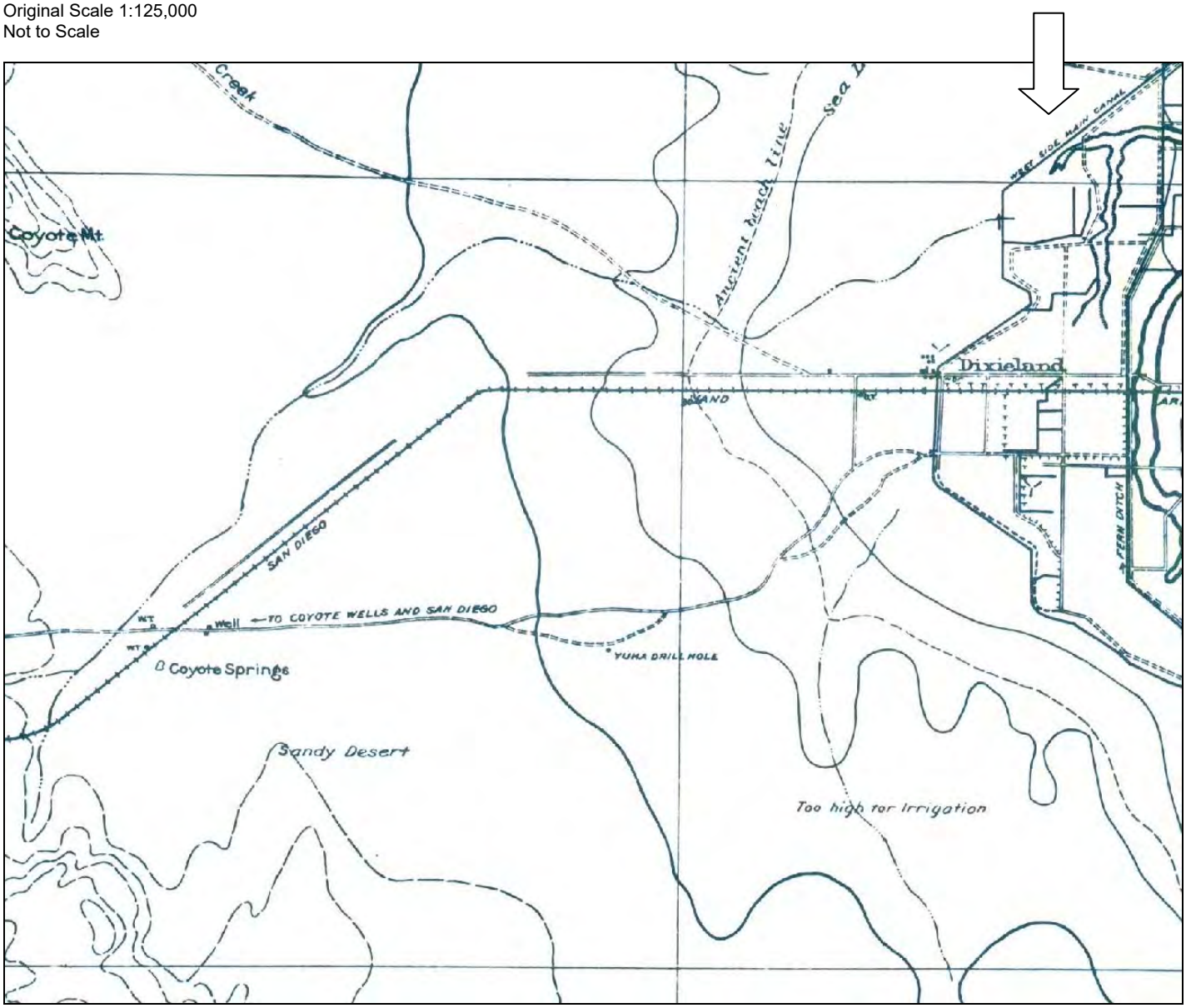
Westside Main Canal, SD-AZ RR Crossing, View to the North



Westside Main Canal, View to the South

Additional Photos/Images:

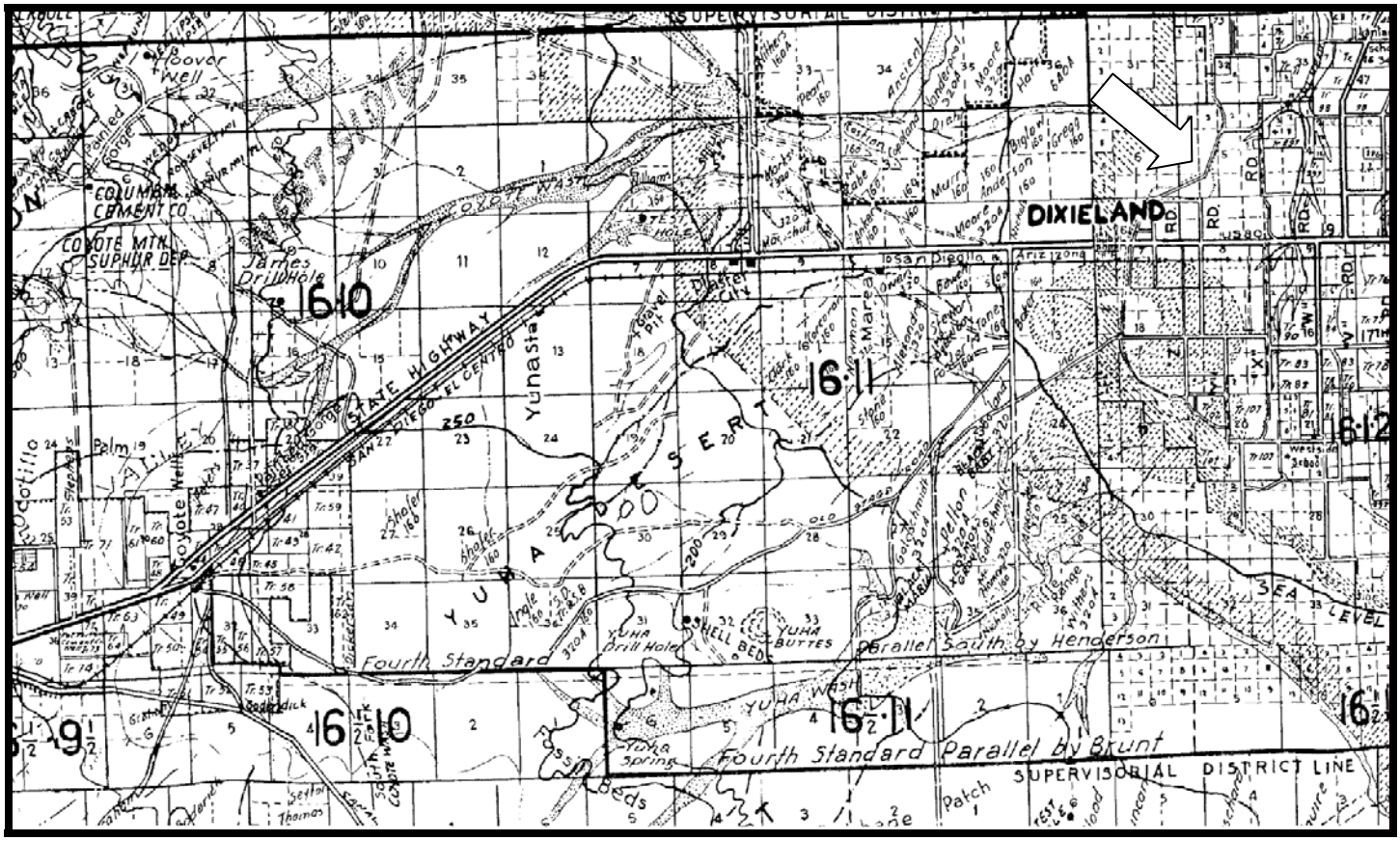
El Centro 1908
Original Scale 1:125,000
Not to Scale



PC ORIGINAL PKG

Additional Photos/Images:

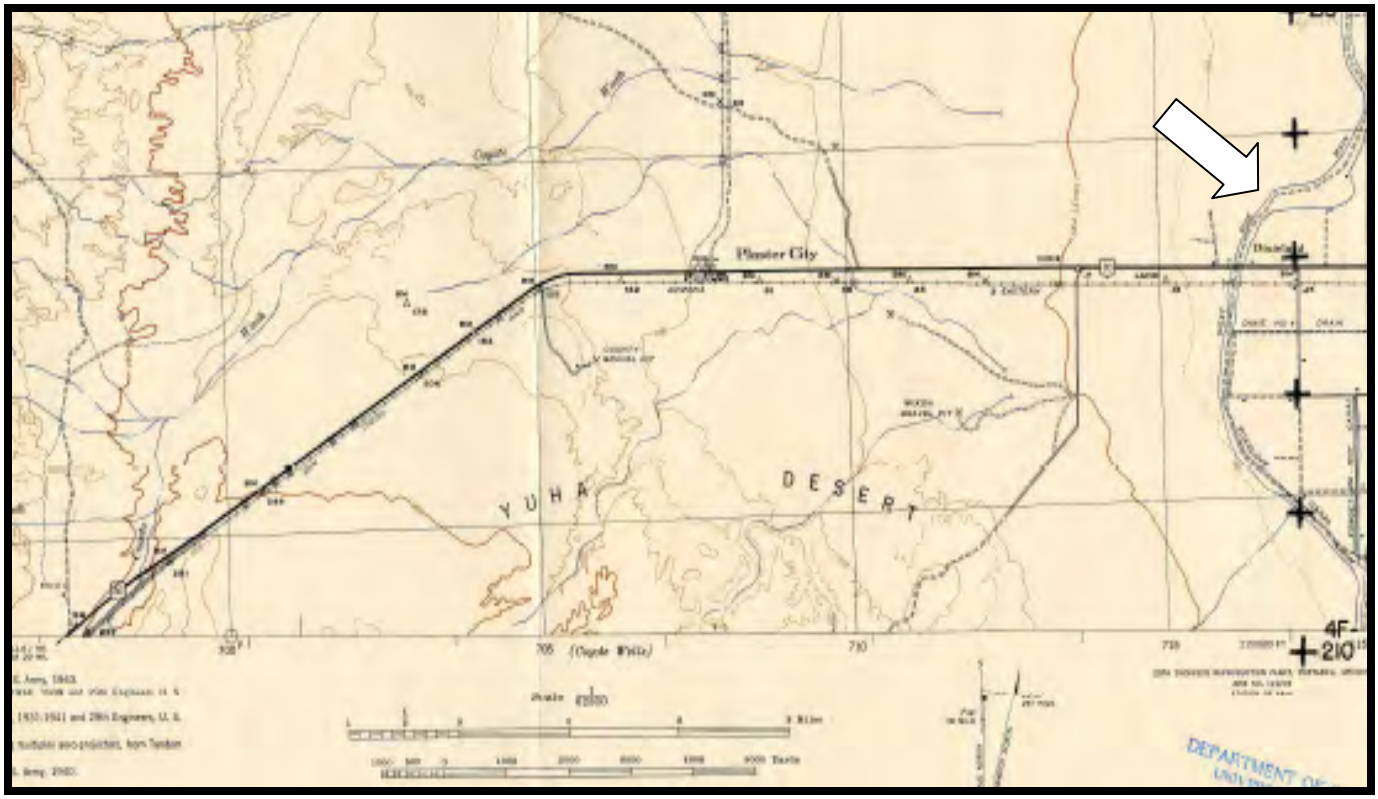
Western Portion of Blackburn's Map of Imperial County, 1936
Not to Scale



PC ORIGINAL PKG

Additional Photos/Images:

Plaster City map, 1943
Original Scale 1:62,500
Not to scale.



Additional Photos/Images:



View from just north of the WSM Pump 6, looking north towards Mandrapa Road



Looking south at the terminus and the north-south portion of WSM Pump 6

Additional Photos/Images:



At the east-west portion of WSM Pump 6, looking west



At the origin of the east-west portion of WSM Pump 6, looking west at the metal check

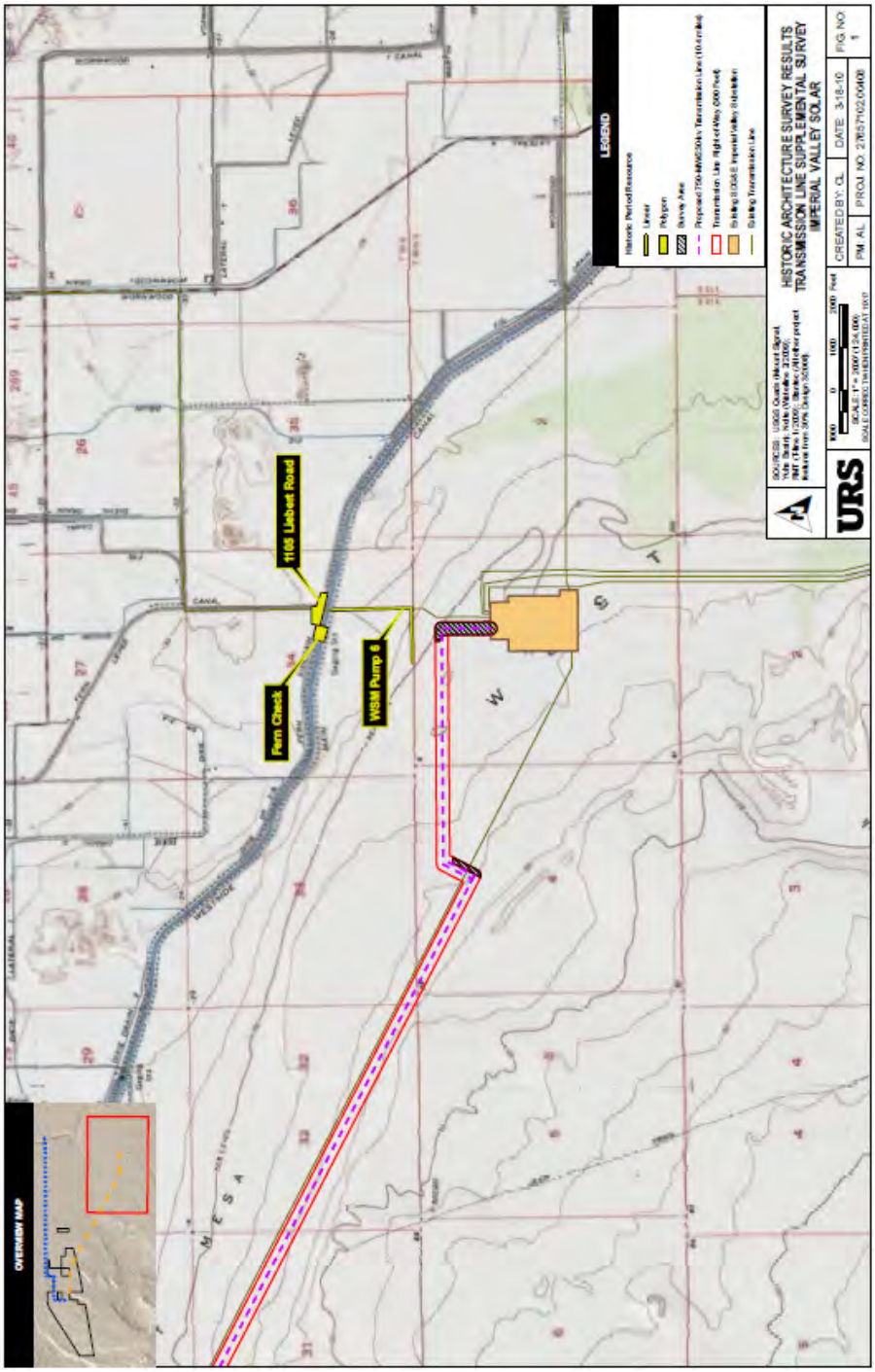
Additional Photos/Images:



At the origin of the east-west portion looking south at concrete-lined structure

Additional Photos/Images:

Sketch map of WSM Pump 6
Not to scale



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7834 UPDATE
NRHP Status Code 3D/CD

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: Westside Main Canal

P1. Other Identifier: CA-IMP-7834, P-13-008334, Westside Main Canal
***P2. Location:** ■ **Not for Publication** ☐ **Unrestricted** ***a. County:** Imperial
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** Seeley, CA **Date:** 1957 (P. 1979) **T** 16S; **R** 12E; NW ¼ **of** SE ¼ **of Sec** 21; S.B. **B.M.**
c. Address: City: Zip:
d. UTM: Zone: 11S; 618511 mE/ 3635113 mN (G.P.S.) NAD 83
e. Other Locational Data: Starting in the City of El Centro, travel west on Interstate 8 and exit at Drew Road. Travel north on Drew Road for approximately 1.5 miles before turning left onto Evan Hewes Highway (old US 80). Travel west on Even Hewes Highway for approximately 2 miles and make a right turn onto Huff Road. Travel north on Huff Road for approximately 5 miles and make a left turn onto Boley Road. Travel west on Boley Road for approximately 1 mile and park. Proceed on foot, in a northeast direction, along the West Main Canal to where a 1.2 kilometer segment of the canal was surveyed starting at UTM coordinate 618511 mE / 3635113 mN and an ending at 619491 mE / 3635877 mN.

***P3a. Description:** This site form updates a 300-foot-long segment of the Westside Main Canal, part of the larger All-American Canal water conveyance system in Imperial County. Because the current project's survey corridor includes part of this canal, only that length within the survey corridor is documented, described, and evaluated.

The Westside Main Canal was built about 1907 as part of the larger Imperial Valley irrigation system, and later integrated into the All-American Canal system during its construction between 1934 and 1940. The Westside Main Canal has not been altered or modified since its last update in 1999 (Jill Hupp), when it was found not eligible for listing in the National Register (NRHP) as a sparate property or as a contributor to a district. However, in 2001 the Bureau of Reclamation and California State Historic Preservation Officer concurred that the All-American Canal is ELIGIBLE for the NRHP; by extension the Westside Main Canal is now recommended ELIGIBLE for the NRHP and California Register of Historical Resources (CRHR) under Criterion A/1 for its significance in association with development of the Imperial Valley.

***P3b. Resource Attributes:** HP20. Canal/aqueduct
***P4. Resources Present:** ☐Building ■Structure ☐Object ☐Site ☐District ■Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo: Photograph # 1599, Westside Main Canal looking northeast.
***P6. Date Constructed/Age and Sources:** ■Historic ☐Prehistoric ☐Both
Main canal- 1907 with alterations
***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd
Imperial, CA 92251
***P8. Recorded by:** J. Burkard, H. Thompson, J. Covert
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
***P9. Date Recorded:** 4 / 19 / 2007
***P10. Survey Type:** Intensive Survey - 15 meter transects
***P11. Report Citation:** SWCA Environmental Consultants and Applied EarthWorks 2008: Cultural Resources Survey of Alternatives for the Sunrise Powerlink Project, San Diego, Imperial, Riverside, and Orange Counties, California

***Attachments:** ☐NONE ■Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ■Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ■Photograph Record ☐ Other (List):

*Required information

PC ORIGINAL PKG

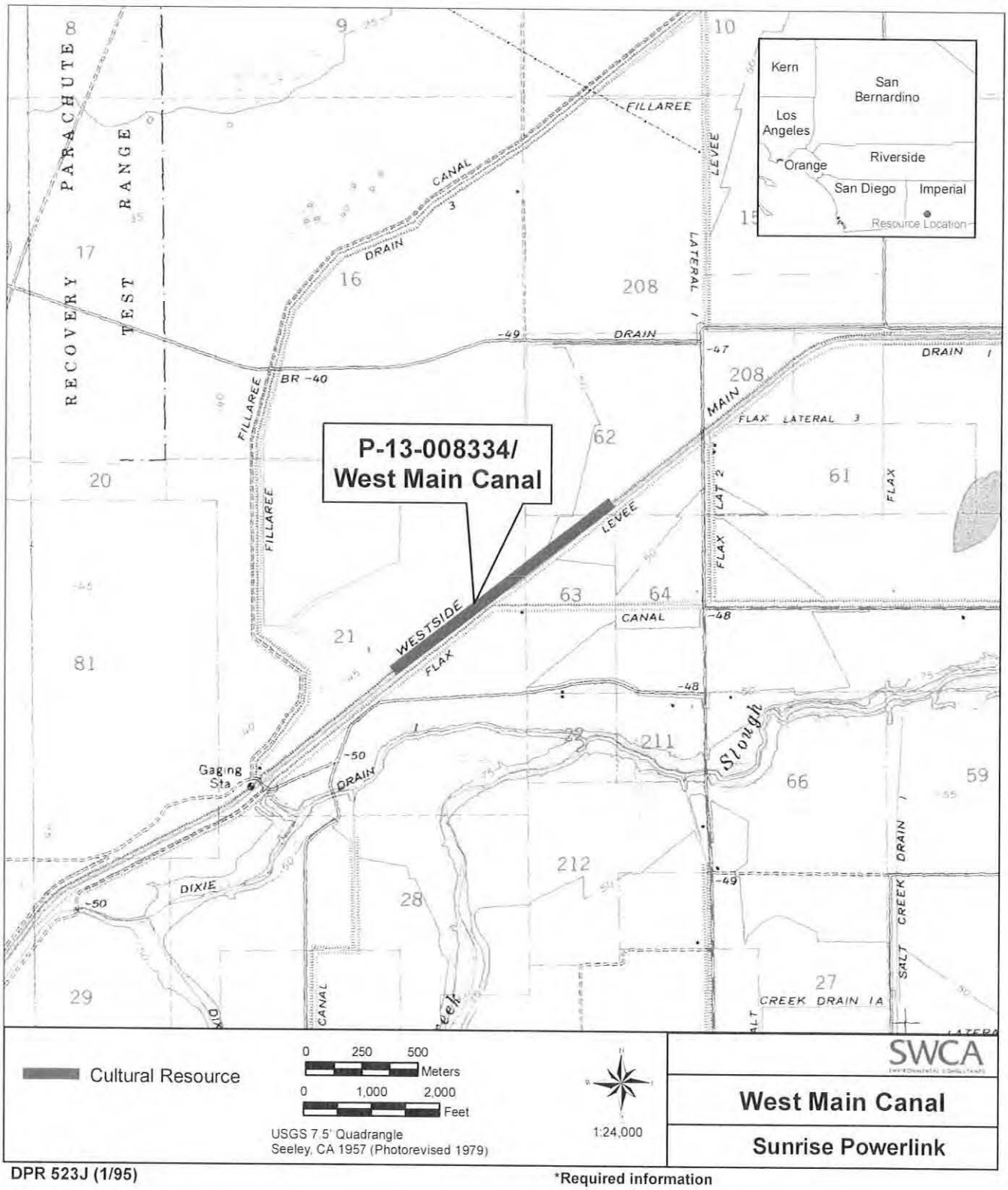
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-13-008334 UPDATE
HRI#
Trinomial CA-IMP-7834 UPDATE

*Resource Name or #: Westside Main Canal

*Map Name: Seeley, CA

*Scale: 1:24,000 *Date of Map: 1957 (Photorevised 1979)



DPR 523J (1/95)

*Required information

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-13-008334 UPDATE
HRI #
Trinomial CA-IMP-7834 UPDATE

 Resource Name or #: Westside Main Canal

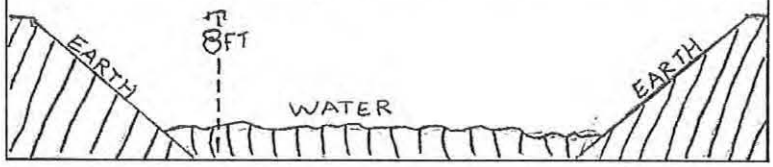
L1. Historic and/or Common Name: CA-IMP-7834, P-13-008334, Westside Main Canal
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:** Segment of Westside Main Canal
b. Location of point or segment: Starting in the City of El Centro, travel west on Interstate 8 and exit at Drew Road. Travel north on Drew Road for approximately 1.5 miles before turning left onto Evan Hewes Highway (old US 80). Travel west on Even Hewes Highway for approximately 2 miles and make a right turn onto Huff Road. Travel north on Huff Road for approximately 5 miles and make a left turn onto Boley Road. Travel west on Boley Road for approximately 1 mile and park. Proceed on foot, in a northeast direction, along the West Main Canal to where a 1.2 kilometer segment of the canal was surveyed starting at UTM coordinate 618511 mE / 3635113 mN and an ending at 619491 mE / 3635877 mN.

L3. Description: Westside Main Canal was built about 1907 and is earth-lined in this specific section. It forms part of the larger All-American Canal System, which provides water for irrigation within Imperial County since its completion in 1940.

L4. Dimensions:
- **a. Top Width:** 40 feet
- **b. Bottom Width:** unknown
- **c. Height or Depth:** 8 feet
- **d. Length of Segment:** 3,937 feet

L5. Associated Resources: The Fox Glove Canal and Dixie Drain are both nearby, serving respectively as irrigation delivery and storm drainage for the Westside Main Canal. All three resources are part of the NRHP-eligible All-American Canal system.

L4e. Sketch of Cross-Section (include scale) Facing: WEST



L6. Setting: The canal is surrounded by local agriculture, and has played a significant role in bringing agriculture and people to the desert of Imperial County. A variety of crops grow along this segment, as well as ruderal vegetation along its banks. Dirt access roads run parallel to the canal along its berms.

L7. Integrity Considerations: The surveyed length of the canal is in working order, and appears to have been regularly maintained to keep the banks properly groomed and the quantity of silt minimal.



L8b. Description of Photo, Map, or Drawing: Photograph #1601, West Main Canal, looking southwest

L9. Remarks: The Westside Main Canal was previously recorded in 1999 by Jill Hupp for the Caltrans Environmental Program. Their mailing address is P.O. Box 942874, Sacramento, California 94274.

L10. Form Prepared by:
J. Burkard , G. Connel, J. Covert
SWCA Environmental Consultants
625 Fair Oaks Avenue,Suite 190
South Pasadena, California 91030

L11. Date: 4 / 19 / 07

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PHOTOGRAPH RECORD

Primary # P-13-008334 UPDATE
HRI#
Trinomial CA-IMP-7834 UPDATE

 Resource Name or #: Westside Main Canal UPDATE **Year** 2007

Camera Format: Digital
Film Type and Speed: Digital

Lens Size:
Negatives Kept at: SWCA Environmental Consultants, South Pasadena office

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
4	19	-	1599	Westside Main Canal	Northeast	N/A
4	19	-	1600	Westside Main Canal	Southwest	N/A
4	19	-	1601	Westside Main Canal, facing southwest down survey corridor	Southwest	N/A
4	19	-	1602	Westside Main Canal	Northeast	N/A

PC ORIGINAL PKG

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

CONTINUATION SHEET

Primary # P-13-008334 UPDATE
HRI# _____
Trinomial CA-IMP-7834 (Update)

CA-IMP-7834 was recorded by Harris of HDR in 2000. This site is described as the Westside Main Canal built in the 1920s and incorporated into the All American Canal System (CA-IMP-7130H, built between 1933 and 1938). The Westside Canal is a forty mile canal alignment that, as part of the All American Canal System, has been determined eligible for listing in the National Register of Historic Places and as a California Historic Resource. The proposed pipeline alignment will connect to the Westside Main Canal.

The Westside Canal is a forty mile canal alignment that, as part of the All American Canal System, has been determined eligible for listing in the National Register of Historic Places and as a California Historic Resource. The proposed pipeline alignment will connect to the Westside Main Canal and, therefore, the proposed project has the potential to adversely impact a significant resource. McKenna et al. recommends that the area be monitored during construction and that the design, construction, and maintenance of the proposed pipeline be planned to avoid adverse impacts to the Canal.

Jeanette A. McKenna
February 28, 2007

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: P-13-008334 UPDATE
HRI #: ___
Trinomial: ___ CA-IMP-7834
NRHP Status Code:

Other Listings:
Review Code: ___ _____ Reviewer: _____ Date:

Page 1 of 3 **Resource Name or #:** (Assigned by recorder). SDY-S-10: Westside Main Canal

P1. Other Identifier: None

P2. **Location:** ■Not for Publication ☐Unrestricted **a. County:** Imperial
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
b. **USGS 7.5' Quad:** Plaster City Date: 1957 photorevised 1979 T 16S ; R 12E ; Section 18; S.B.M.
c. Address: - City: - Zip: -
d. UTM: Zone 11; 615200 mE/ 3625820 mN to 3628400 mN
e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate): The Westside Main Canal crosses Old Hwy 80 in a northward direction at Dixieland; it intersects the project area approximately 1300' south of Dixieland at the ROW of the San Diego and Eastern Railroad. Elevation here is about 35' above sea level.

P3a. **Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): The Westside Main Canal is an older canal, built in the 1920s, that was incorporated into the All American Canal System (CA-IMP-7130H), constructed between 1933 and 1938, and opened in 1940. The Westside Main begins at the western terminus of the All American Canal and extends northward in a general "Z" shape for about forty miles. It ends about 5 miles west of the town of Westmorland. As part of the All American Canal System, this canal is eligible for NRHP inclusion.

P3b. **Resource Attributes** (List attributes and codes): HP20 - Canal

P4. **Resources Present:** ☐Building ■Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photograph or Drawing (Photo required for buildings, structures, and objects)

P6. **Age and Sources:**
■Historic ☐Prehistoric
☐Both

P7. **Owner and Address:**

P8. **Recorded by** (Name, affiliation, and address):
N. Harris, HDR ,9444 Farnham, San Diego ,CA 92123

P9. **Date Recorded:**
June, 2000

P10. **Survey Type** (Describe):
Intensive Surface Inventory

P11. **Report Citation** (Cite survey report and other sources, or enter "none") Cultural Resources Survey for the Level (3) Communications Fiber Optic Network Between City of San Diego, California, and the California/Arizona State Line at the Colorado River, Near Yuma, Arizona; on file with the BLM, Riverside, CA.

Attachments: NONE ■Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐Other (List):

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary #: P-13-008334 UPDATE
Trinomial: CA-IMP-7834

Resource Name or #: (Assigned by recorder): Westside Main Canal

A1. **Dimensions:** a. Length: ca. 40 miles b. Width: unknown
Method of Measurement: ☐ Paced ☐Taped ☐Visual estimate■ Other: Derived from map
Method of Determination (check any that apply.): ☐ Artifacts ☐Features ☐Soil ☐Vegetation ☐Topography ☐Cut bank ☐Animal burrow ☐Excavation ☐Property boundary ■Other (Explain): Imperial Irrigation District map
Reliability of Determination: ☐High ■Medium ☐Low Explain: Measured off map
Limitations (check any that apply): ☐Restricted access ☐Paved/built over ☐Site limits incompletely defined ☐Disturbances ☐Vegetation ☐Other (Explain):

A2. Depth: ☐None ■Unknown Method of Determination:

A3. **Human Remains:** ☐Present ■Absent ☐Possible ☐Unknown (Explain):

A4. **Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.): Canal channel, headgates, drops, etc.

A5. **Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.): None noted.

A6. **Were Specimens Collected?** ■No ☐Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

A7. **Site Condition:** ■Good ☐Fair ☐Poor (Describe disturbances.): Operational canal

A8. **Nearest Water** (Type, distance, and direction.): n/a

A9. **Elevation:** ca. 35 feet above sea level

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.): Agricultural properties on the east side, and creosote, ocotillo, cactus, grasses, mesquite, shrubs, forbs on the west side; soils are light brown alluvial sandy silt loams and sand dunes on the western edge of the cultivated portion of the Imperial Valley.

A11. Historical Information: The Westside Main Canal is an older canal, built in the 1920s, that was incorporated into the All American Canal System (CA-IMP-7130H), constructed between 1933 and 1938, and opened in 1940. The Westside Main begins at the western terminus of the All American Canal and extends northward in a general "Z" shape for about forty miles. It ends about 5 miles west of the town of Westmorland. As part of the All American Canal System, this canal is eligible for NRHP inclusion.

A12. **Age:** ☐Prehistoric ☐Protohistoric ☐1542-1769 ☐1769-1848 ☐1848-1880 ☐1880-1914 ■1914-1945 ☐Post 1945 ☐Undetermined (**Describe position in regional prehistoric chronology or factual historic dates if known**):

A13. Interpretations (Discuss data potential, function(s), ethnic affiliation, and other interpretations): The canal is part of the historic system of canals that make up the extensive hydraulic irrigation system in the Imperial Valley. These canals profoundly influenced the Euro-American land use, settlement patterns, economy, and the cultural landscape of southern California, and continues to do so today.

A14. Remarks: None.

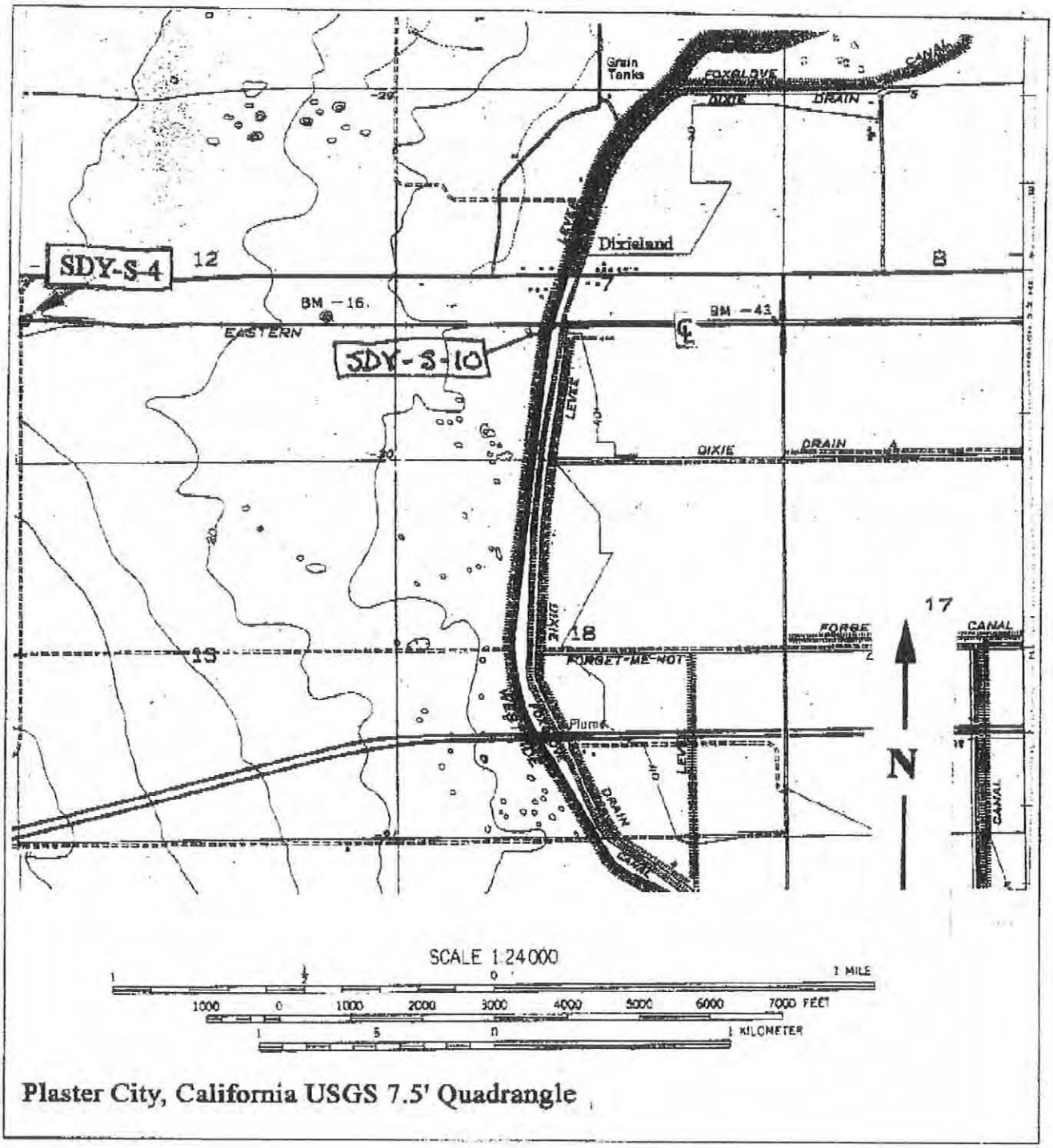
PC ORIGINAL PKG

A15. References (Documents, informants, maps, and other references): None.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record):
Kept at:

A17. Form Prepared by Michael Oberndorf Date: 12/4/2000
Affiliation and Address: HDR Engineering, Inc.
9444 Farnham Street, Suite 300
San Diego, CA 92123

PC ORIGINAL PKG



Plaster City, California USGS 7.5' Quadrangle

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-008334
HRI #:
Trinomial: CA-IMP-7834

NRHP Status Code: 6
Other Listings:
Review Code ____ Reviewer ____ Date ____

County/Route/Postmile: 11-IMP-98, P.M. 0.3-30.3/K.P 0.5-48.8 Map Reference No.: 1

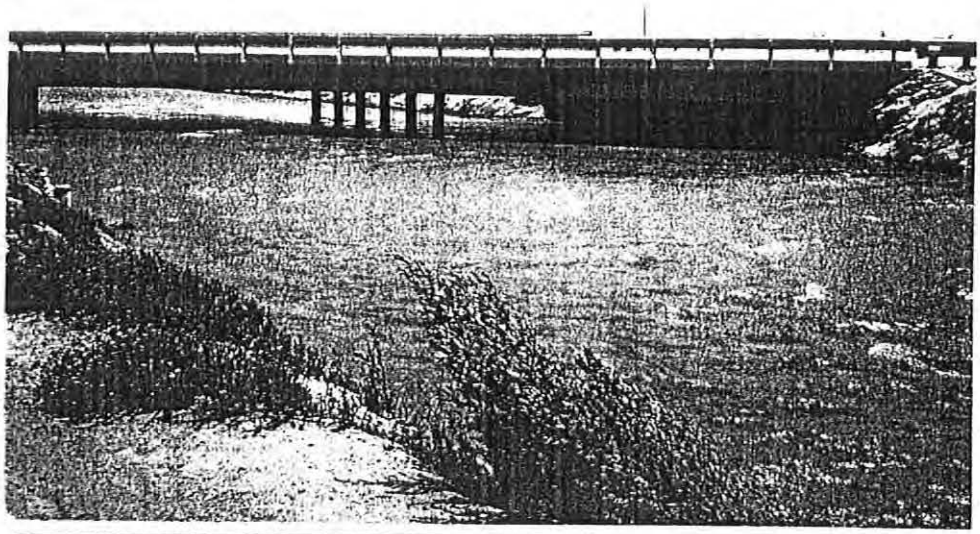
*Resource Name or #: Westside Main Canal
P1. Other Identifier: N/A
*P2. Location: *a. County Imperial
b. Address SR 98 at Postmile 22.02 City Calexico Zip 92231
*c. USGS 7.5 Quad: d. UTM:
*e. Other Locational Data: (e.g. parcel #, directions to resource, elevation, etc., as appropriate)
Segment within the APE crosses SR 98 at P.M. 22.02 (K.P. 35.23) just west of Drew Rd.

*P3a. Description:
The Westside Main Canal is a wide irrigation canal that runs through agricultural land in the Imperial Valley section of Imperial County. It enters the current project area where State Route 98 crosses the canal at Postmile 22.02 (K.P. 35.23) west of Drew Road. At this point the canal is approximately 25 feet wide (7.62 m) and about 10 feet deep (3.04 m), running perpendicular to the highway in a northwest-southeast direction. It is banked by earthen levees of natural vegetation and is unlined. Dirt access roads run along the levees on both sides of the canal to precipitate maintenance and dredging operations. The Westside Main Canal as a whole is primarily earthen lined and subject to regular dredging. Rigorous dredging has reshaped the canal's banks and inner surface.

Originating at the All-American Canal along the International Boundary, Westside Canal extends northwest roughly 11 miles (17.8 km), where it becomes the Tamarack Canal. At this point (between Brawley and Westmoreland) Westside branches off to the west, terminating at the Trifolium Canal, which continues northwest a short distance to the boundary of the Imperial Irrigation District, with laterals serving a considerable area lying south of Salton Sea. Bridge #58-274, constructed in 1955, carries SR 98 across the canal. Parallel to Westside Main is a smaller waterway, the concrete-lined Wormwood Canal. The surrounding area consists primarily of irrigated cropland.

*P3b. Resource Attributes: HP20 (Canal/Aqueduct)

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



*P4. Resources Present:
☐ Building ■ Structure ☐Object ☐ Site ☐ District ☐ Element of District

P5b. Description of Photo: 4/28/99. Canal segment N of SR 98 looking S.

*P6. Date Constructed/Age: c.1906; recent modifications
☐ Prehistoric ■ Historic ☐ Both

*P7. Owner and Address:
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

*P8. Recorded by:
Jill Hupp
Caltrans Environmental Program
PO Box 942874
Sacramento, CA 94274-0001
(916) 654-3567

*P9. Date Recorded: 4/28/99

*P10. Type of Survey: ■Intensive ☐ Reconnaissance ☐ Other

*P11. Report Citation: IMP-98 HASR, 11-IMP-98, P.M. 0.3/30.3, EA 173400

*Attachments: ☐ NONE ☐ Map Sheet ☐ Continuation Sheet ■ Building, Structure, and Object Record ☐ Linear Resource Record ☐ Archaeological Record ☐ District Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List)

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334
HRI #/ Trinomial CA-IMP-7834

Resource Name or #: Westside Main Canal

■ Continuation ☐ Update

County/Route/Postmile: 11-IMP-98, P.M. 0.3/30.3

P5b. Description of Photo (continued)



4/28/99. Westside Main Canal segment north of SR 98, looking NW.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # P-13-008334
HRI#/Trinomial CA-IMP-7834

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code: 6

*Resource Name or #: Westside Main Canal

B1. Historic Name: Westside Main Canal
B2. Common Name: Westside Main Canal
County/Route/Postmile: 11-IMP-98, P.M. 0.3/30.3
B3. Original Use: Irrigation ditch
B4. Present Use: Irrigation ditch
*B5. Architectural Style: N/A
*B6. Construction History: built c. 1906 as part of the Imperial canal system with recent modifications.
*B7. Moved? ■ No ☐ Yes ☐Unknown Date: N/A Original Location: N/A
*B8. Related Features: None
B9a. Architect: N/A
B9b. Builder: Calif. Devel. Co., Southern Pacific Co., I.I.D.
*B10. Significance: N/A Theme: N/A Area: N/A
Period of Significance: N/A Property Type: N/A Applicable Criteria: N/A

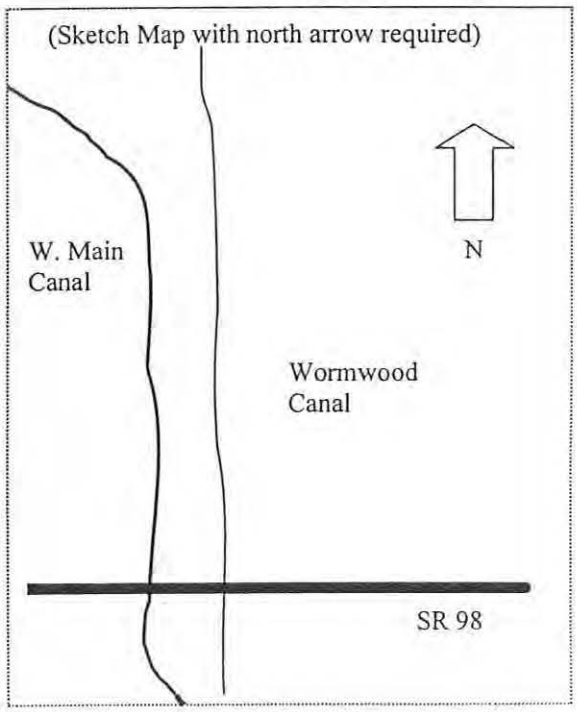
Westside Main Canal was built about 1906 as part of the expansive Imperial irrigation system, which transformed the Colorado Desert into fertile farmland. The movement to reclaim this seemingly inhospitable wasteland for agrarian purposes had originated with Dr. O. M. Wozencraft in the 1850s. Wozencraft was convinced that the area had unlimited agricultural potential, if only a potable water supply could be established; he believed that this could be accomplished by means of a single gravity-flow canal, by which several hundred acres could be irrigated. Despite Wozencraft's best efforts, no progress was made on the project during his lifetime. In 1896 a group of investors formed the California Development Company (CDC), determined to take on the challenge of desert irrigation. Headed by civil engineers Charles Rookwood and George Chaffey, the company began constructing a canal that would divert water from the Colorado River into the dry channels of the Alamo and New rivers, which would in turn carry the water north to the Colorado Desert (now the Imperial Valley). In early 1902, the first irrigation water was delivered. A CDC subsidiary, the Imperial Land Company, promoted colonization of the area and handled land sales. Under Chaffey's direction, several mutual water companies were organized as well, and the CDC built most of the distribution systems, main canals and laterals needed to service these newly developed areas. By 1905, 80 miles of main canals had been built, with more than 100,000 acres under cultivation. Water delivery service was unreliable however, the canals being poorly designed and maintained. The muddy Colorado River had a tendency to deposit heavy loads of silt, which soon blocked the canal's intake, thereby reducing the amount of water reaching Valley crops. In an attempt to combat this, the CDC cut a bypass channel in the riverbank four **(See Continuation Sheet)**

B11. Additional Resource Attributes: N/A
B12. References: Clement 1996: primary record 1;
Lortie, 1997: 6, 8-10, 13-17;
IID website: 1, 6; Tout 1990: 110, 114-115;
Fisher 1998: 11-14.

B13. Remarks: N/A
B14. Evaluator: Jill Hupp
Caltrans Environmental Program
PO Box 942874
Sacramento, CA 94274-0001
(916) 654-3567

*Date of Evaluation: 5/24/99

(This space reserved for official comments)



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-13-008334
HRI #/ Trinomial CA-IMP-7834

Resource Name or #: Westside Main Canal ■ Continuation ☐ Update

County/Route/Postmile: 11-IMP-98, P.M. 0.3/30.3

B10. Significance (continued) miles south of the border, without legal authority or adequate gates to control the force of the water. Widespread flooding in the winters of 1905-06 and 1907 as a result of this action caused extensive damage to farmland and railroad property, as well as to the canal system itself. The wooden flume that had carried the Encina (Westside Main) Canal across New River in Mexico was destroyed in the floods, as was a similar flume across New River 20 miles north of the border. It was not deemed practical to rebuild the latter, as the floodwaters had greatly increased the width and depth of the New River Channel at that locale. As an alternative, the CDC decided to enlarge Westside Main Canal (then located primarily within Mexico) and extend it north into the United States. By the end of 1907, a new enlarged wooden flume with a length of some 1,860 feet carried the canal across New River in Mexico. The extended Westside Main Canal was designed to serve all of the area lying west of New River, which had not yet been developed.

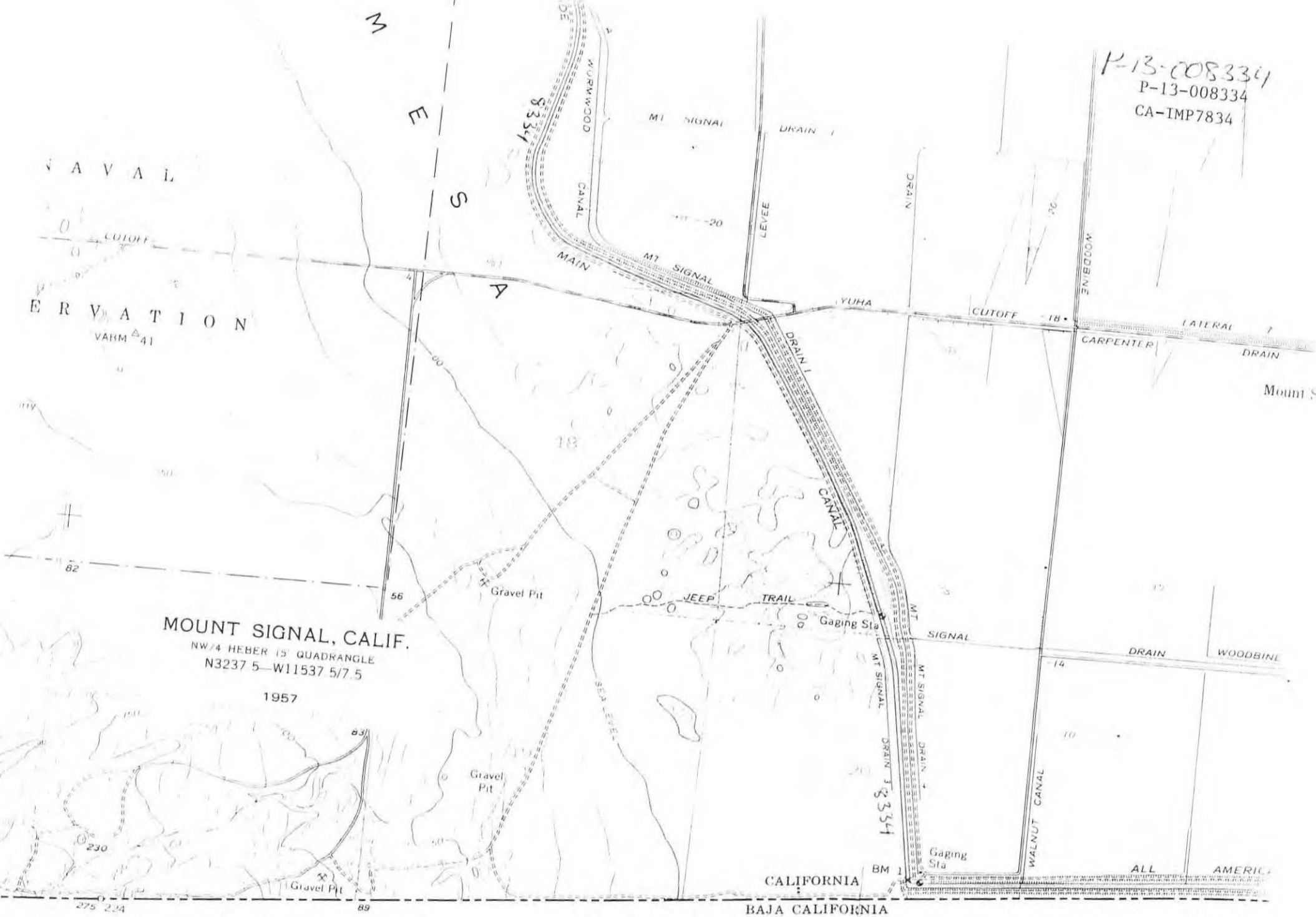
Unable to recover from its huge financial losses after the floods, the CDC was forced into bankruptcy. Southern Pacific (as the CDC's main creditor) assumed management of the company, and water delivery service continued without interruption. Between 1912-1916, development work in Imperial Valley in the way of canal extensions and territorial improvements advanced at an accelerated pace. The Imperial Irrigation District (IID) purchased the existing canal system in 1916, and in 1922 the region's smaller mutual water companies were absorbed by the District. By 1930 the district was operating some 1,700 miles of canals and laterals, with a service area of 550,000 acres. As an agricultural center, the Imperial Valley was particularly hard-hit by the Depression; maintenance and expansion work on the canals slowed to a near-standstill as economic conditions worsened. To Valley residents, the completion of Hoover Dam on the lower Colorado River in 1935 seemed an indication of better times to come. This massive Federal undertaking would help reduce the volume of silt carried by the river, and prevent the possibility of another devastating flood in the Imperial Valley. The All-American Canal was finished in 1941 as part of the same project as Hoover Dam, fulfilling the long-held ambition of Valley farmers and IID officials to build a new canal that was entirely within the boundaries of the United States. Improvements were made to the existing canal system as well, particularly the drain ditches, which were widened and fitted with drain tiles to help alleviate the problem of salt build-up in Valley soil.

Beginning in the 1960s, the IID endeavored to line all of its earthen canals with concrete. The section of Westside Main Canal within the project area is earthen, although other segments are now concrete. The canal originally lay primarily within Mexico, but was considerably widened and extended within the United States in 1907, and again between 1912-1916. More extensive improvements were made after the completion of the All-American Canal in 1941, and the sections of Westside Canal located south of the border were no longer part of the IID system. The earthen sections have been subject to regular dredging operations since the 1950s.

Westside Main Canal today, like the IID irrigation system overall, reflects the developments that occurred as a result of the construction of the All-American Canal in 1941, after which the system was considerably expanded and modernized. The Westside Main Canal appears to possess significance under criteria A and C for its association with the development of irrigated commercial agriculture in the Imperial Valley west of New River in the early 1900s and as a good example of an early large-scale irrigation canal system. However, research to date appears to indicate that the canal as a whole, while significant, would not possess the requisite degree of integrity due to reconstruction and dredging activities since the 1950s, but no survey of the canal in its entirety has yet been undertaken. Caltrans architectural historian Frank Lortie, after an extensive study of the IID system in 1997, concluded that the elements in the IID that retain integrity for the period 1941-1950 could be contributors to a potentially eligible National Register historic district. The segment of Westside Main Canal within the project vicinity does not appear to possess sufficient integrity of workmanship, design, feeling and association to represent the canal's significance in itself or as a contributor to a larger property. While still earthen, extensive dredging since the 1960s has changed the basic configuration of the canal, because modern dredging equipment created a different ditch profile, more U-shaped and with steeper sides. The canal was extended and widened over time as the IID attempted to keep up with its ever-expanding service area. Because of these alterations it reflects neither the period of significance outlined by Lortie (1941-1950) or the earlier period of the canal system's history (1901-1907).

In July 1997 and April 1998, segments of several canals within the IID system (including portions of Westside Main) were examined and found ineligible due to loss of integrity. The segment of Westside Main Canal within the current project area also appears to lack integrity to be individually eligible for the National Register of Historic Places or to be a contributing element of the canal as a whole, should the entire canal constitute an eligible property. There is no evidence of a possible historic district or historic landscape which might include this segment of the canal as a contributing element. Likewise, Caltrans has evaluated the canal in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines, using criteria outlined in Section 5024.1 of the California Public Resources Code, and determined that the canal is not a historical resource for the purposes of CEQA.

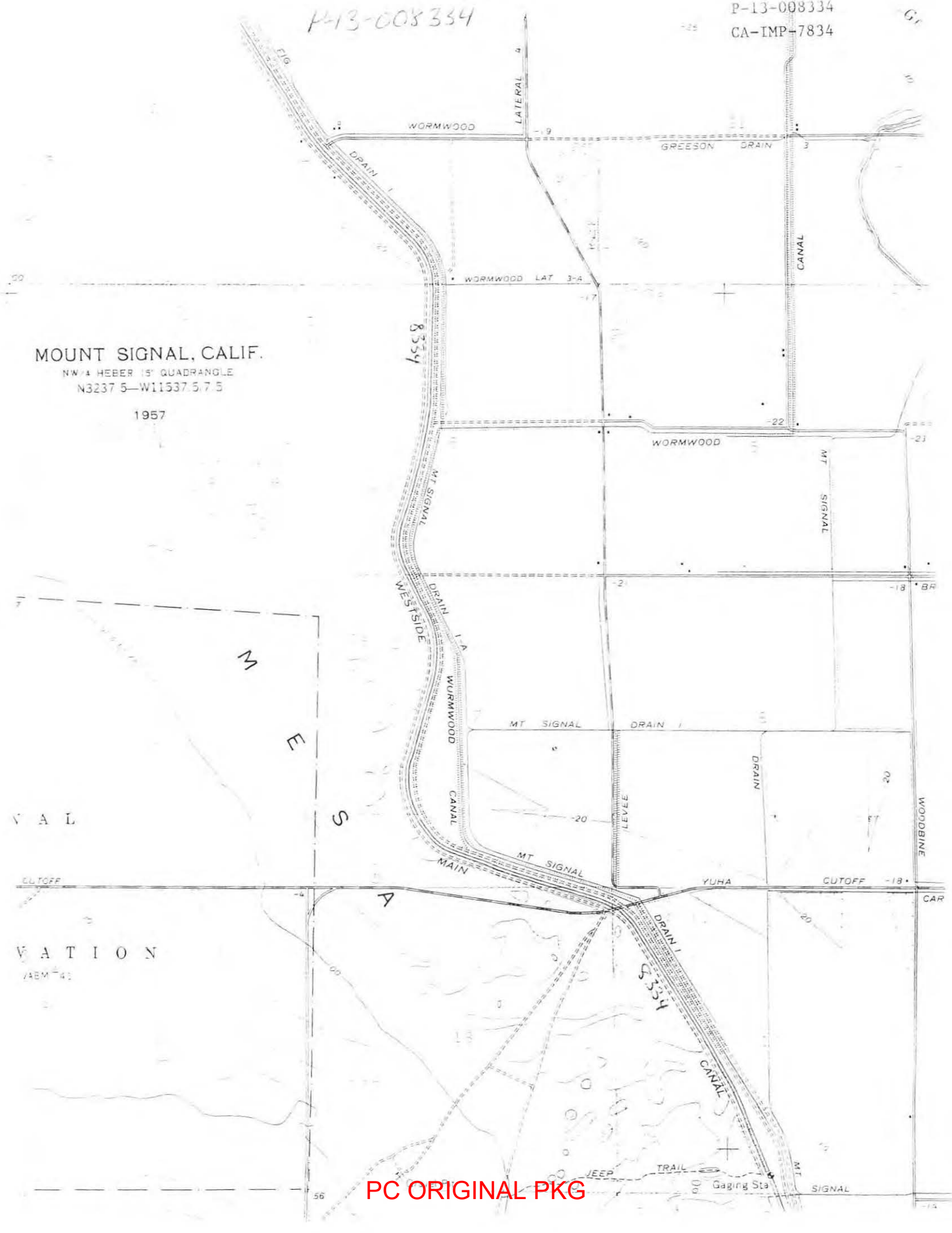
PC ORIGINAL PKG



PC ORIGINAL PKG

P-13-008334

P-13-008334
CA-IMP-7834



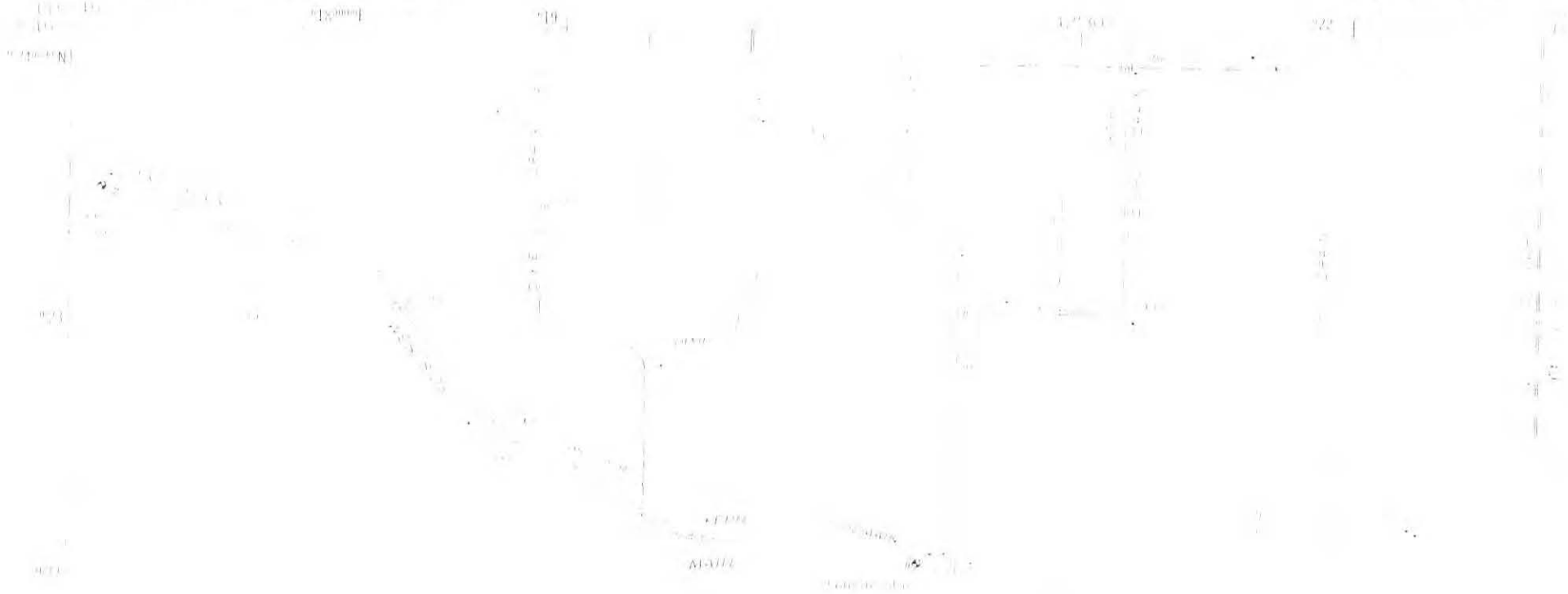
PC ORIGINAL PKG

P-13-008434

CA-IMP-7834

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF
DEPARTMENT OF



MOUNT SIGNAL, CALIF.

PC ORIGINAL PKG

4/

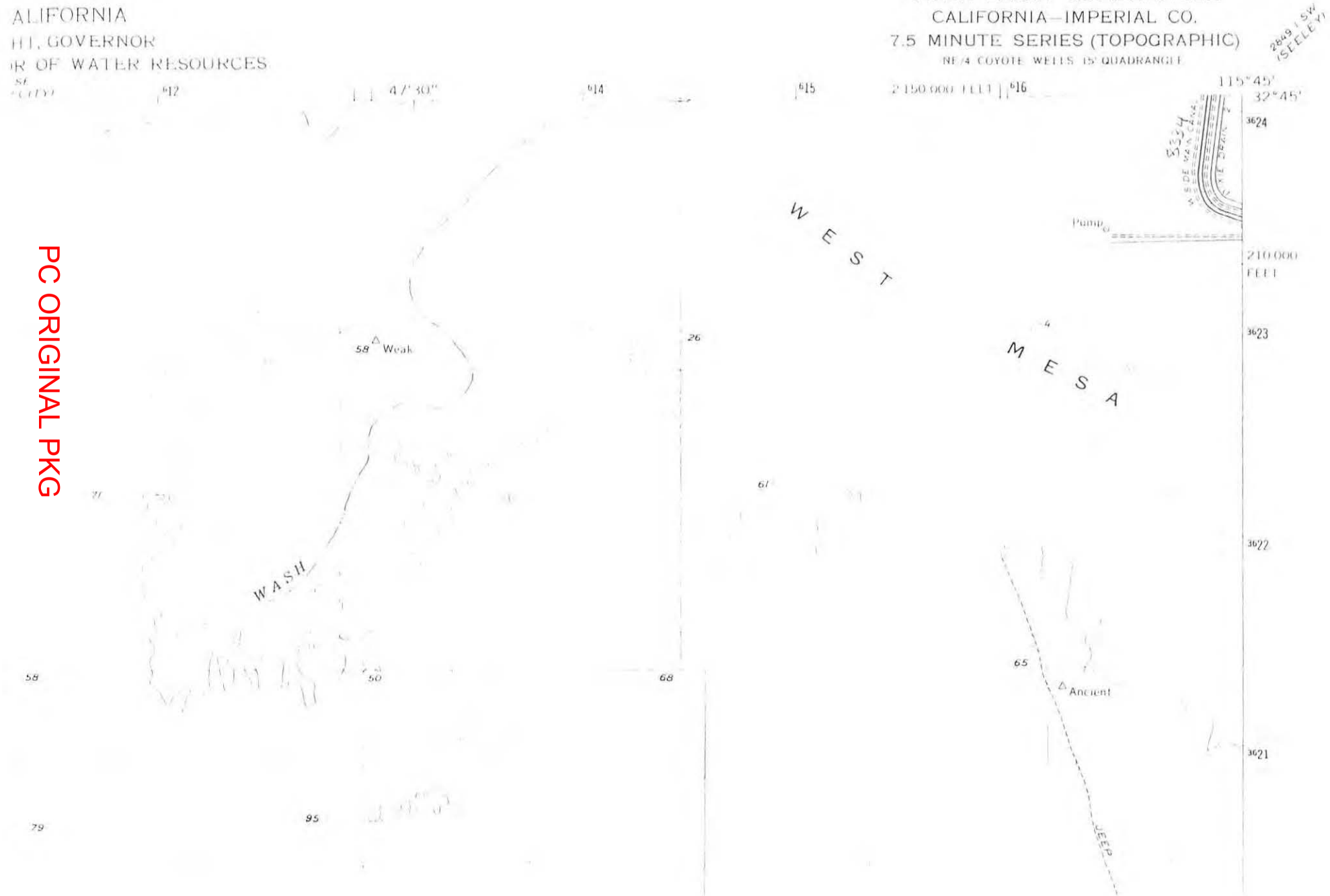
P-13-008334

P-13-008334
CA-IMP-7834

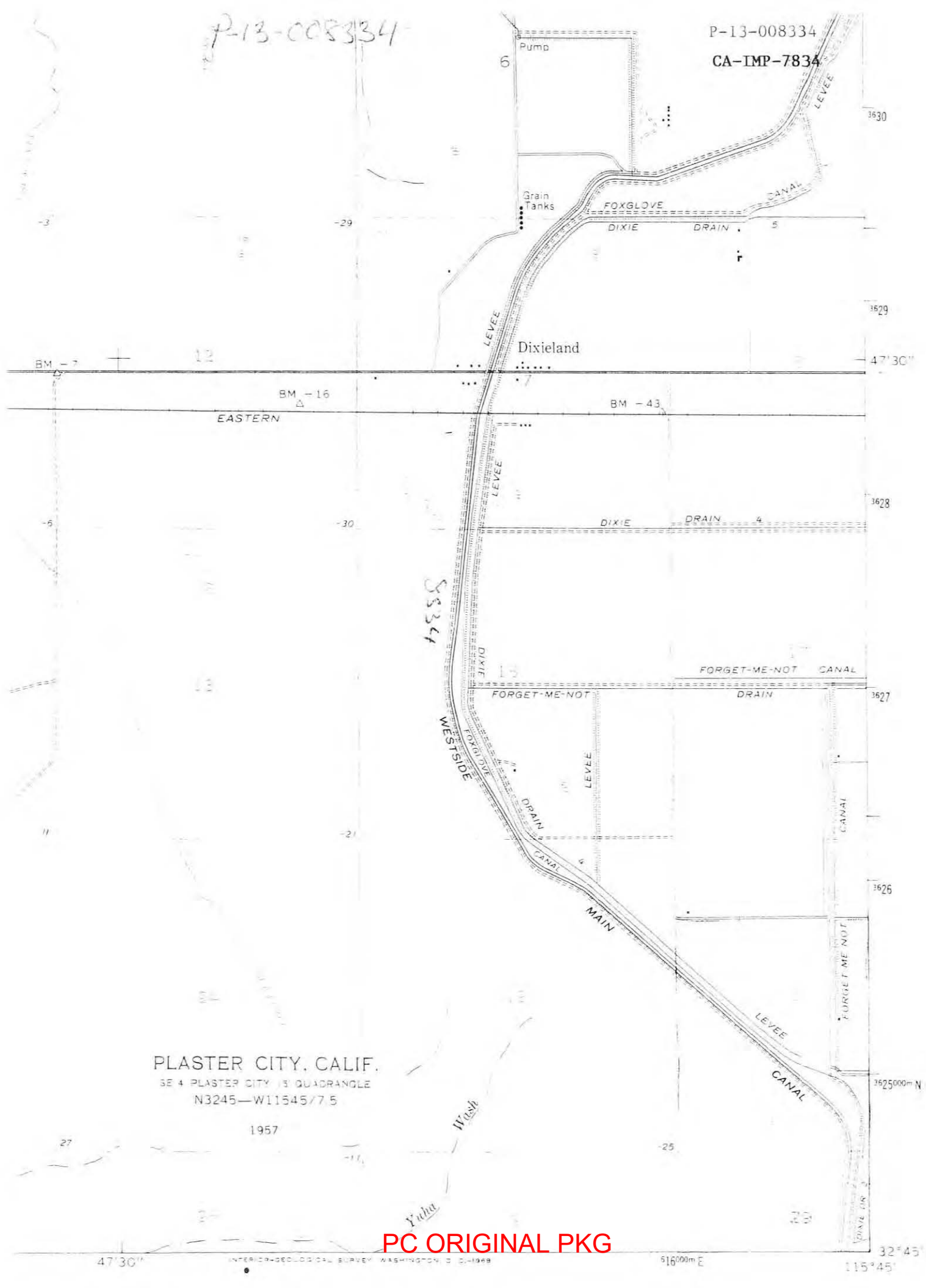
ALIFORNIA
HT, GOVERNOR
R OF WATER RESOURCES

YUHA BASIN QUADRANGLE
CALIFORNIA—IMPERIAL CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

NE/4 COYOTE WELLS 15' QUADRANGLE



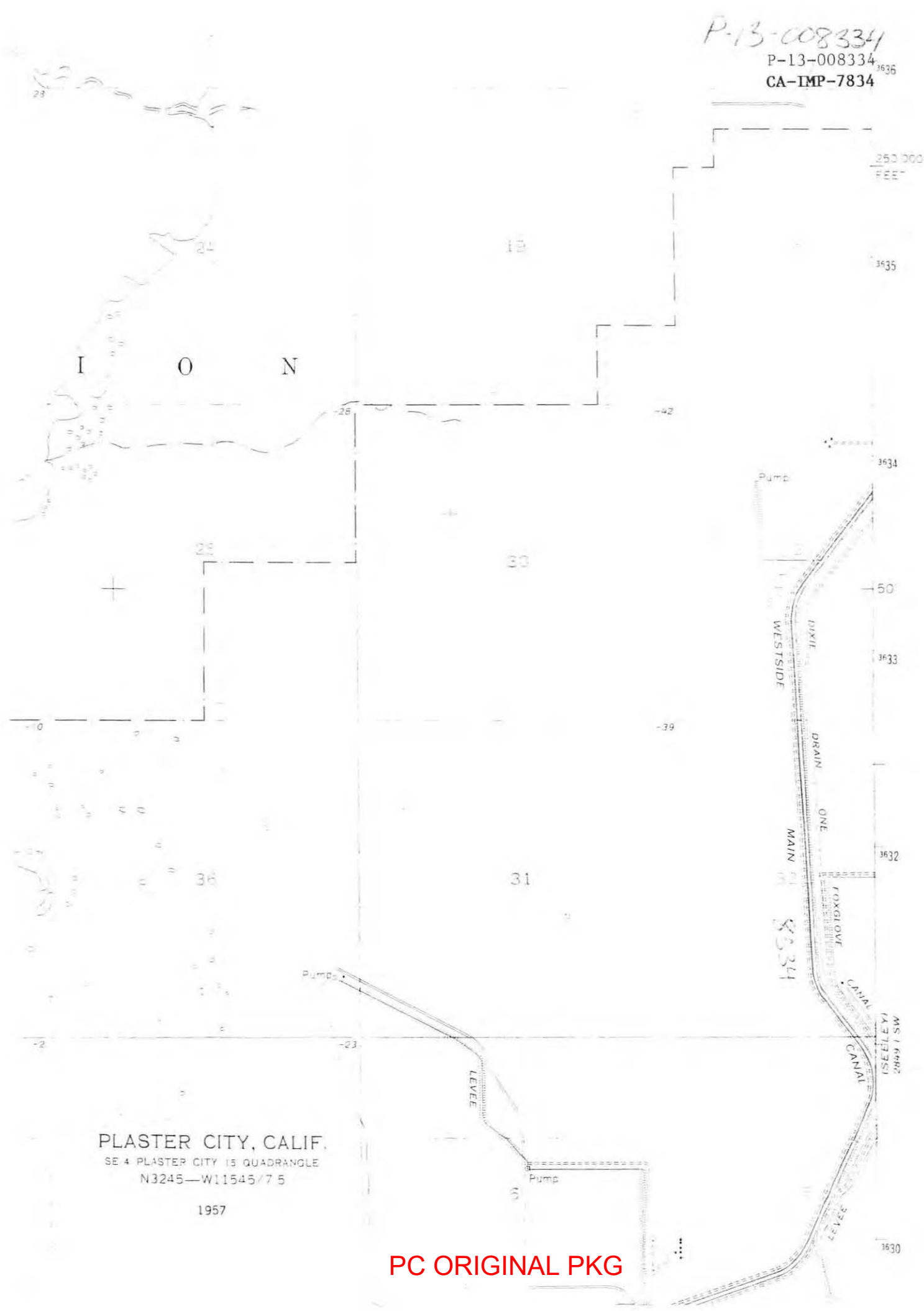
PC ORIGINAL PKG



PC ORIGINAL PKG

P-13-008334

P-13-008334
CA-IMP-7834



PLASTER CITY, CALIF.

SE 4 PLASTER CITY 15 QUADRANGLE

N3245—W11545/7 5

1957

PC ORIGINAL PKG

P-13-008334

P-13-008334

CA-IMP-7834

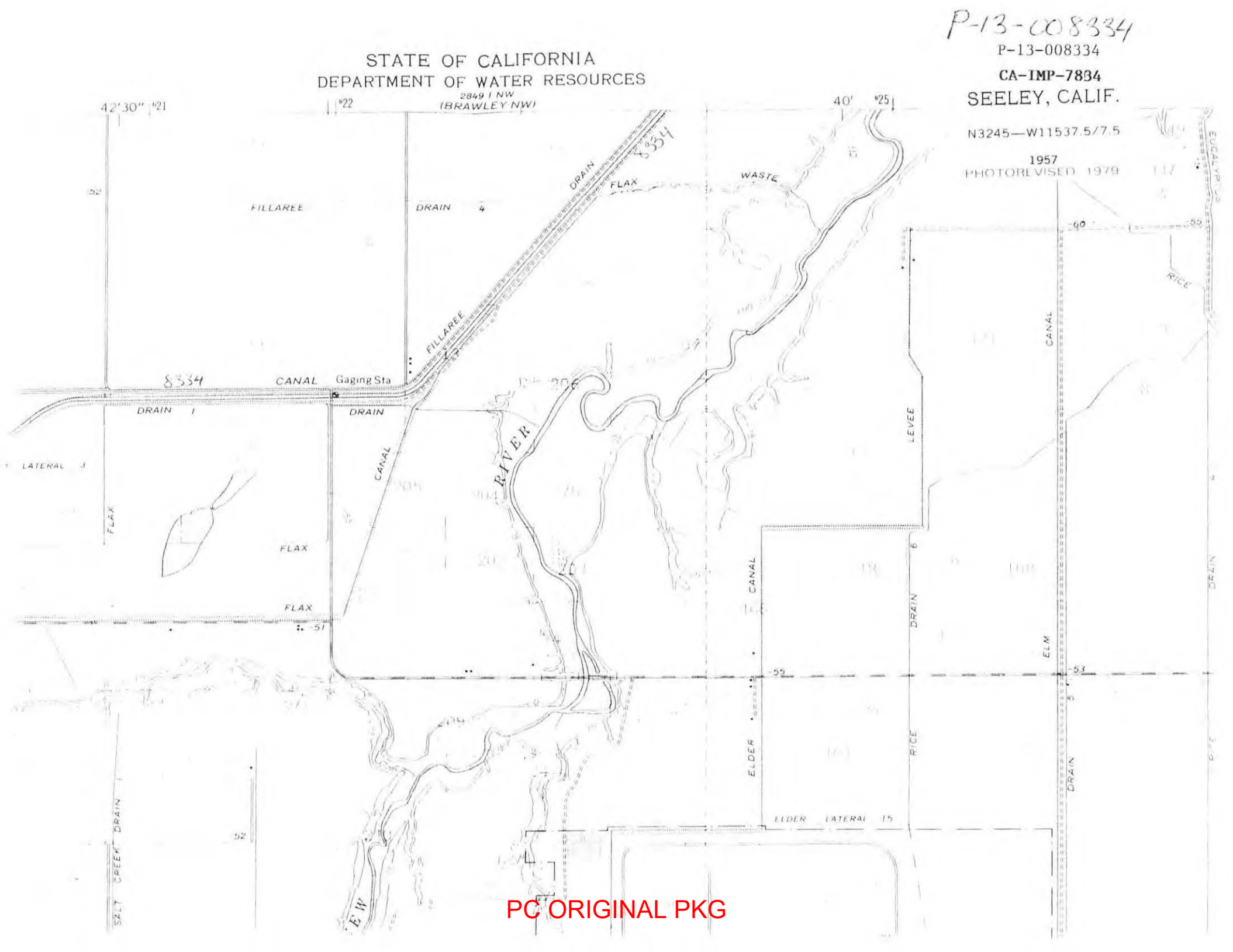
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

SEELEY, CALIF.

2849 I NW
(BRAWLEY NW)

N3245—W11537.5/7.5

1957
PHOTOREVISED 1979

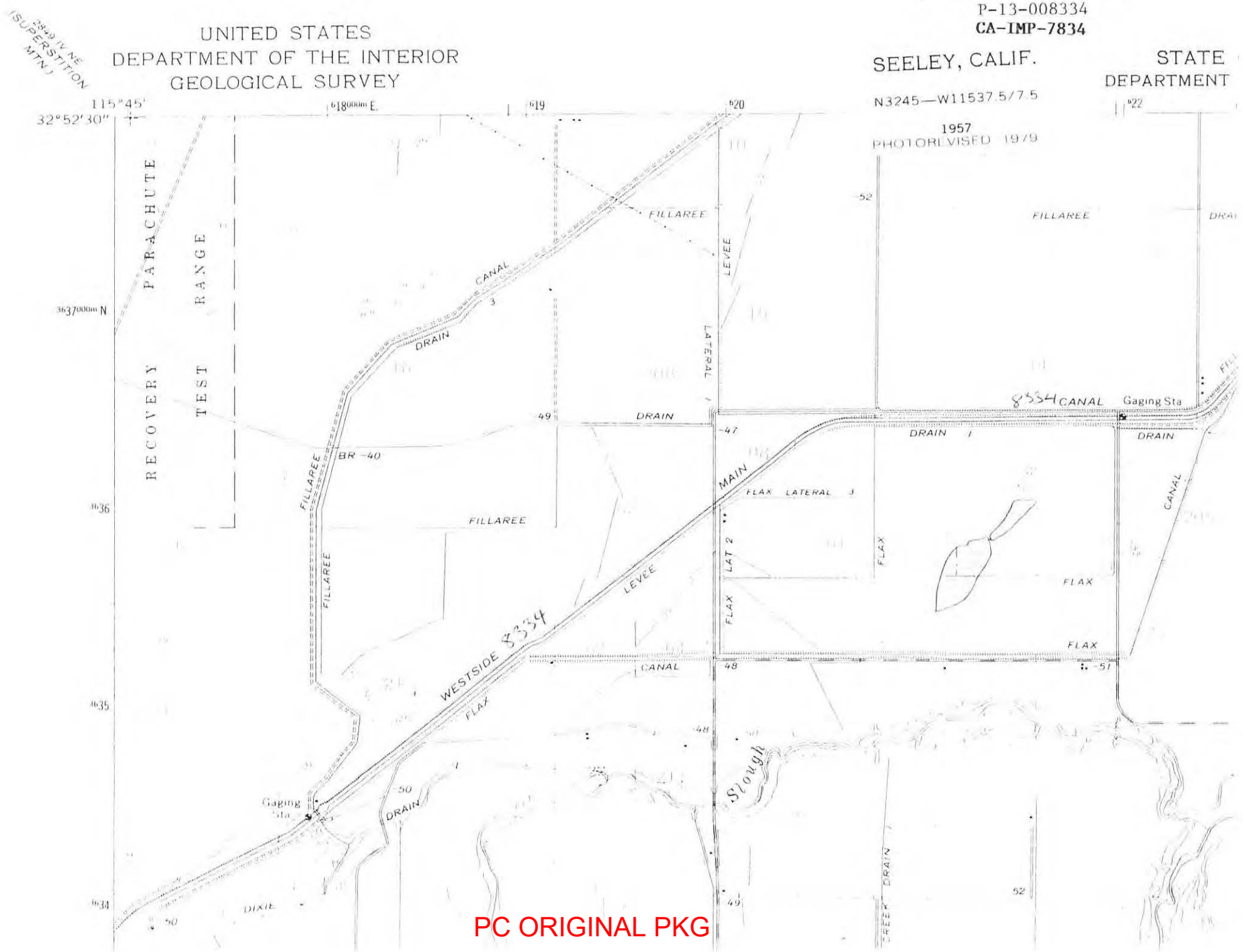


PC ORIGINAL PKG

P-13-008334

P-13-008334

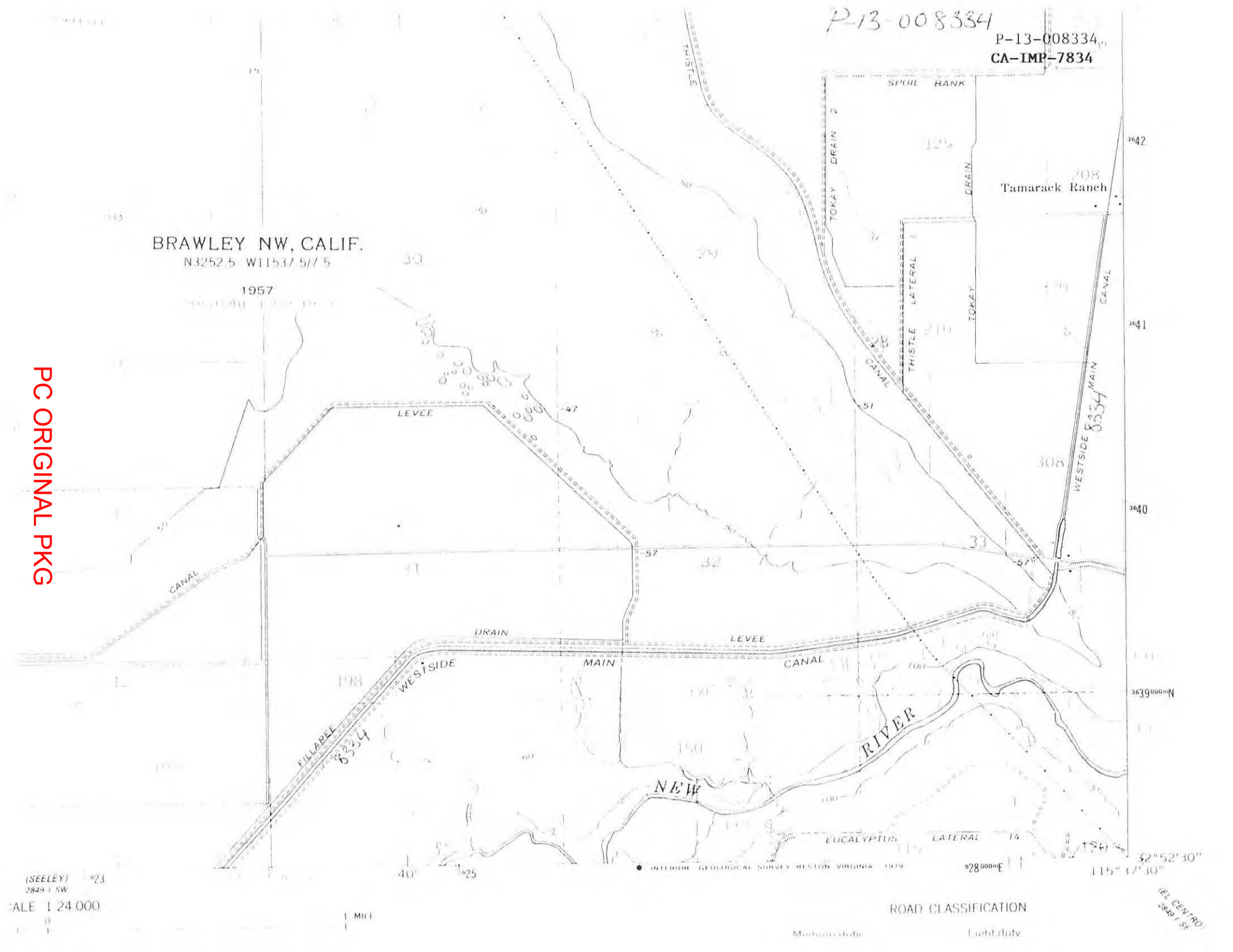
CA-IMP-7834



PC ORIGINAL PKG

P-13-008334

P-13-008334
CA-IMP-7834



PC ORIGINAL PKG

P-13-008334
CA-IMP-7834

P-13-008334

BRAWLEY, CALIF.
N3252.5—W11530/7.5
1957

57'30"

55'

THORN

THORN

TUBEROSE

CANAL

MAIN

MALAN

CANAL

(BRAWLEY NW)

TOKAY

TOKAY LAT 1

LEVEE

WESTSIDE

LAT 2

SUMAC

RIVER

Reservoir

Res

CANAL

MAIN

CANAL

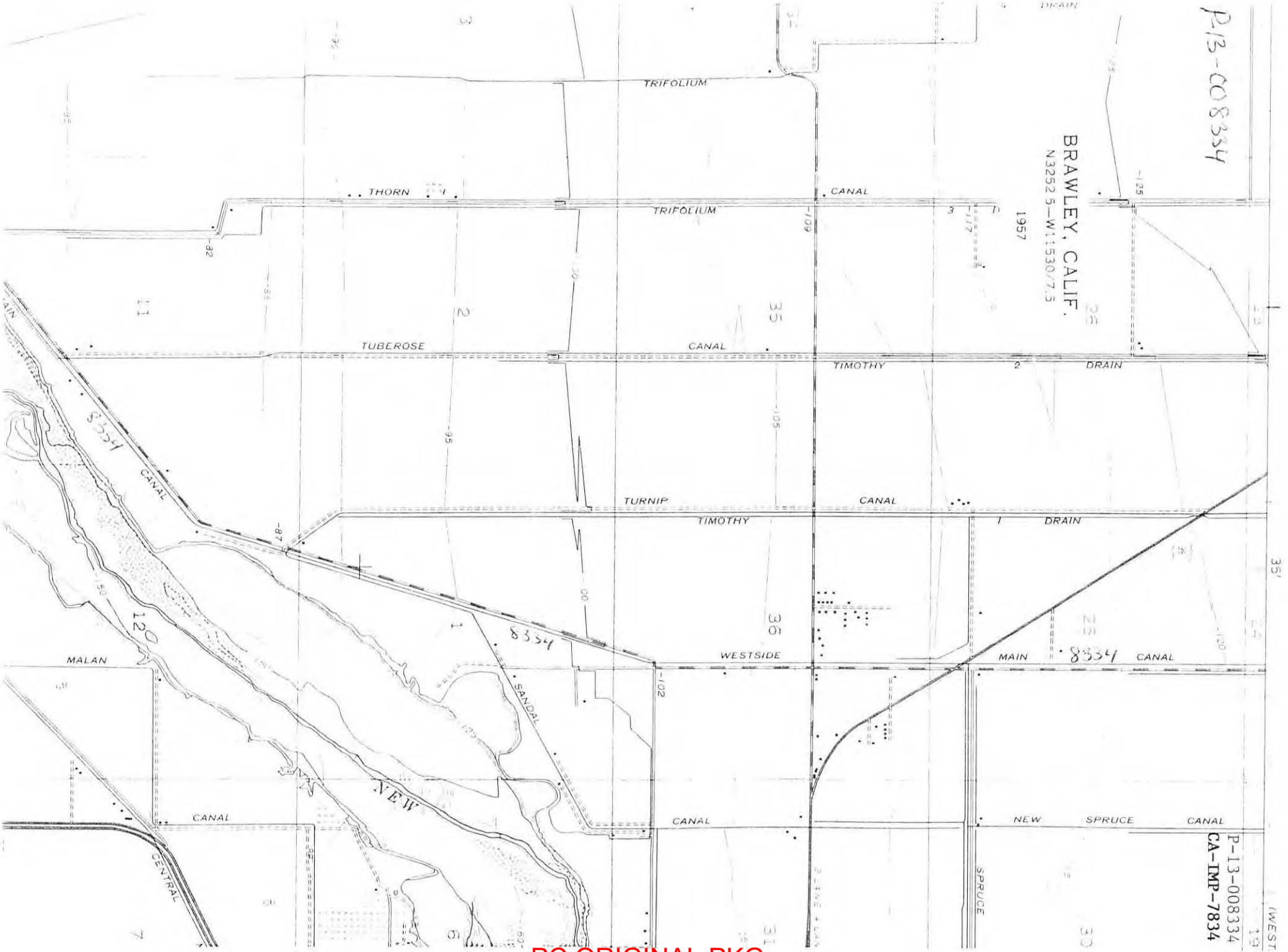
ELICALYPTUS

CENTRAL

NEWSIDE

Tamarack
Ranch

PC ORIGINAL PKG



PC ORIGINAL PKG

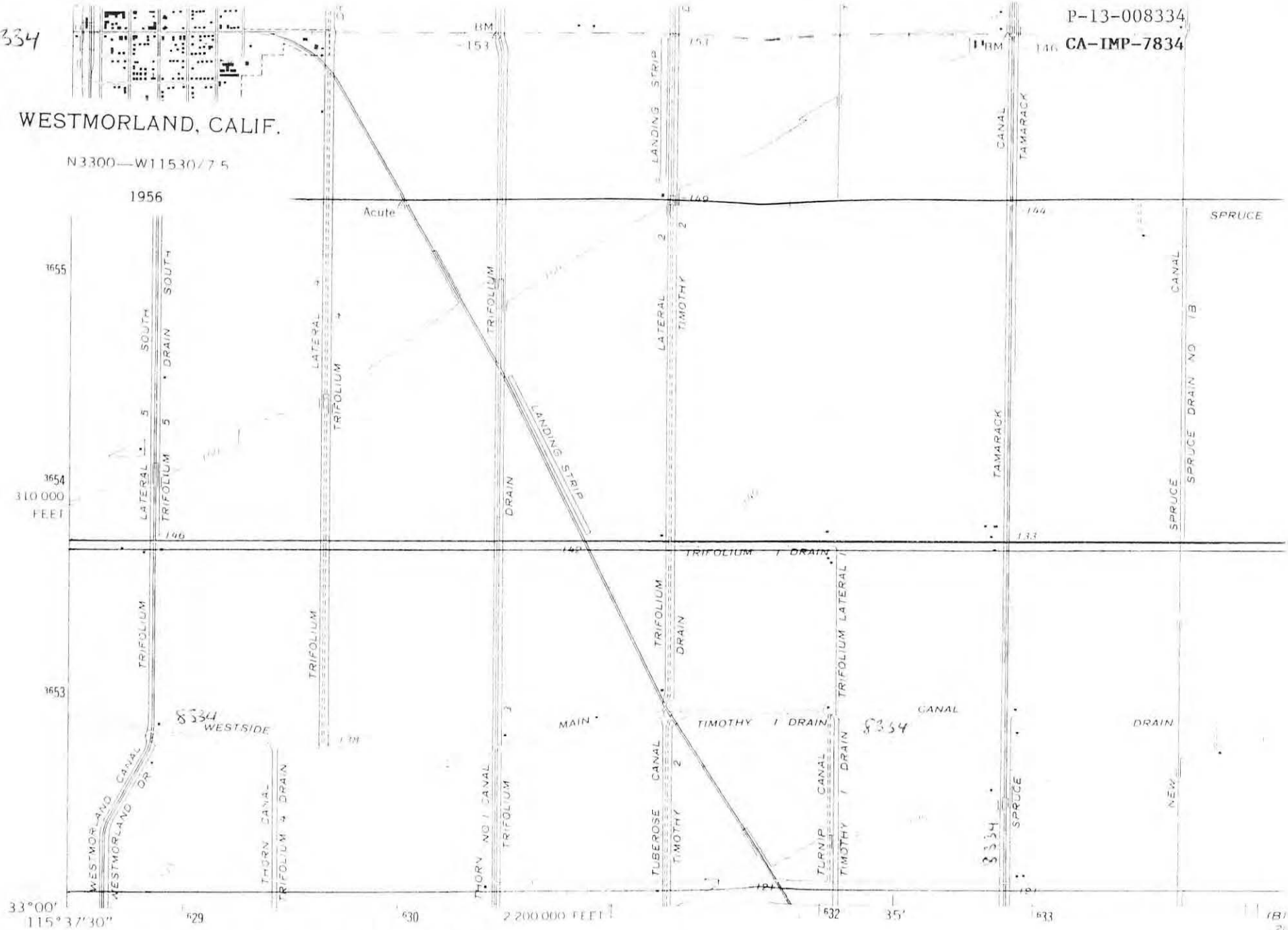
P-13-008334

P-13-008334
CA-IMP-7834

WESTMORLAND, CALIF.

N3300—W11530/7.5

1956



(BRAWLEY NW)
2849 I NW

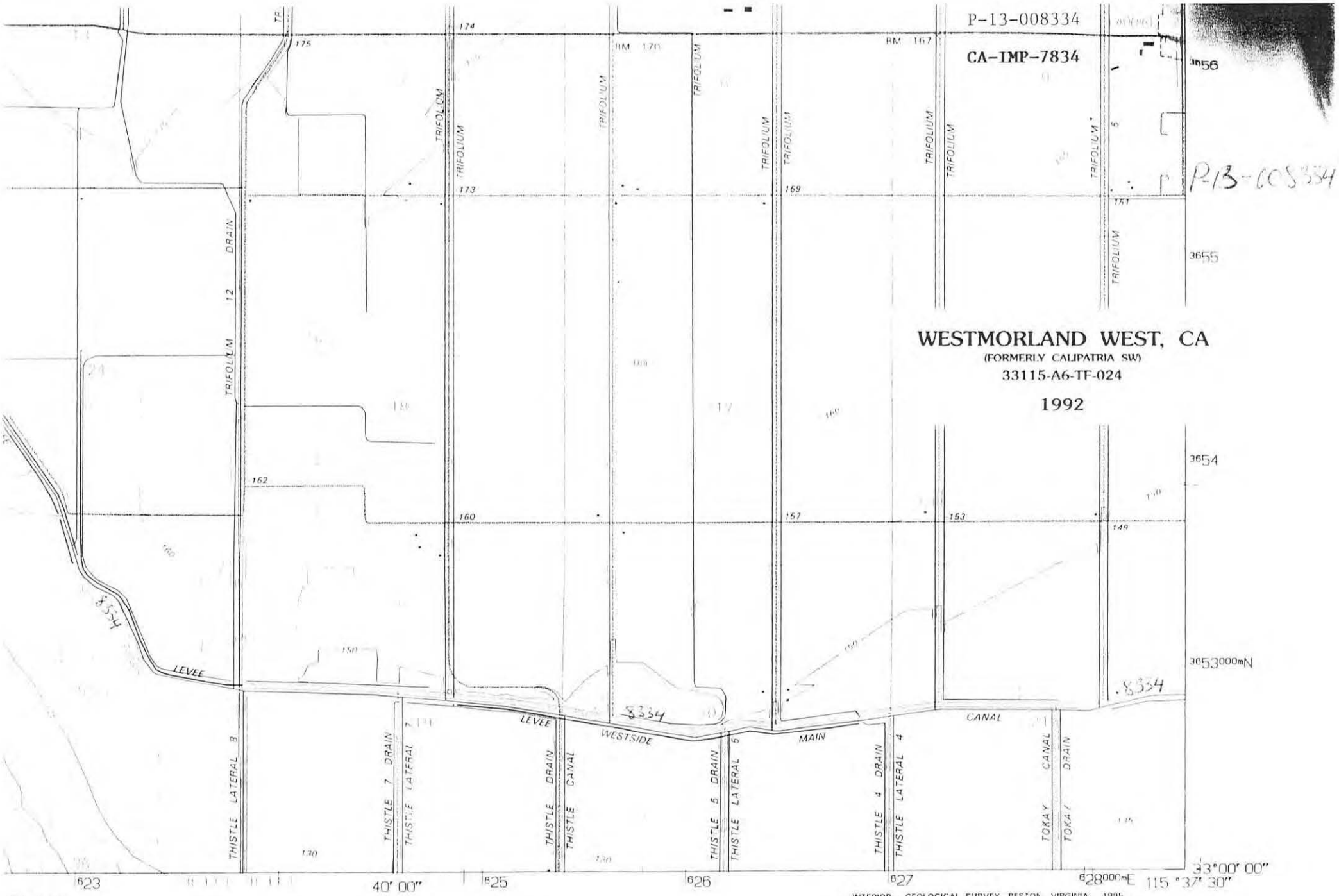
Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and State of California

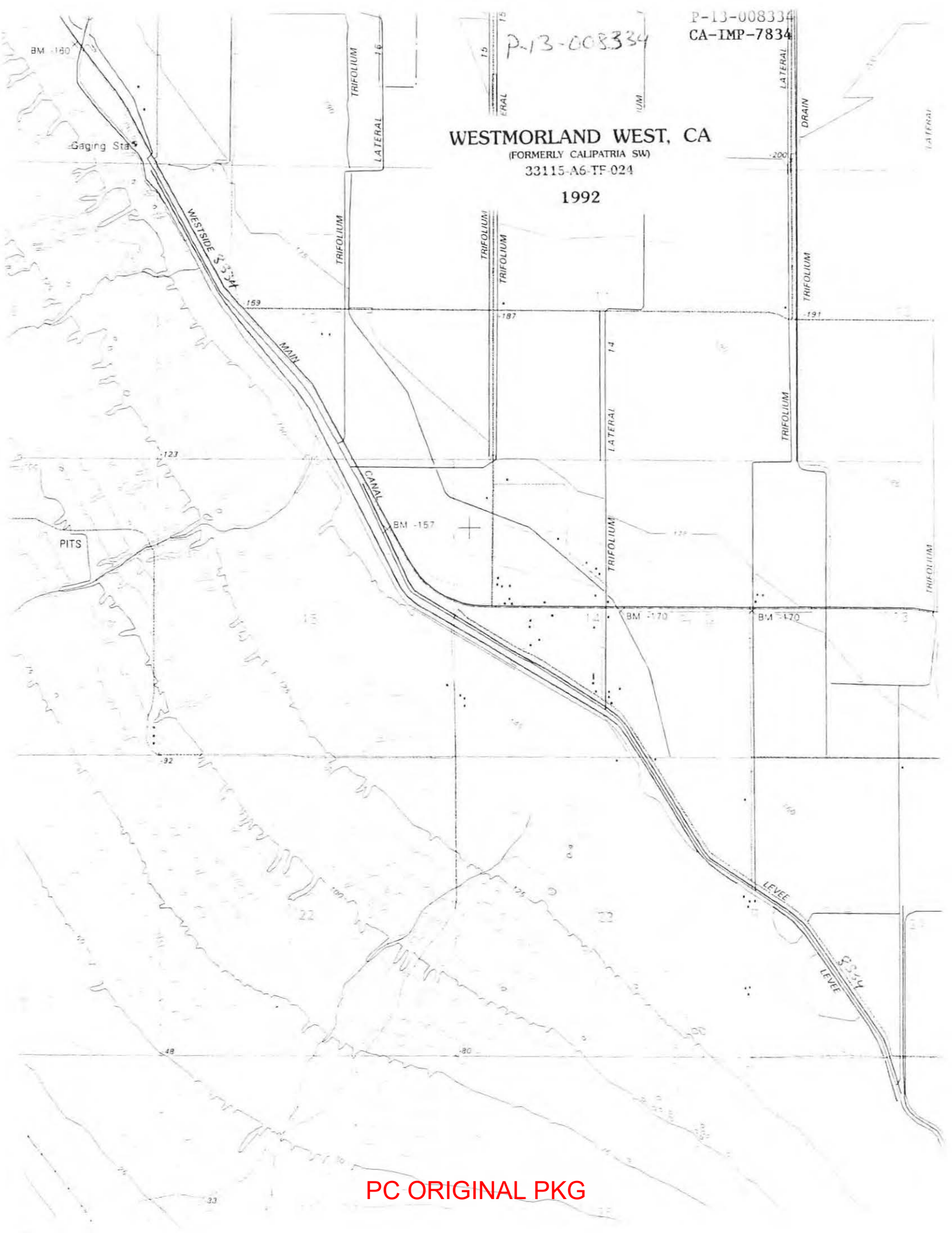
Culture and drainage compiled from aerial photographs taken 1953. Topography by planetable surveys 1956

Polyconic projection. 1927 North American datum
10,000-foot grid based on California coordinate system,

PC ORIGINAL PKG



PC ORIGINAL PKG



PC ORIGINAL PKG

P-13-008334
CA-IMP-7834

SALTON SEA

ELEVATION 228 FEET BELOW SEA LEVEL
SEPTEMBER 1992

P-13-008334

WESTMORLAND WEST, CA
(FORMERLY CALIPATRIA SW)
33115-A6-TF-024
1992

SALTON SEA

NATIONAL WILDLIFE REFUGE

LEVEE

LEVEE

ONE DRAIN

Spring

TRIFOLIUM

BM -166

EXTENSION

BM -161

BM -160

Gaging Sta

TRIFOLIUM LATERAL

DRAIN

LATERAL

DRAIN

TRIFOLIUM

PC ORIGINAL PKG

Ogilby, Cal., May 14, 1901

A. M. Chaffey, 244 Stowell Block, Los Angeles. --
Water turned through gate at 11 a.m. Everything
all right.

George Chaffey

The first delivery of water in the United States occurred in June, 1901, when delivery was made as far as Calexico through the Boundary Canal. Some 1500 acres was put under crops in the fall of that year.

Additional Mutual Water Companies

As already noted, Imperial Water Company No. 1 was organized in 1900. Later in the same year, Imperial Water Company No. 4 (20,000 acres) was organized, followed in 1901 by Imperial Water Companies No. 5 (100,000 acres) and No. 6 (20,000 acres), and in 1902 by No. 7 (18,000 acres) and No. 8 (45,000 acres). Tri-Party contracts were entered into by each, which in general, except for that of No. 6 Co., were similar to the one heretofore described for No. 1 Company. No. 7 Company bought its water rights from the C. D. Company for a lump sum cash payment of $50,000 and built its own distribution system; the C. D. Company built the distribution systems for the others.

No more water companies were organized until 1908. These are discussed at a later point.

Additional Construction

Canals

The Central Main Canal was continued on from the international boundary line through No. 1 Company to its north limits (No. 4 Heading), a few miles to the southwest of the present city of Brawley, and put into service in March 1902. From this point, water service was furnished to Water Company No. 4. A branch canal from the Central Main, with a crossing by flume of what was then the relatively narrow and shallow channel of New River, was constructed to provide service to Water Company No. 8.

The Encina Canal - now West Side Main - was constructed in Lower California from Sharp's Heading to the south, crossing New River channel in a flume, then swinging to the west and north to the international boundary line at a point about ten miles west of Calexico, for providing service to Water Co. No. 6.

Diverting from the Alamo Canal about 1-½ miles upstream from Sharp's Heading, the East Side Main Canal was constructed north to the international boundary line (Allison Heading) to serve Water Co. No. 7.

For service to Water Co. No. 5, the original plan utilized the old Alamo River channel as a canal from Sharp's Heading to Holtville, where an earthern dam was constructed in the channel to raise the water high enough to make delivery. However, the dam failed within a short time, and No. 5 Company built a main canal from Allison Heading north to its lands; this became known as the Low Line or No. 5 Main Canal.

PC ORIGINAL PKG

By January 1, 1905, there had been constructed eighty miles of main canals in the Imperial and Mexicali Valleys belonging to the C. D. Company and the Mexican Company and some seven hundred miles of distribution canals in Imperial Valley.

Structures

In addition to the Chaffey Gate and other structures already mentioned, major structures built during the first years included: head gates for the Central Main and Encina Canals and a waste gate to the Alamo River, all at Sharp's Heading, and the 134 Waste Gate on the Central Main Canal in Mexico about two miles downstream from Sharp's Heading, which discharged into a side channel of New River.

Holton Power Plant

From a point on the No. 5 Main Canal southeast of Holtville known as No. 5 Heading, W. F. Holt, developer of No. 7 Water Company, the town of Holtville, and other enterprises, built a canal to the Alamo River where he installed a small hydroelectric plant in 1903-04 with a head of about 20 feet. This was the start of the Holton Power Company and supplied the first electric service to Holtville and El Centro. Water for the plant was secured from the C. D. Company by a special contract and when available up to 150 second-feet was used for power purposes. The deepening of the Alamo River by flood waters from the river break of 1905-07 increased the available head at the plant about 25 feet, and a second hydro plant was built to utilize the increased head. The two plants had a capacity of about 1500 kilowatts.

Concession from Mexican Government

From the discussion which has been given of the Mexican Company relating to the various contracts in which it became involved, as well as its intended purpose of selling or leasing water to serve lands in Mexico in addition to those it owned, it can be seen that the Company was, in fact, a public utility; but the right to operate as such had not been granted by the Mexican Government. Moreover, as will be referred to at a later point, questions arose as to the right of the C. D. Company to appropriate water from the Colorado River under California State law, since the River was considered navigable and such right had not been recognized by the United States Government; hence it appeared desirable to the C. D. Company to secure the right, if possible, to divert water from the River in Mexico.

These were among the reasons why the C. D. Company, through its subsidiary, the Mexican Company, sought a concession from the Mexican Government to legalize all of the activities of the latter Company.

Such a concession, or contract, was obtained under date of May 17, 1904, being approved by action of the Mexican Congress and the President under date of June 7, 1904.

The concession authorized the Mexican Company to carry through its canal system in Mexico, 284 cubic meters per second (10,000 second-feet) of water to be diverted from the Colorado River in the United States by the C. D. Company and turned over to the Mexican Company at the international boundary line. It also authorized the Mexican Company to divert from the Colorado River in Mexico, 284 cubic meters per second (10,000 second-feet) of water to be carried through its canal system, provided that such diversion did not injure the

PC ORIGINAL PKG

completed in March of that year.

Complications With Work in Mexico

One of the complicating factors in connection with all work carried on in Mexico was that neither the C. D. Company nor the Southern Pacific Company, as such, could do any work in Mexico under their own names. At a later date, the U. S. Federal Government ran into a similar complication when it undertook to construct river levees in Mexico. It was therefore necessary that the work in connection with the canal system and the closing of the break be carried on in the name of La Sociedad de Yrrigation y Terrenos de la Baja California, S. A., the Mexican Company, with funds advanced by the C. D. Company or the Southern Pacific Company.

Damages from the Break

Erosion of New and Alamo Rivers

During the break, the large flow of water through the Alamo Canal caused an overflow for many miles and created a very serious situation. The larger part of the water overflowed the south bank and collected in New River channel in Lower California and thence passed down the west side of Imperial Valley to Salton Sea. At the closure of the Break, New River, which had been a rather shallow channel, had become a gorge 40 to 60 feet deep through Imperial Valley and extending for some six or eight miles into Lower California.

It was possible, through the use of the Alamo Wasteway at Sharp's Heading, to control the flow at that point during the River break, so that most of the area in the Valley east of New River received a continuous water supply. However, the large amounts of water which, to maintain control at Sharp's Heading, had to be wasted through the Alamo Wasteway to the Alamo River and thence to Salton Sea widened the River and deepened it as much as 20 to 30 feet in some places; but the resulting channel was small compared to that of New River.

It is estimated that some 13,000 acres of irrigable land, part of which was in crop, was destroyed by the erosion of the Alamo and New Rivers.

Salton Sea

Salton Sea, which had been practically dry, reached an elevation of approximately 195 feet below sea level by the time the break was closed in February, 1907. The surface area of the Sea at that time was about 500 square miles, (285,000 acres) with a length of 50 miles and a width of some 10 to 15 miles.

Flumes Over New River

In addition to the damage caused to the Alamo Canal, the water from the break destroyed the wooden flume which carried the Encina (West Side Main) Canal across New River in Mexico, and a similar flume across New River some 20 miles to the north of the international boundary line which supplied No. 8 Water Company.

Inasmuch as it was not practical to rebuild the No. 8 flume because of the greatly increased width and depth of the New River channel in that locality created by the flood, it was decided to enlarge the West Side Main Canal in Mexico and

PC ORIGINAL PKG

same vicinity, to the west into Imperial Valley, was imminent at the time. As a matter of fact, such a natural diversion did occur in 1908-09 about twenty miles downstream at a point in the River about opposite the lower (Arizona - Mexico) international boundary line. The end had come to the peaceful meandering of the River along the east side of its delta in Mexico, which had existed over the previous five hundred years. While the 1905 break was a bitter and costly experience, still the knowledge gained from it and the realization of the need for a levee system, perhaps saved Imperial Valley from a far worse disaster at a later time through the River diverting itself into the Valley.

Permanent Hanlon Heading

Original Structure

The loan of $200,000 made to the C. D. Company by the Southern Pacific Company in the early part of 1905 was primarily for the construction of permanent head works to replace the wooden Chaffey Gate and to construct the Alamo waste gate at Sharp's Heading. Work on the new head gate, known as Hanlon Heading, was started in December 1905 and completed in June 1906. The new structure was constructed on solid rock where a spur of Pilot Knob Mountain extended out near the River channel, the location of the structure being somewhat to the north and a short distance to the west of the Old Chaffey Gate. A new intake canal was excavated from the River to the new structure. Hanlon Heading had 11 gate openings each 12 feet wide and 10 feet high, the flow through them being controlled by radial gates. The designed capacity was 10,000 cubic feet per second at low-flow stages of the River, with the sill of the gate placed at a much lower elevation than that of the Chaffey Gate. There was also a "navigation pass" 10 feet 3 inches wide at the east end of the structure for the purpose of passing small power boats through the structure.

Addition to Hanlon Heading

In 1913, a "Stoney" gate was added to the west side of Hanlon Heading, occupying three of the original gate openings. This gate has a single opening of 25 feet by 14 feet, with the sill 5 feet lower than that of the main structure and was completed in May of that year. The purpose was to improve diversion conditions during low-flow periods of the River.

Repairs and Improvements to Canal System

Following the closure of the break, in addition to the rebuilding of the Encina (West Side Main) flume over New River and extension of that canal in the United States, other work was undertaken.

The banks of the Alamo Canal were repaired and strengthened and the work of straightening and confining the channel was commenced.

At a point on the Alamo River west of Holtville, a large concrete drop structure - known as Rositas Wasteway - was constructed to raise the water in the River for service to the Mesquite Lake area through the Rose Canal, for which a concrete head gate was also installed. In this way, reuse was made of the water discharged from the Holton Power Plant, as well as that which was passed through the Alamo Wasteway at Sharp's Heading in Mexico.

The Rositas Wasteway was designed for a capacity of 2,000 second-feet. The

PC ORIGINAL PKG

The appropriation was used to extend the existing levee - C. D. Levee - along the River for a distance of about twenty-five miles in Mexico, which carried it across and for several miles below the break of the old channel into Bee River, the new levee being named Ockerson Levee. The work was completed in May 1911, but floods a short time later breached the new levee at the Bee River break and at many other points. The result was an almost total loss of the work, and the River was again flowing through Bee River into the Volcano Lake area.

United States Government Withdraws

In 1912, a part of the unexpected funds remaining from the 1910 appropriation was used in repairing numerous breaks in the upstream section of the Ockerson Levee, and again the work had to be carried on in the name of the Colorado River Land Company. In 1913, the remainder of the 1910 appropriation was used in repairing a break in the C. D. Levee a few miles below the international boundary line in Mexico, to which cost $30,000 was contributed by Imperial Irrigation District.

By the start of 1915, the general situation as to flood control was chaotic. The C. D. Company and the Mexican Company were bankrupt and in the hands of Receivers with insufficient funds available, and Imperial Irrigation District was not yet in position to take over because of legal complications. In view of these conditions, a further appeal was made to the Congress for assistance, and the sum of $100,000 was appropriated in March of that year, with the provision that Imperial Irrigation District contribute a like amount, which it did. These funds were expended in raising, strengthening, and extending the Volcano Lake Levee about four miles, and in rock revetting the parts of the C. D. Levee then under attack by the River. This was the last expenditure of funds by the United States Government on flood-protection work for Imperial Valley; the people of the Valley were left to their own fate, being faced with a flood menace far more critical than had existed up to that time.

Additions and Betterments to the Canal System

Receiver's Certificates

When the Receiver for the C. D. Company took over in December 1909, he found there were no funds available with which to operate. To secure the necessary funds, he obtained an order from the Court to issue Receiver's Certificates, and to April 1918, $315,000 of such Certificates were sold at par to the Southern Pacific Company. This money, together with subsequent collections for water delivered to the mutual water companies, financed the operations of the Receiver.

Major Structures

Mention has already been made of the Stoney gate attached to Hanlon Heading, which was installed during the receivership. Other important canal structures built during this period included Cudahy Check, Laurence Heading (this was on the Alamo Canal in Mexico at the point of diversion for the new East Highline Canal), and a new head gate for the West Side Main (Encina) Canal at Sharp's Heading.

Due to a washout of the West Side Main Canal at the upstream end of the

PC ORIGINAL PKG

a field survey of an All-American Canal.

Cierro Prieto Canal

One of the first improvements undertaken by the District was the construction of the Cierro Prieto Canal diverting from Volcano Lake through a head gate constructed in the Volcano Lake Levee near its lower end at Black Butte. The canal was built to the northwest and then north, a total distance of some sixteen miles, keeping to the south of New River, to a junction with the West Side Main Canal near Wistaria Check.

There were several reasons for building this canal. By diverting water from Volcano Lake, the demand on the Alamo Canal would be reduced. Also, because much of the silt in the River was being deposited in the Volcano Lake region, the silt content of the water diverted would be materially reduced, which would result in a saving to both the District and the landowners in the cost of water service. Moreover, the entire west side of the Valley was dependent upon the flume which carried the West Side Main over New River, and any accident to the flume, such as had occurred in the past, might cause not only great inconvenience to the water users, but severe damage to their crops. The Cierro Prieto Canal would furnish another source of supply, independent of the flume, for the west side of the Valley.

The canal was completed in August 1916 at an initial cost, including the head gate, of about $300,000. Tule Check, on the Cierro Prieto Canal was constructed in the spring of 1917, and the canal enlarged to a capacity of 1,200 second-feet, at a cost of about $125,000.

The water surface of Volcano Lake varied with the amount of flow in the River, and during the periods of lowest flow it was not possible to divert to the Cierro Prieto Canal. For this reason, diversion was made from the Lake to the canal for about twenty days in August, 1916 and intermittently thereafter until September, 1921. The diversion of the River through the Pescadero Cut and out of the Volcano Lake region, made by the District in 1922, dried up the Lake, making further diversion into the canal impossible. After 1917, the canal was served primarily by the Solfatara Canal, discussed at a later point.

Board of Consulting Engineers

In view of conditions on the River and the very serious problem of maintaining an adequate water supply, the District Board of Directors, by resolution of September 26, 1916, appointed a Board of Consulting Engineers to make an investigation and recommend what should be done to cope with the critical situation. The Board consisted of G. G. Anderson and C. E. Grunsky, both of whom were well known for their ability and long experience in connection with Colorado River irrigation matters.

Report No. 1

The Consulting Board issued its Report No. 1 under date of October 25, 1916. This was of a preliminary nature and contained eight recommendations to be carried out immediately. These included a new head gate and intake canal at Andrade, with the use of large suction dredgers for handling heavy silt in the intake canal; improvements to the Alamo canal; and an upstream extension of the Cierro Prieto Canal to a connection with the Alamo Canal.

PC ORIGINAL PKG

ed from a point about two miles below its Volcano Lake heading, to the north a distance of sixteen miles to the Alamo Canal at Cudahy Check, the extension being known as the Solfatara Canal. As has been pointed out, diversions to the Cierro Prieto Canal from Volcano Lake could be made only during the higher stages of the flow of the River. So the first purpose of the new canal was to assure a constant supply to the Cierro Prieto, and thus to the west side of Imperial Valley. The upper end of the new canal was located adjacent to and on the westerly side of the Volcano Lake Levee. Excavation from this section was used to raise and strengthen the Volcano Lake Levee. The lower portion of the canal veered away from the Volcano Lake Levee and crossed extensive alkali flats. The area between the canal and the levee was silted in, which not only provided good material for raising the levee, but also gave it backing and increased its stability.

Cudahy Check had been constructed in 1914 with funds provided by the Imperial Development Company, which owned a large tract of land in the vicinity, the check being used for diversion of water for the development of that tract. When the Solfatara Canal was constructed, its heading was located on the Alamo Canal immediately upstream from Cudahy Check, and the District reimbursed the Imperial Development Company in the sum of $43,000 on the cost of the check.

The canal was completed in 1917 at a cost of $171,000.

4. Improvements to the Alamo Canal

Considerable work was done on the Alamo Canal, including the cutting off of bends to improve alignment, widening of certain sections to increase capacity, and channelizing of a number of sections to prevent excessive deposition of heavy silt. On this work, a total of $625,000 was expended.

5. Improvements to Levee System

In accordance with the Consulting Board's recommendation, $500,000 was expended on the protective levee system, principally in extending, raising and revetting the Saiz and Volcano Lake Levees. Conditions which required this work will be discussed at a later point, under the heading of "Pescadero Cut".

6. Other Items of Construction

Among other major items constructed in accordance with the recommendations of the Consulting Board was the replacement of the Alamo Waste Gate at Sharp's Heading. This was a large wooden structure and was the main control not only for the several canals diverting from the Alamo Canal at Sharp's Heading, but also for the regulation of the entire Alamo Canal. It diverted surplus water to the Alamo River and was used in sluicing the lower end of the Alamo Canal. It was originally constructed in 1903, and although the Consulting Board had recommended that it be replaced with a concrete structure, this was not done, the replacement being a similar type of wooden structure costing $86,500.

Also, a concrete wasteway structure was installed on the east side of the West Side Main Canal at Wistaria Heading in Mexico, discharging into a channel leading into New River. The cost of the structure was $45,000.

In addition, there were a number of miscellaneous structures built, such as canal headings, small sluiceways and wasteways, both in Mexico and in the Imperial Valley, which completed the expenditure of funds from the second bond issue.

PC ORIGINAL PKG

Construction of Deep Drains

The major portion of the work was carried on with the $2,500,000 made available from the fourth bond issue, and by 1929, when these funds were exhausted, there had been completed a total of 190 miles of deep drain outlets. In addition, General Fund monies had been used in the construction of 44 miles of such drains, making the total 234 miles at the end of 1929.

Soils of Imperial Valley

These main drains were but a start toward solving the drainage problem of Imperial Valley. While such a system of deep drains had to be provided in any event, yet it was found that in most instances their effect did not extend to a very great distance laterally, for reasons which will be explained.

The soils of the delta portion of Imperial Valley - the area then developed are made up of alluvial deposits of fine textured clays, silts, and sands laid down by the Colorado River, the thickness and type of a stratum at any particular location having been determined by the course of the River and the type of silt it was carrying when the deposit occurred. The result is a very greatly stratified soil, made up of lenses or pockets of varying size and type of material, and this condition tends to retard natural drainage. There are no gravel and sand water-bearing strata and hence no "general" underground water table such as is found under many western irrigation projects. In most parts of the Valley, the water table is perched on underlying relatively impervious strata, so that drainage by deep-well pumping, successfully used in many projects, is ruled out.

These conditions made the problem of adequate drainage of the lands in the delta portion of Imperial Valley one of the most difficult of solution of any to be found in the West. Drainage methods which have been successful in areas of homogenous soils are not adapted to the stratified, alluvial and lacustrine soils of Imperial Valley.

Expansion of Drainage System

It became apparent that the answer to the problem was a drainage system that would meet the varying soil conditions on the individual farms. To this end, the District began an expansion of its drainage system, as rapidly as funds would permit, to reach each 160 acres of land throughout the Valley. Such would then provide an outlet for whatever additional drainage facilities as might be required on the individual farm to give it adequate drainage.

The program required the development of a lateral drain system by the deepening of existing surface drains to a depth of 6 or 8 feet and the construction of additional deep drains to serve as outlets. Also as a part of the program, the District adopted a policy of cooperating with the individual landowner in the making of a detailed survey and examination of his land, from which facilities to provide adequate drainage could be designed, and, if the landowner proceeded with the installation, furnishing all the engineering work required, all without expense to the landowner, but the latter was required to pay all other costs of the installation. As further assistance in getting the work underway, the District purchased two tile-laying machines, the use of which it furnished to the landowner at cost.

PC ORIGINAL PKG

1929, which provided that the Imperial District would construct all of the works, with the Niland District paying for the excavation and Imperial standing the cost of the necessary structures. Work performed by Imperial in 1929 under this contract included the extension of the East Highline Canal for 2½ miles and the construction of five laterals extending westerly to Salton Sea, totalling 32 miles in length, together with parallel surface drains from the Southern Pacific Railroad to the Sea. In subsequent years, Imperial continued construction until the proposed work was completed.

Miscellaneous Canal System Improvements

The Thistle Canal on the west side of the Valley west of Brawley was enlarged and its laterals extended to make possible the development of several thousand acres of new land. Also, the Trifolium (West Side Main) Canal was extended for several miles to the western boundary of the District, with laterals to the north to serve a considerable area lying south of Salton Sea.

In addition to funds provided by bond issues for work on realigning and controlling the Alamo Canal in Mexico, the District expended a considerable amount from General Funds for this purpose.

Commencing about six miles downstream from Cudahy Check, a section of the Alamo Canal some three or four miles in length, known as Alamo Mocho, gave particular trouble. Bed silt depositing in this section caused a continuous rise of the bottom of the Canal and hence of the water surface, requiring raising of the canal banks. This rise in water surface averaged between one-half and one foot per year.

It was also noted that, year by year, the bed silt was gradually moving farther into the main canals and laterals in the Imperial Valley, necessitating more dredging and, hence, increasing the cost of maintenance to the District. Sluicing of the canals into the Alamo and New Rivers was of benefit in removing bed silt, but still large amounts of this type and most of the suspended silt were carried through to the farms, causing added expense to the water users too.

Silt Problem

As an illustration of the seriousness of the silt problem to the Imperial Valley, conditions in the year 1923 are cited.

From tests made during that year, it was determined that about 25,000 acre-feet of silt passed through Rockwood Heading into the Alamo Canal; this equals 40,000,000 cubic yards but did not include all of the bedload or sand which was carried along the bottom of the canal and out of reach of the silt-sampling apparatus. Of this total quantity of silt, it was estimated, in round figures that 1,000,000 cubic yards was removed from the intake canal by suction dredging; 3,000,000 cubic yards was excavated in cleaning, by various methods, the remainder of the canal system; 10,500 cubic yards were disposed of by sluicing the canals and laterals; and deliveries of water to lands in Mexico carried 5,500,000 cubic yards onto those lands. The total of the foregoing amounts is 20,000,00 cubic yards, or one-half of the total of 40,000,000 cubic yards. This means that the other half, or at least 20,000,000 cubic yards of silt, was carried onto the irrigated lands in Imperial Valley.

PC ORIGINAL PKG

Other Events to 1940

Improved Situation

With the Plan of Composition becoming effective, the District's financial position very greatly improved. However, it had been a most difficult decade through which the District and its people had had to operate; but on the bright side, several events had taken place which offered much encouragement.

During the period prior to storage in Lake Mead in 1935, there had been no large river floods; hence expenditures required for flood protection were at a minimum. The silt content of the water, which had been excessive for several years prior to 1931, greatly increasing the cost of canal maintenance, had returned to normal, which assisted in carrying out the retrenchment program.

As had been anticipated, this very severe retrenchment program in the early thirties resulted in a deterioration of the canal and drainage systems, but toward the latter part of the period it was possible to catch up on a considerable part of the delayed work. Also, with the monies made available to the Drainage Fund under the Plan of Composition, drainage construction was going forward at a much increased pace. Moreover, after 1932 the District issued no more registered warrants and had maintained its cash position for current expenditures.

Commencing on February 1, 1935, storage of water in Lake Mead behind Hoover Dam had begun, which removed the major flood danger and assured an ample water supply for the Valley. Construction of the All-American Canal had started in 1934, the head works had been dedicated in 1938, and service to the Valley was to be commenced in a short time. The Canal not only would eliminate the international difficulties and diversion problems which had previously existed, but, together with Hoover Dam, would in time largely eliminate the silt problem. In May, 1936, the District's power system had gone into operation and was rapidly being expanded to cover the entire Valley. Revenue from power sales was increasing rapidly, and an additional source of power would soon be available from plants then under construction by the District on the All-American Canal. Lastly, to all of the foregoing should be added the effect from the rapidly improving market for agricultural products, both as to prices and demand, which had developed in the latter part of the period.

1939 Storm

But mention should be made of two serious events which the District had to meet, one of which occurred in 1939 and the other in 1940.

In September, 1939, a storm resulting from a hurricane off the west coast of Mexico swept up through the trough of the Colorado River Valley, and during one week in which rain fell in Imperial Valley almost continuously, there was nearly 7 inches of precipitation - not only the maximum amount for any one storm but more than the total amount for any one year, in the history of the Valley.

Great damage was done to both the canal and drainage systems. The West Side Main Canal and the north end of the East Highline Canal were broken in many places and canal banks were seriously damaged over a length of many miles.

PC ORIGINAL PKG

A large number of lateral headings and drop and delivery structures were destroyed, as well as a number of miles of lateral canal banks. Several major drainage structures were washed out, and other serious damage to the drainage system occurred at many points.

The cost of repairing the damage to the canal and drainage systems amounted to about $110,000. A part of this cost was met with funds from the newly created Emergency Fund provided for by the 1939 Plan of Composition and the balance from the General Fund.

1940 Earthquake

The second disastrous event was the earthquake of May 18, 1940 - the most severe since the development of the Valley commenced. It was caused by a movement of the San Jacinto fault, which passes through the Valley, from the northwest to the southeast, a few miles to the west of Brawley and several miles to the east of El Centro and Calexico. The epicenter was located approximately on the international boundary line, and it was possible to trace the fault for a distance of some forty to fifty miles, commencing in Mexico near Volcano Lake and extending through Lower California and on through Imperial Valley to north of Brawley. The maximum slippage was over 14 feet near the international boundary line.

The principal damage occurred to the canal system in Mexico. For several miles below Tortuoso Drop the Solfatara Canal was completely destroyed. The large flume carrying the West Side Main over New River was completely wrecked and large longitudinal cracks were opened up in many miles of the Alamo and other canals.

In Imperial Valley, the East Highline Canal was cracked in many places, and the Ash Canal and its laterals were severely damaged. Along the fault itself, the shift caused an offset in the canals it crossed, and in several cases structures were destroyed.

The earthquake also caused very extensive damage in most of the cities and towns of the Valley, and several people lost their lives. The remarkable thing is that great numbers were not killed or severely injured.

The entire water supply to the District's canal system had to be cut off for several days until repairs were completed and service re-established to most of the canal system. With the loss of the Solfatara Canal and the New River Flume in Lower California, the entire water supply for the west side of Imperial Valley was cut off. However, the All-American Canal had been completed from the Central Main Canal east of Calexico to the West Side Main Canal and, with water from the Central Main Canal, was put into service to supply the west side of the Valley. Had this not been available, there would have been considerable loss of crops in that area.

The Solfatara Canal was rebuilt and, together with the partial use of the All-American Canal, supplied the west side of the Valley until the balance of the All-American Canal was completed and put into service. As it was known that water would soon be available through the All-American Canal, the New River Flume in Lower California was not rebuilt.

PC ORIGINAL PKG

Map Reference Number: 15

P1. Other Identifier: N/A
e. Other Locational Data: UTM: Zone 11S; North Datum: 614879.84 mE / 3627108.30 mN; South Datum: 617030.81 mE / 3623711.71 mN

***P3a. Description:** The Fox Glove Canal was constructed in ca. 1912 and modified between 1954 and 1981. It was built parallel to the Westside Main Canal, most likely in the 1940s, and the spillway along the Westside Main Canal was built in 1967. In 1982, the diversion from the Westside Main Canal into the Fox Glove was constructed in concrete (Exhibit 16). The canal is approximately 20 feet wide, made of concrete slab sidings and metal gate structures, and runs for 1.1 miles parallel to the Westside Main Canal and the Dixie Drain 2 on the west portion of the API. The Fox Glove Canal connects to the Westside Main Canal by a spillway gate located southwest of the intersection of Mandrapa Road and Hyde Road, constructed in 1967. At 0.5 miles to the north, Fox Glove Canal connects to Dixie Lateral 1, which bisects multiple farmland segments in the API. The canal runs north to West Vaughn Road and continues northwest, parallel to the Westside Main Canal north of Interstate 8. The canal is approximately 9 miles long (NETR 2023a) (Photograph 1).

***P3b. Resource Attributes:** HP20: Aqueduct/Canal

***P8. Recorded by:** Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

***P11. Report Citation:** Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

***B10. Significance:**

The property has been previously evaluated six times. The first evaluation was conducted by USBR and OHP in 2006. USBR and OHP determined that a portion of Fox Glove Canal is associated with the All-American Canal, which appeared to be eligible under Criteria A/1 and C/3. USBR and OHP recommended that the canal be found ineligible under Criteria B/2 and D/4. The IID report from 2001 included the entire IID system with all associated canals and was used as reference in this evaluation by USBR and for further evaluations (Schaefer and O'Neil 2001), In 2008, the Southeastern Information Center confirmed that SHPO considers eligible all components of the All-American Canal system. SWCA Environmental Consultants determined the Fox Glove Canal eligible for the NRHP under Criterion A/1 for its significance in association with the development of the Imperial Valley and under Criterion C/3 as part of "one of the great engineering marvels of the American West" as a contributor to the All-American Canal system, which is a linear historic district (Steely 2008). In 2009, URS considered the portion of the Fox Glove Canal crossing the Evan Hewes Highway as not eligible for listing on the NRHP or CRHR nor considered a historical resource for CEQA purposes (URS 2009e). In 2011, portions of the Fox Glove Canal were evaluated by KP Environmental, ASM, and AECOM. Both KP Environmental and ASM considered portions of the Fox Glove Canal not eligible, while AECOM considered the portion of the canal surveyed as largely unchanged and retained integrity; therefore, it was recommended eligible for the NRHP and CRHR (Davis 2011b; AECOM 2011; Thomson 2011b).

On April 11, 2023, Dudek revisited this portion of the Fox Glove Canal and did not observe any noticeable alterations since the last recordation in 2011. Dudek concurs with the previous findings of ASM and KP Environmental that the Fox Glove Canal does not meet any of the criteria for listing in the NRHP or CRHR. The canal has been altered throughout its development and, most recently, in the 1980s and exhibits a loss of integrity with its restructuring and widening throughout its existence. Although it fits into the Imperial Valley's agricultural development theme, the canal is an ancillary extension of a large water conveyance system designed to irrigate individual, private agrarian ventures. The Fox Glove Canal's mere association with the West Side Main Canal or All-American Canal does not elevate the aqueduct to a level of significance worthy of recordation. The Fox Glove Canal does not represent any significant historical trends associated with any important persons, architecturally significant, or

PC ORIGINAL PKG

likely to yield additional information about pre-history or history. Dudek also finds—as a result of the current study, and in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and the criteria outlined in Section 5024.1 of the PRC—that the subject property is not a historical resource for the purposes of CEQA. Dudek has assigned the subject property a 6Z California Historical Resource status code.

***B14. Evaluator:** Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

***Date of Evaluation:** August 15, 2023.

Photograph(s):

Photograph 1. View of the Fox Glove Canal on the corner of Hyde Road and W Vaughn Road, facing east.



Source: Dudek IMG_3640

References

Davis, S. 2011. "Fox Glove Canal DPR form update." ASM Affiliates.

Krintz, J. 2011. "DPR Form set for the Foxglove Canal." ASM Affiliates, Inc.

NETR (National Environmental Title Agency). 2023. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 27, 2023. https://www.historicaerials.com/viewer.

URS Corporation. 2009. "DPR Form set for the Westside Main Canal."

Steely, J.W. 2008. "DPR form set from Fox Glove Canal." SWCA Environmental Consultants.

Thomson, H. 2011. "Fox Glove Canal (Portions)." State of California Department of Parks and Recreation.

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial CA-IMP-08821
NRHP Status Code: 6Z

Page 1 of 2 ***Resource Name or # (Assigned by recorder)** Foxglove Canal
Recorded by: Shannon Davis, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

P1. Other Identifier:
***P2. Location:** ☒ Not for Publication ☐ Unrestricted
***a. County:** Imperial
***b. USGS 7.5' Quad:** Plaster City, Yuha Basin, Mount Signal **Date:** 1957; **T** 16 S; **R** 11 E; **of Sec.** Plaster City 18, 19, 20, 29, 107; Yuha Basin 29; Mount Signal 29 S.B. **B.M**
c. Address: N/A **City:** Imperial **Zip:** N/A
d. UTM: Zone 11S; North end: 614879.84 **mE** / 3627108.30 **mN**; South end: 617030.81 **mE** / 3623711.71 **mN**

***P3a. Description:** The Foxglove Canal is an irrigation canal constructed ca. 1912. It is located east of and directly parallel to the Westside Main Canal. The canal begins at a point just west of Hyde Road, and flows north to the canals terminus one mile north of the intersection of Westmoreland and W. Hetzel Rd. The concrete-lined irrigation canal is approximately 12 ft. wide and about 6 ft. deep. Modifications were made to the canal in the 1960s. The entire canal is approximately 9 mi. long.

***P3b. Resource Attributes:** HP20. Canal/Aqueduct

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1912
Thurston, Arthur G.
1912a Imperial Valley Tract Map. El Centro.
1914 Imperial Valley Tract Map. El Centro.

***P8. Recorded By:**
Shannon Davis, Architectural Historian
ASM Affiliates, Inc.
260 S. Los Robles Avenue Suite 106
Pasadena, CA 91107

***P9. Date Recorded:** November 2011
***P10. Survey Type:** Intensive
P11. Report Citation:
Inventory, Evaluation, and Analysis of Impacts on Historic Resources On Private Lands within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California, ASM Affiliates, November 2011.

***B10. Significance: Theme:** Irrigation Water Conveyance Systems **Area:** Imperial Valley

Period of Significance: N/A **Property Type:** Irrigation System **Applicable Criteria:** N/A
The Foxglove Canal was an early irrigation canal in the Imperial Valley, constructed ca. 1912. According to a previous evaluation by URS Corporation, the Foxglove Canal was recommended not eligible for the NRHP or the CRHR for the loss of integrity from regular dredging and widening of the canals and drains over time to alleviate problems of silt and build-up. Although the canal is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, this particular canal does not convey that theme as well as other similar resources such as the Westside Main Canal and the All-American canals—in part due to its loss of integrity. Therefore the Foxglove Canal is recommended not eligible for the National Register of Historic Places nor the California Register of Historic Resources.

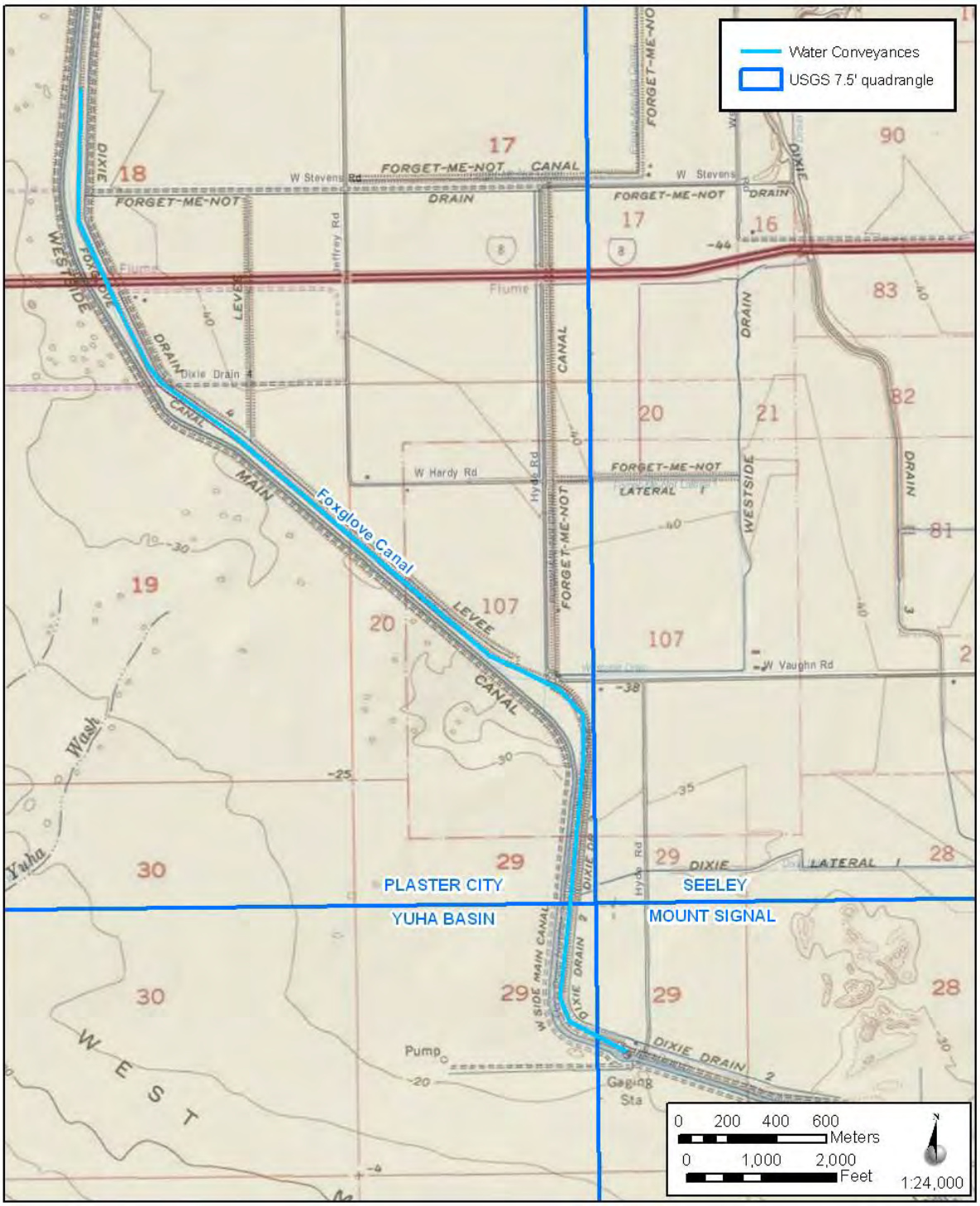
PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial CA-IMP-08821
NRHP Status Code: 6Z

 ***Resource Name or # (Assigned by recorder)** Foxglove Canal
Recorded by: Shannon Davis, Architectural Historian **Date:** November 2011
☐ Continuation ☒ Update

Location Map of the Foxglove Canal



*Required Information
PC ORIGINAL PKG

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-13-009880 Update
HRI # _____
Trinomial _____
NRHP Status Code _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

*Resource Name or # Fox Glove Canal

P1. Other Identifier: Fox Glove Canal
*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County Imperial County
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Plaster City Quad Date 1979 T R; ¼ of Sec 7; SB B.M.
c. Address City Zip
d. UTM: Zone 11S; 613474.85 mE/ 3628580.65 mN (Northern terminus within the APE)
Zone 11S; 614643.03 mE/ 3623525.73 mN (Southern terminus within the APE)
e. Other Locational Data:

*P3a. Description:
This site form updates a 4.75 mile segment of the Fox Glove Canal, which is part of the larger historic Westside Main Canal. The Fox Glove Canal is an irrigation canal that runs though agricultural land in the Imperial Valley section of Imperial County. The northern terminus of the recorded segment enters the Area of Potential Effects (APE) .25 miles east of Centinela State Prison in Imperial, CA (UTMs Zone 11S; 613474.85 mE/ 3628580.65 mN). After the canal passes under Interstate 8 the route orients to southeast. The remainder of the route curves and the southern terminus of the recorded segment ends 100 feet west of the intersection at Mandrapa and Hyde Road in Imperial, CA (UTMs Zone 11S; 614643.03 mE/ 3623525.73 mN). The canal is approximately 12 feet wide. It is a concrete-lined water channel that is fed upstream (south) by the larger Westside Main Canal. Dirt access roads run along the levees on both sides of the canal for maintenance and access.

*P3b. Resource Attributes: HP20. Canal/aqueduct
*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo:
Camera facing south; 10/18/2009; IMG_0740

*P6. Date Constructed/Age and Sources:
☒ Historic ☐ Prehistoric ☐ Both
c. 1930/Cultural Resource Survey, SWCA 2007

*P7. Owner and Address:
Imperial Irrigation District
333E. Barioni Blvd
Imperial, CA 92251

*P8. Recorded by:
AECOM
1420 Kettner Blvd., Suite 500
San Diego, CA 92101

*P9. Date Recorded: 07/20/2011

*P10. Survey Type: (Describe) Intensive

*P11. Report Citation: *BUILT ENVIRONMENT SURVEY REPORT ADDENDUM TO THE CULTURAL RESOURCES INVESITGATIONS CLASS III REPORT FOR THE IID DIXIELAND 230 kV TRANSMISSION LINE AND SUBSTATION EXPANSION PROJECT, IMPERIAL COUNTIES, CALIFORNIA*, AECOM 2012 (Cite survey report and other sources, or enter "none.")
*Attachments: NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☒ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☐ Other (list) _____

PC ORIGINAL PKG

LINEAR FEATURE RECORD

Resource Name or #: (Assigned by recorder) Fox Glove Canal

L1. Historic and/or Common Name: Fox Glove Canal

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**

b. Location of point or segment: Seeley traveling on Drew Road for one mile. Turn left on Drew Road and go west for 4 miles. The northern terminus of the recorded segment begins .25 miles east of Centila State Prison at UTMs Zone 11S; 613474.85_mE/ 3628580.65_mN.

L3. Description: This site form updates a 4.75 mile segment of the Fox Glove Canal, which is part of the larger historic Westside Main Canal. The Fox Glove Canal is an irrigation canal that runs though agricultural land in the Imperial Valley section of Imperial County. The northern terminus of the recorded segment enters the Area of Potential Effects (APE) .25 miles east of Centinela State Prison in Imperial, CA (UTMs Zone 11S; 613474.85_mE/ 3628580.65_mN). After the canal passes under Interstate 8 the route orients to southeast. The remainder of the route curves and the southern terminus of the recorded segment ends 100 feet west of the intersection at Mandrapa and Hyde Road in Imperial, CA (UTMs Zone 11S; 614643.03_mE/ 3623525.73_mN). The canal is approximately 12 feet wide. It is a concrete-lined water channel that is fed upstream (south) by the larger Westside Main Canal. Dirt access roads run along the levees on both sides of the canal for maintenance and access.

L4e. Sketch of Cross-Section (include scale) Facing:

L4. Dimensions:

a.Top Width 12 feet
b. Bottom Width 4 feet
c. Height or Depth 6 feet
d. Length of Segment 4.75 miles

L5. Associated Resources:
Westside Main Canal parallels the Fox Glove Canal to the west.

L6. Setting:
Located in between Plaster City and Seeley, the Fox Glove Canal is surrounded by agricultural lands within a desert setting. The berm of the canal is level with a dirt road running parallel to the canal. The sediment is sandy with small rocks.

L7. Integrity Considerations:
The canal appears to be in excellent working condition, though the edges of the drain are overgrown with invasive weeds.



L8b. Description of Photo, Map, or Drawing:
Camera facing south; 10/18/2009; IMG_0744

L9. Remarks:

L10. Form Prepared by:
AECOM
1420 Kettner Blvd., Suite 500
San Diego, CA 92101

L11. Date:

07/20/2011

PC ORIGINAL PKG

This site form updates the 4.75 mile recorded segment of the Fox Glove Canal. In 2001, the Bureau of Reclamation and California State Historic Preservation Officer found the All-American Canal eligible for the NRHP. In 2007, Burkard et.al recorded the Fox Glove Canal as part the Westside Main Canal and found that the Fox Glove Canal by extension eligible for the NRHP and California Register of Historical Resources (CRHR) under Criterion A and 1 for its significance in association with the development of the Imperial Valley.

As a part of the Built Environment Survey Report for the IID Dixieland Survey Report, the resource was revisited in September 2011. The Fox Glove Canal is unaltered and has not acquired additional significance since the 2007survey. The condition of its integrity is unchanged and therefore, it is recommended eligible for the NRHP and CRHR.

PC ORIGINAL PKG

CA-IMP-8821 was first recorded by SWCA archaeologists in April 2007. The resource consists of the Foxglove Canal and the 300′ section identified was described as follows:

> *"The Foxglove Canal is a concrete-lined water channel that is fed upstream (south) by the larger Westmain Canal, which flows from the southwest to the northeast of the current power line survey corridor. Dimensions of the Foxglove Canal and parallel Dixie Drain are similar. In 2001 the Bureau of Reclamation and California State Historic Preservation Officer concurred that the All American Canal is eligible for the NHRP; by extension the Foxglove Canal as part of the Westside Main Canal system is recommended eligible for the NHRP and California Register of Historic Resources (CRHR) under criterion A/1 for its significance in association with development of the Imperial Valley".*

The resource was the subject of another investigation conducted by URS in May 2009. The current survey conducted by KPE encountered small segments of the Foxglove Canal. This includes: section located south of Interstate 8 that is situated between Dixie Drain 4 and the Westside Main Canal and a check structure and small length of canal located at the western end of Vaughn Road. This is also the heading for the Forget-me-not Canal which is fed by the Foxglove.



IMG_2804; view to SSE
Foxglove Canal check structure with Forget-me-not gate to left.

PC ORIGINAL PKG

Although SWCA found the canal to be eligible, URS Corporation entered a NRHP status code of 6Z. This code means that the resource had been found ineligible for listing in the National Register through an evaluation process other than a determination by the Keeper of the National Register or through a consensus determination of a federal agency and the State Historic Preservation Officer.

This resource has not been surveyed in its entirety; however, Shannon Davis (ASM Affiliates, Inc.) did evaluate the segments within the Campo Verde Solar Project APE and recommended the Foxglove Canal not eligible for the NRHP and CRHR. Although the Foxglove Canal is associated with the early irrigation system of the Imperial Valley, and the important local theme of agricultural development, it does not convey that theme as well as other similar resources such as the Westside Main and the All-American canals, in part due to their loss of integrity (Davis et al. 2011; Mitchell 2011).

A sketch and location map has been generated reflecting the portions of the resource within the current project area.

Davis, Shannon, Jennifer Krintz, Sarah Stringer-Bowsher, and Sinéad Ní Ghabhláin. 2011. Impacts on Historic Resources on Private Lands, Campo Verde Solar Project, Imperial County, California.

Mitchell, Patricia T. 2011. Inventory Report of the Cultural Resources Recorded within the Campo Verde Solar Project, Imperial County, California.

PC ORIGINAL PKG

State of California — The Resources Agency **Primary #** P-13-009880 UPDATE
DEPARTMENT OF PARKS AND RECREATION **HRI#**
PHOTOGRAPH RECORD Trinomial CA-IMP-8821

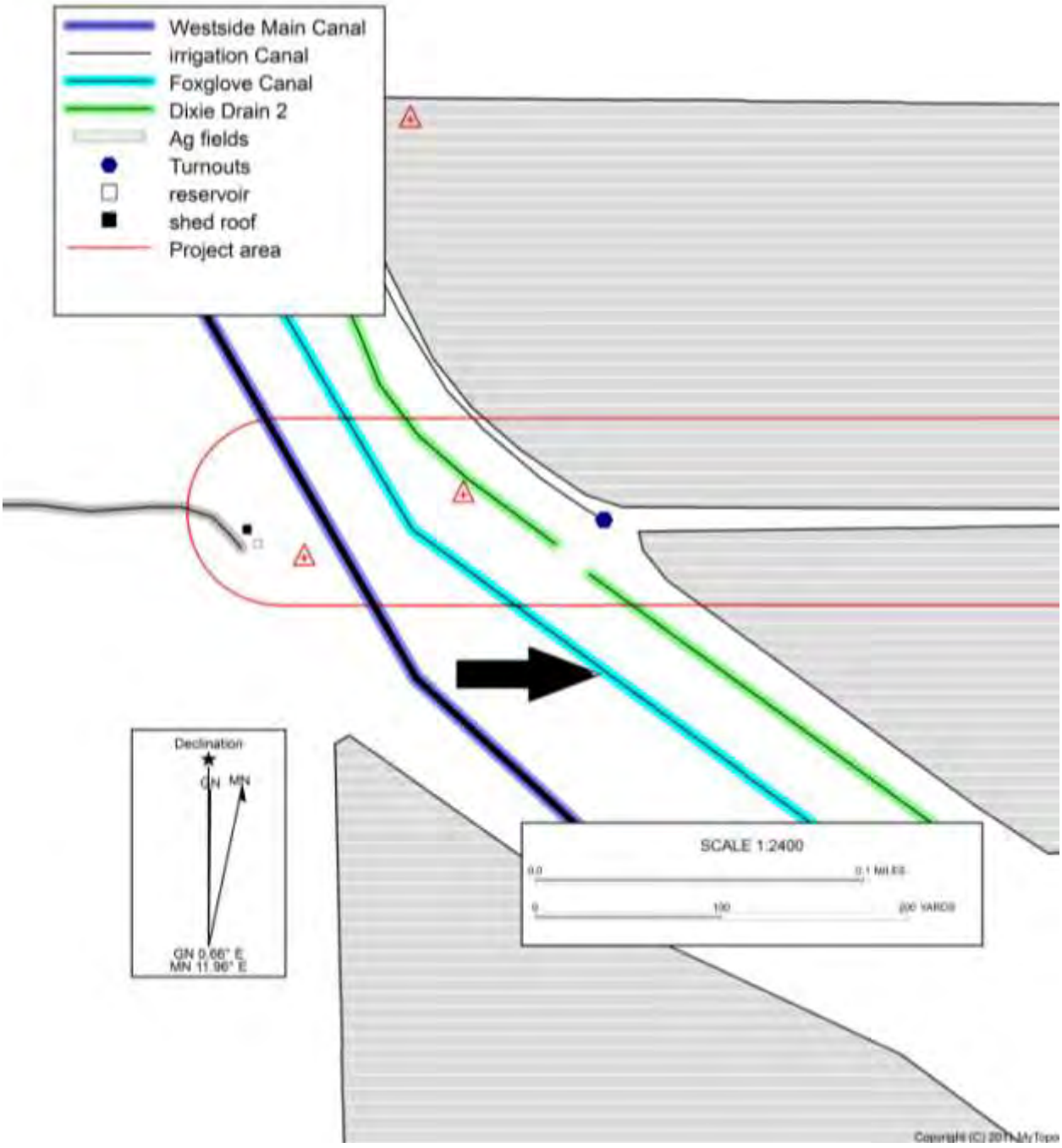
Page 3 **of** 6 **Resource Name or #:** Foxglove Canal **Year** 2011

Camera Format: Digital – Canon Powershot SD1300 IS Digital ELPH 12.1 megapixel
Negatives Kept at: kp environmental, LLC. 2387 Montgomery Ave, Cardiff By The Sea, CA 92007

Mo.	Day	Frame	Subject/Description	View Toward
11	**03**	**2804**	**Foxglove Canal and Levee**	**SE**
11	**03**	**2805**	**Purple glass**	**D**

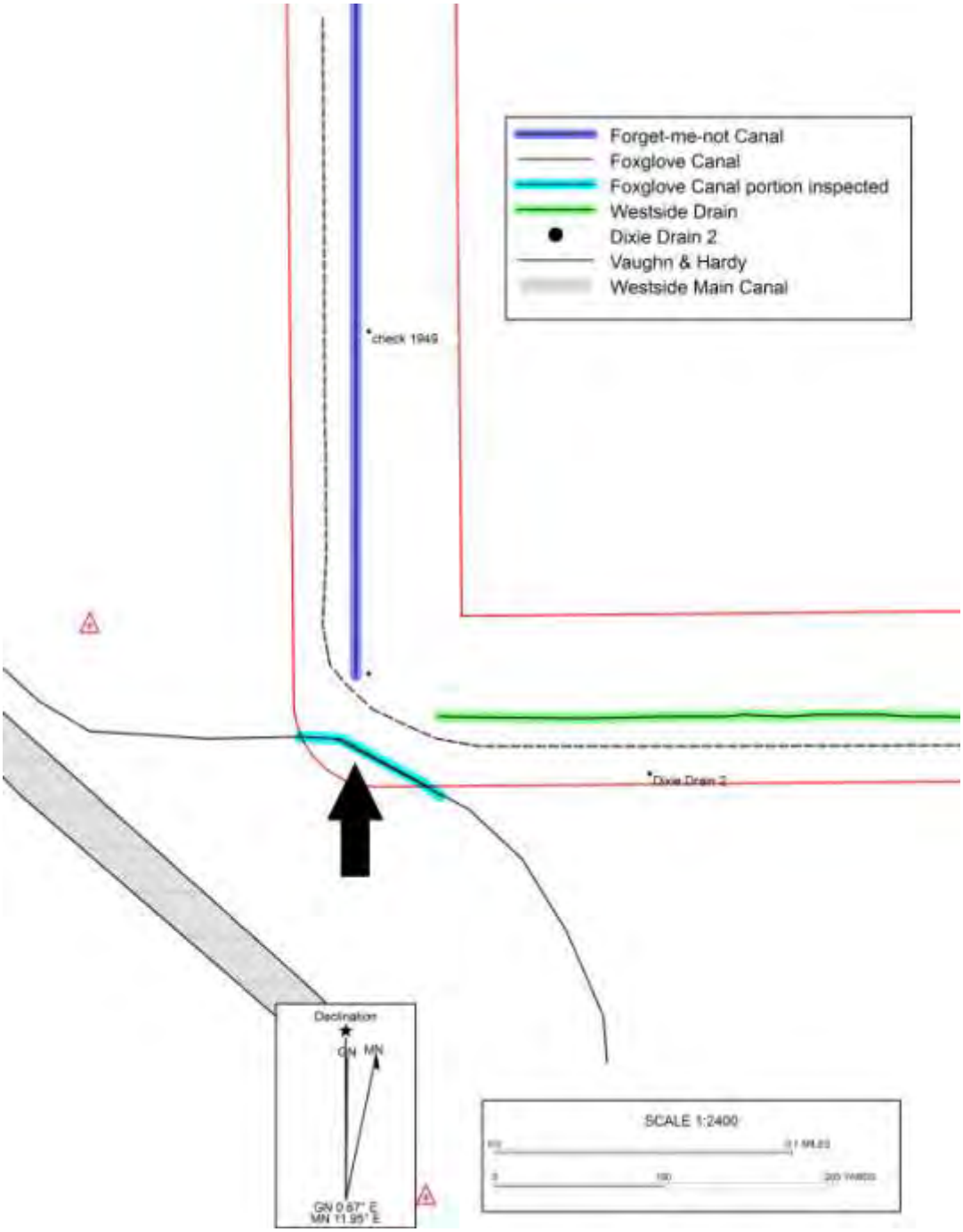
PC ORIGINAL PKG

*Drawn By: Heather Thomson



PC ORIGINAL PKG

*Drawn By: Heather Thomson



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-13-009880 UPDATE
HRI#
Trinomial CA-IMP-8821

Page 6 of 6 *Resource Name or # (Assigned by recorder) Foxglove Canal (portions)

***Map Name:** Plaster City, Calif ***Scale:** 1:24,000 ***Date of Map:** 1957



PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code CA-IMP-8821H UPDATE
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 **of** 10 ***Resource Name or #:** (Assigned by recorder) Portion of Foxglove Canal (CA-IMP-8821H)

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

* **a. County** Imperial **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

* **b. USGS 7.5'** Brawley **Date** 1957 **T** 16S **R** 12E ; ¼ ¼ **of** 7 ; SB **B.M.**

c. Address N/A City N/A Zip N/A

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 615025 mE/ 3628810 mN

e. Other Locational Data: (e.g., parcel I, directions to resource, elevation, etc., as appropriate)

The portion of the Foxglove Canal (CA-IMP-8821H) surveyed is a small segment of a larger historic-period linear property within the Dixieland area of Imperial County that travels north to south for approximately ten miles and runs adjacent to the Westside main Canal. The TRS and UTM provided above is the approximate centerpoint of the portion of the canal surveyed.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Foxglove Canal is a concrete-lined irrigation canal that appears to be approximately 20 feet wide and 10 feet deep with a trapezoidal form. The canal runs perpendicular to Evan Hewes Highway (Highway 80) and parallels the adjacent Westside Main Canal, which is located west of the Foxglove Canal. The canal features concrete levees with vegetated dirt banks. Vegetation includes wild grasses and weeds. Of note, immediately south of the Evan Hewes Highway crossing is a non-historic period gas pipeline (approximately one-foot in diameter) which bisects the canal (partially subsurface). This pipeline disrupts the feeling, setting, visual narrative, and historic viewshed of this portion of the canal. The Foxglove Canal runs perpendicular beneath Evan Hewes Highway through a winged wall concrete culvert. A 1963 date stamp is located on the north headwall of the culvert. The south headwall contains a wood and metal gate structure to control water flow. A date stamp of 1957 is found on the headwall adjacent to the gate. On the east bank of the canal, just south of the gate, is another wood and metal gate structure. This gate is likely used to control water flow into the Dixie Drain 4, which is located adjacent and parallel to the Foxglove Canal. SEE CONTINUATION SHEET 523L (PAGE 3)

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/Aqueduct

***P4. Resources Present:** ☐ **Building** ☒ **Structure** ☐ **Object** ☐ **Site** ☐ **District** ☐ **Element of District** ☐ **Other** (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (view, date, accession #)
At Evan Hewes Crossing looking north
March 2009

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
Approximately 1912 - 1912 A.G.
Thurston Irrigation District & Road Map

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Boulevard
Imperial, CA 92251

***P8. Recorded by:** (name, affiliation, and address)
URS Corporation
1615 Murray Canyon Rd., Suite 1000
San Diego, CA 92108

***P9. Date Recorded:** 05/2009

***P10. Survey Type:** (Describe)
Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Mutaw, Robert J. (Ph.D.), Elizabeth B. Roberts, Gordon C. Tucker Jr., Ph.D., Brian Shaw, Terrie Bagwell, Colin O'Hanlon, Rachael Nixon, Gary Fink, Jeremy Hollins, Mark Neal. 2010 Draft Final Class III Confidential Cultural Resources Technical Report for the Imperial Valley Solar (formerly Solar 2), Imperial Valley County. URS Corporation. Technical report prepared for Tessera Solar (Applicant). Submitted to the Bureau of Land Management – El Centro Field Office, El Centro, CA. Copies available from the Bureau of Land Management – El Centro Field Office, El Centro, CA.

***Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☐ Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

*Resource Name or #: (Assigned by recorder) Portion of Foxglove Canal (CA-IMP-8821H)

B1. Historic Name: Foxglove Canal
B2. Common Name: Foxglove Canal
B3. Original Use: Irrigation Ditch B4. Present Use: Irrigation Ditch
*B5. **Architectural Style:** N/A
*B6. **Construction History:** (Construction date, alterations, and date of alterations)
Actual construction date of the Foxglove Canal is unknown at present, despite efforts to contact the Imperial Irrigation District for construction date and information. However, the canal is shown on maps as early as 1912. In the 1912 A.G. Thurston Irrigation District and Road Map, the Foxglove Canal is unidentified, but follows the same general alignment as it does today. Review of 1940 Plaster City 15-Minute USGS quadrangle map, the 1943 Plaster City 1 to 62,500 scale map, the 1944 Plaster City 1 to 62,500 scale map, 1949 USDA Aerial Photograph Collection, and the September 18, 1996 Imperial Irrigation District Southwest Division Map show that the general course of the canal has remained consistent for most of its history.

*B7. **Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
*B6. **Related Features:**
None

B9. Architect: N/A b. Builder: Unknown
*B10. **Significance: Theme** N/A **Area** Dixieland
Period of Significance N/A **Property Type** Irrigation Ditch **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
In 1849, Dr. Oliver M Wozencraft, on his way to the gold fields of San Bernardino from New Orleans, traveled through the Imperial Valley and noted the region's soil fertility and potential for arability. He was likely the first person to recognize the Imperial Valley's potential for agriculture. Wozencraft believed he could construct a gravity canal from the Colorado River to the Imperial Valley, because the river was at a higher elevation than the valley (Garnholz 1991). Wozencraft's opinion of the fertile valley was reaffirmed in 1853 when Jefferson Davis, U.S. Secretary of the War Department, ordered a scientific expedition along the Colorado River for the placement of fortifications. In this expedition, led by Lieutenant R. S. Williamson and Professor William Phipps Blake, the particular fertility of the alluvial soil at the southern end of the Salton Sink was noted. Blake prophetically noted, "it is indeed a serious question, whether a canal would not cause the overflow once more of a vast surface, and refill, to a certain extent, the dry valley of the ancient lake" (Garnholz 1991). Blake's expedition scientifically described how the Colorado River had meandered through the valley, delivered enough silt to block the mouth of the Gulf of California, and recognized that the banks of the current Colorado River course were much higher than that of Imperial Valley (Smith 1979). During the nineteenth century, the Colorado River historically flooded the valley several times, specifically in 1840, 1842, 1852, 1859, and 1867 (Garnholz 1991). SEE CONTINUATION SHEET 523L (PAGE 3 AND 4).

B11. Additional Resource Attributes: (List attributes and codes) N/A
*B12. **References:**
SEE CONTINUATION SHEET 523L (PAGE 6)

B13. Remarks:
None

(Sketch Map with north arrow required)
SEE CONTINUATION SHEET 523L (PAGE 5)

*B14. **Evaluator:** Jeremy Hollins
***Date of Evaluation:** 05/2009

(This space reserved for official comments)

PC ORIGINAL PKG

P3a. Description (Continued)

The portion of the Foxglove Canal in the project area shows evidence of chipping, cracking, and spalling due to environmental effects (sun and heat exposure) and travel. Overall, the portion of the Foxglove Canal that bisects Evan Hewes Highway is in good condition, but has been affected by non-historic period construction and features, including the pipeline and the crossings.

B10. Significance (Continued)

With the information gathered from the scientific expedition, Wozencraft pressed California into granting him approximately 1,600 square miles or roughly ten million square acres (which included present-day Imperial County and portions of present-day Riverside County). However, the federal government retained title to the land in this region of California and Wozencraft was unable to convince Congress, even with the results of the scientific analysis of the valley, to support his efforts. Wozencraft then approached George Chaffey to finance the project. Chaffey, who would successfully spearhead irrigation projects in San Bernardino County and Australia, was also unconvinced and noted that the "Imperial Valley was to [sic] hot for white men to prosper" (Garnholz 1991). Chaffey would later change his mind and near the end of the nineteenth century led the effort to irrigate the valley. Still undeterred, Wozencraft hired the Los Angeles County surveyor, Ebenezeer Hadley, in 1860 to draw up a plan to irrigate the valley by diverting the Colorado River through the Alamo River (Garnholz 1991). Wozencraft eventually left California for Washington, D.C. to lobby Congress. He died several years later without ever convincing Congress and never seeing his dream fulfilled. While Wozencraft failed to create an irrigation network, his efforts during the mid-nineteenth century led the way for future development efforts.

In 1896, a group of investors formed the California Development Company (CDC) and followed Wozencraft's earlier attempts to irrigate the Imperial Valley. The group was led by Engineer Charles R. Rockwood and George Chaffey and they wanted to establish a canal, referred to as the "main channel," constructed from the Colorado River through the Imperial Valley using an ancient overflow channel of the Colorado known as the Alamo River (Sperry 1975). Chaffey, to avoid conflict with the Mexican government over land development since the canal was to be developed almost entirely on the south side of the border, established a subsidiary to the CDC known as the Sociedad de Irrgación y Terrenos de la Baja California (Smith 1979). By 1901, portions of the Imperial Valley were irrigated and attracted many new settlers and farmers from the Midwest.

One of the main problems throughout the entire canal venture project was constant silting, which needed consistent dredging of muck. The solution was to build a wooden, although supposedly temporary, structure referred to as the "Chaffey Gate" (Sperry 1975; Tout 1932). The year the gate was constructed (1904) was one of the wetter years on record and the gate was constructed too high on the riverbank. Arguments at the time seem to suggest that Chaffey had the gate constructed correctly, but that because the water level was high at the time, the engineer in charge of the project placed several removable flashboards in the bottom of the gate, which silted over rapidly (Sperry 1975). The next few years were very dry causing the canals' water level to drop precipitating the construction of more diversion and gates around the Chaffey gate. The year 1905, however, was extremely wet causing several flooding episodes with the fifth one completely destroying all remaining gates and dams along the canal network system. The Colorado River, originally flowing toward the Gulf of Californian, had changed its course and started flooding the Alamo River to the Salton Sink in Imperial Valley.

By 1905, over 80 miles of irrigation canals had been built, with more than 100,000 acres under cultivation. However, the design and construction of several poorly planned canals and ditches made water delivery service unreliable and inefficient. Large quantities of silt would block the canals' intakes and reduce the amount of water reaching Imperial Valley crops. A widespread flood in the winter of 1905-1906 caused extensive damage to railroad property, farmlands, and the newly constructed canal system. The CDC did not believe it was practical to reconstruct several of the canals, and as an alternative decided to enlarge the Westside Main Canal, which at the time was a wooden flume conveyance system located south in Mexico and known as the Encina Canal (Hupp 1999). The extension of the Westside Canal into the United States approximately 1906 was intended to alleviate irrigation problems, and spark development of the county west of the New River. By 1908, the Westside Main Canal extended into the Dixieland area of Imperial County. It was constructed as an earthen canal, banked by earthen levees, approximately 25 feet wide and 10 feet deep. Throughout the early twentieth century, the general alignment of the Westside Main Canal within the Dixieland area of Imperial County was not significantly altered. Based on the 1915 El Centro 15-minute USGS quadrangle maps, Albert G. Thurston's Imperial Valley Tract Map (1914), Blackburn's Map of Imperial County, California (1919, 1929, 1936, 1943, 1955 editions), the 1949 and 1976 USDA Aerial Collection, the 1957 Painted Gorge 7.5-Minute USGS quadrangle map, and the 1964 Western Portion of Blackburn's Map of Imperial County, the general course of the canal has remained consistent for most of its history.

By 1907, the Southern Pacific Railroad Company threatened a lawsuit against the CDC for flooding their railroad line along the Salton Sink. A year later, CDC reorganized and the board was taken over by Southern Pacific men, including Epes Randolph, who was the assistant to the president of the Southern Pacific (Sperry 1975). The task of returning the Colorado to its natural course heading toward the Gulf of California was such a daunting and expensive quest that the Southern Pacific eventually ended its association with the CDC. The Southern Pacific did, however, request over $3 million from the U.S. government for expenses incurred in turning the Colorado back toward the Gulf; the government awarded them $1 million 22 years later (Sperry 1975; Tout 1932). Only the construction of the Hoover Dam (then known as the Boulder Dam) in 1935 allowed for more effective control of the Colorado River for irrigation purposes.

B10. Significance (Continued)

The Imperial Irrigation District (IID) was organized in 1911 to acquire the land rights of the California Development Company (CDC), and its Mexican subsidiary Sociedad de Irrigación y Terrenos de la Baja California, from the Southern Pacific. By the mid-1920s, IID was delivering water to over 500,000 acres of arable land (Imperial Irrigation District 1998). The Boulder Canyon Act, passed in 1928, authorized the Bureau of Reclamation to construct the Boulder Dam, completed in 1935, along the Colorado River. The Imperial Valley and IID benefited greatly as the Act and the dam provided immediate hydroelectric power to the valley. The Act also provided for the construction of the All-American Canal. In 1932, the Secretary of the Interior and IID signed an agreement to allow IID the utilization of hydroelectric power from the canal system for repaying the costs of the canal construction. The All-American Canal was begun in 1934 and the first diesel-generating plant was constructed near Brawley in 1936 (Imperial Irrigation District 1998). Subsequent hydroelectric plants were constructed in 1941. The All-American Canal was completed in 1941, and the Westside Main Canal was incorporated into the All-American Canal System upon its completion. The portions of the Westside Main Canal within Mexico were removed from the IID system.

By the 1950s, regular dredging and widening of the canals were needed to alleviate problems from silt and other build-ups. This altered the structures' profiles, depth, and width, and improvements were also made to the canals' ceramic drain tiles and ditches. For example, the Fern Canal features several culverts and other structural improvement s from the 1950s through the 1980s. By the 1960s, IID had implemented a plan to start lining its earthen canals with concrete (Hupp 1999). Through the 1970s, due to IIDs ongoing preventive and reactive maintenance, many original construction materials and features were replaced. These alterations have impacted the canals' historic setting, but were necessary for the agriculture industry's expansion and success (Henderson 1968).

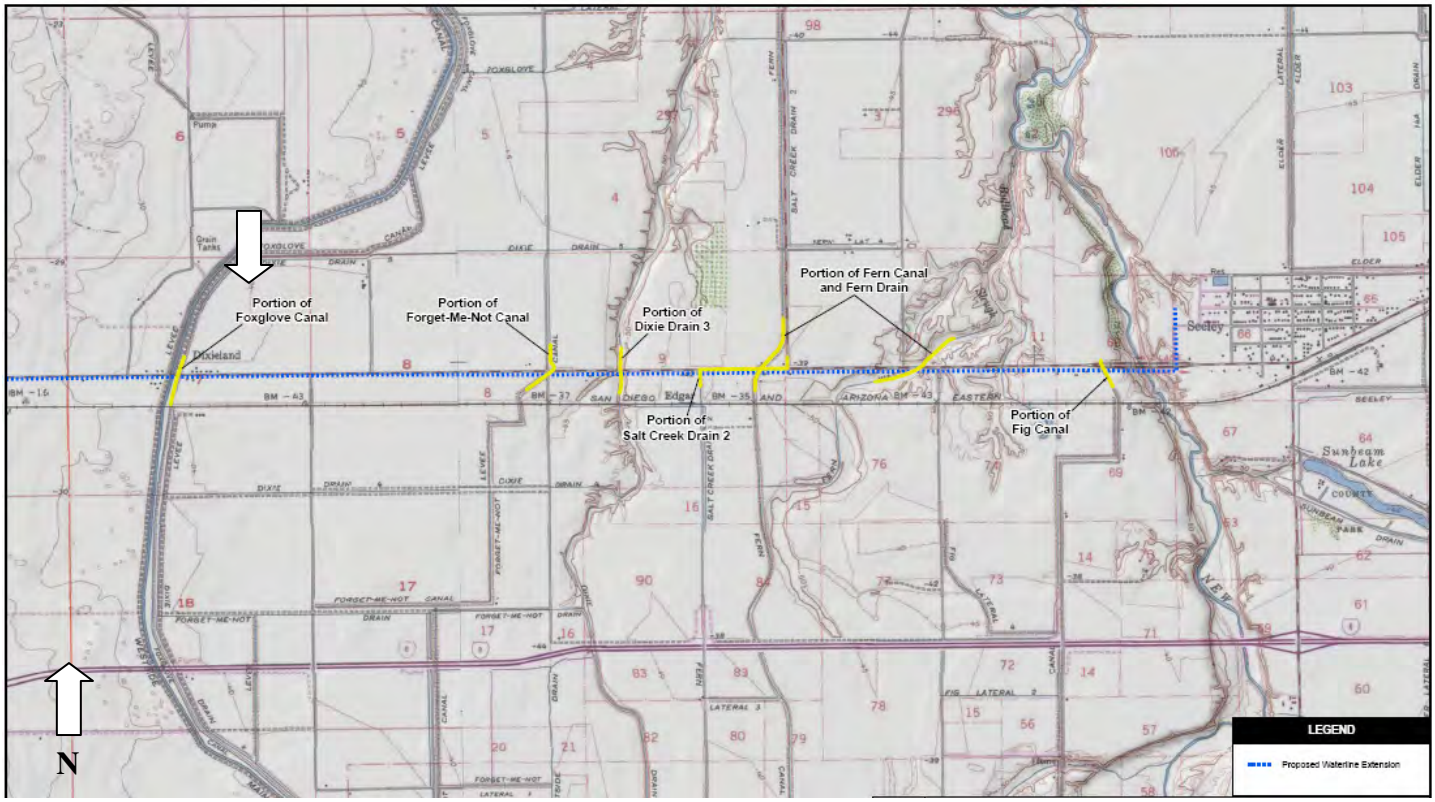
The Foxglove Canal, as a whole, is associated with the Westside Main Canal system and reflects the development associated with the construction and operation of the All-American Canal between 1941 and 1950, which is primarily when the system was widened, shortened (portions in Mexico were removed from service), and modernized. Based on an earlier assessment prepared by the Bureau of Reclamation and Office of Historic Preservation, the All-American Canal appears to be significant under Criterion A and C of the NRHP and Criterion 1 and 3 of the CRHR for its association with the development of irrigated commercial agriculture in Imperial County west of the New River. By extension, the Westside Main Canal and the Dixie Drain 3 (which is a related feature to the larger Westside Main Canal and All-American Canal), appears to be NRHP- and CRHR- eligible. It does not appear to be associated with the lives of significant people or appears to be likely to yield important information in prehistory or history. Therefore, it does not appear to be significant under Criterion B and D of the NRHP and Criterion 2 and 4 of the CRHR.

Overall, the Foxglove Canal as a whole does not retain a sufficient amount of its historic integrity to convey its significance due to improvements and reconstruction that may have occurred since the 1950s, though, an intensive survey of the entire canal has not occurred. The portion of the Foxglove Canal at the crossing of Evan Hewes Highway also does not appear to possess sufficient integrity of workmanship, design, setting, feeling, and association (Though, it still retains sufficient historic integrity aspects of location and materials). Accordingly, it does not appear to be contributing element or significant related feature/component to the larger linear All-American Canal and Westside Main Canal system or individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA. The addition of 1960s features, a non-historic period pipeline, and improved highway and railroad crossings over the canal disrupts the property's integrity aspects of setting and feeling, since these elements are outside of the property's period of significance, 1941 to 1950. Accordingly, due to these alterations, the workmanship and association of the historic-period property has been lost, since there is little physical evidence of the crafts of a particular culture or people from the period of significance.

In summary, the portion of the Foxglove Canal at the crossing of Evan Hewes Highway does not appear to be individually eligible for listing to the NRHP, CRHR, or considered a historical resource for purposes of CEQA, and does not appear to be contributing element or significant related feature/component to the larger linear Westside Main Canal system (if it is determined that such a resource exists). Further, the addition of a proposed water line adjacent or perpendicular to the existing Foxglove Canal would not create a new adverse effect or significant impact to the portion of the historic-period property that bisects the Evan Hewes Highway.

Sketch Map:

Not to scale



PC ORIGINAL PKG

B12. References

A.G. Thurston. 1912. Irrigation District and Road Map – Imperial Valley.

Albert G. Thurston. 1914. Imperial Valley Tract Map.

O.V. Blackburn. 1919, 1929, 1936 & 1955 editions. Blackburn's Map of Imperial County, California.

O.V. Blackburn. 1964 edition. Western Portion of Blackburn's Map of Imperial County, California.

Garnholz, Derek Brandon, 1991. The Salton Sea: a narrative and political history. Unpublished Master's Thesis, San Diego State University.

Henderson, Tracey, 1968. Imperial Valley. San Diego: Neyensech Printers.

Hupp, Jill, 1999. CA-IMP-7834 Westside Main Canal. Sacramento: Caltrans Environmental Program

Imperial Irrigation District, 2006. "General History." Located at http://www.iid.com/Sub.php?pid=14. Website last visited on April 2009.

Imperial Irrigation District. September 18, 1996. Southwest Division Map.

JRP Historical Consulting and Caltrans (California Department of Transportation). 2000. Water Conveyance Systems in California. http://ntl.bts.gov/card_view.cfm?docid=24219. Accessed February 2009.

Parsons Brickerhoff and Engineering and Industrial Heritage. 2005. A Context for Common Historic Bridge Types. National Cooperative Highway

Research Program Transportation Research Council.

Smith, Karen J., 1979. The Reclamation of the Imperial Valley, 1849-1916. Unpublished Masters Thesis, San Diego State University.

Sperry, Robert L., 1975. When the Imperial Valley Fought for its Life. The Journal of San Diego History, 21(1). Located at: http://www.sandiegohistory.org/journal/75winter/imperial.htm. Website last visited on 27 April 2007.

SWCA Environmental Consultants. 2007. CA-IMP-8821H Fox Glove Canal. South Pasadena, California.

Tout, Otis B., 1932. The First Thirty Years—1901-1931: History of Imperial Valley, Southern California, U.S.A. San Diego: Otis B. Tout.

USDA. 1949 & 1976. Aerial Survey of Imperial County. On file at UCSD Maps and Government Publications.

USGS. 1908. El Centro USGS Quadrangle Map.

USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

Additional Photos:



At Evan Hewes Crossing looking northeast at north culvert with 1963 date stamp.



At Evan Hewes Crossing looking south at SD-AZ RR Crossing

Additional Photos:



At Evan Hewes Crossing looking southeast at south culvert and gate structure.

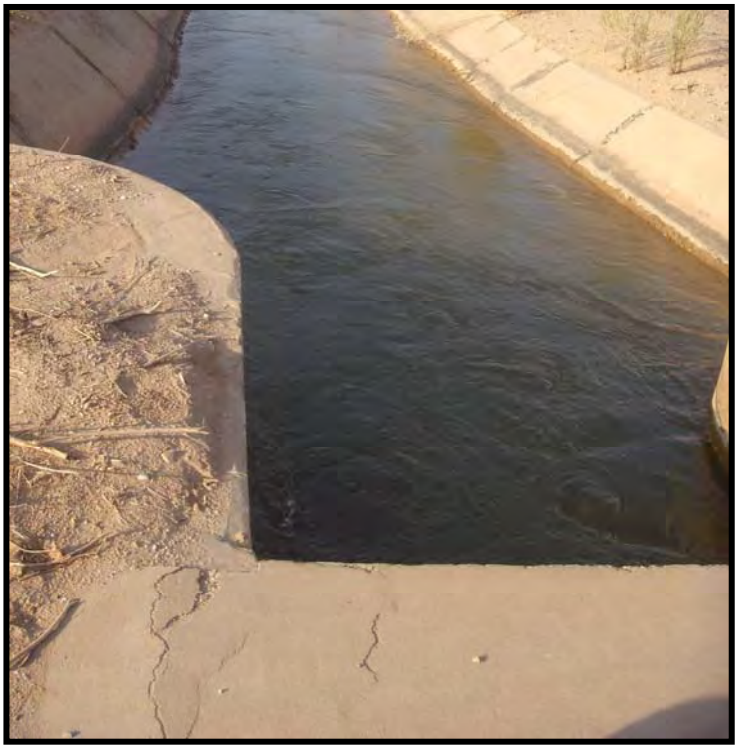


Looking southeast at the gate structure on the east bank

Additional Photos:



Gas pipeline located on the south side of Evan Hewes Highway



Looking south from Evan Hewes Crossing at south culvert

Additional Photos:



Wing wall of north culvert

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	**Primary #** CA-IMP-8821 **HRI #** **Trinomial** P-13-009880 **NRHP Status Code** 2D2
Other Listings **Review Code**	**Reviewer** **Date**

 ***Resource Name or #:** Fox Glove Canal (Imperial Irrigation District, All-American Canal system)

P1. Other Identifier: None

***P2. Location:** ■ **Not for Publication** ☐ **Unrestricted** ***a. County:** Imperial

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Plaster City, CA **Date:** 1957 (P. 1979) **T** 16 S; **R** 12 E ; SE ¼ **of** SE¼ **of Sec** 5 and 6; S.B. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 11S; 615960 mE/ 3629613 mN (G.P.S.) NAD 83

e. Other Locational Data: Exit Interstate 8 at Drew Road and travel north for approximately 1.5 miles before turning left onto Evan Hewes Highway (old US 80). Follow Evan Hewes Highway for approximately 4 miles and then turn right (N) on Arizona Road. Arizona Road ends at Dixie Drain. Turn right and travel parallel with the drain for approximately .33 mile and park. Within the current survey corridor the western end of the drain is at UTM coordinate 615960 mE / 3629612 mN and the eastern point at at 616105 mE / 3629612 mN.

***P3a. Description:** This site form records a 300-foot-long segment of the Fox Glove Canal, which is part of the larger historic Westside Main Canal—one of three main canals in Imperial Valley charged by the 1940 All-American Canal. Because the survey corridor includes part of this drain, only that part of the drain within the survey corridor is documented, described, and evaluated.

The Fox Glove Canal is a concrete-lined water channel that is fed upstream (south) by the larger Westside Main Canal, which flows from the southwest to the northeast of the current powerline survey corridor. Dimensions of Fox Glove Canal and parallel Dixie Drain 5 are similar. In 2006 the Bureau of Reclamation and California State Historic Preservation Officer concurred that the All-American Canal —inclusive of all components including Fox Glove Canal — is ELIGIBLE for the NRHP and California Register of Historical Resources (CRHR) under Criterion A/1 for its significance in association with development of the Imperial Valley, and C/3 as part of "one of the great engineering marvels of the American West" (Schaefer 2001), as a Contributing resource of the All-American Canal system (a linear historic district).

***P3b. Resource Attributes:** HP20. Canal/aqueduct

***P4. Resources Present:** ☐Building ■Structure ☐Object ☐Site ☐District ■Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo: Photograph # 49, length of Fox Glove Canal looking west. Photo taken on 4 / 24 / 07.

***P6. Date Constructed/Age and Sources:** ■Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
BoR % Imperial Irrigation District
333 E. Barioni Blvd
Imperial, CA 92251

***P8. Recorded by:** J. Burkard, G. Connell, J. Covert, J.Steely
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030

***P9. Date Recorded:** 4 / 24 / 07

***P10. Survey Type:** Intensive Survey – 15 meter transects

***P11. Report Citation:** SWCA Environmental Consultants and Applied EarthWorks 2008: Cultural Resources Survey of Alternatives for the Sunrise Powerlink Project, San Diego, Imperial, Riverside, and Orange Counties, California.

***Attachments:** ☐NONE ■Location Map ☐Sketch Map ■Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ■Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ■Photograph Record ☐ Other (List):

PC ORIGINAL PKG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

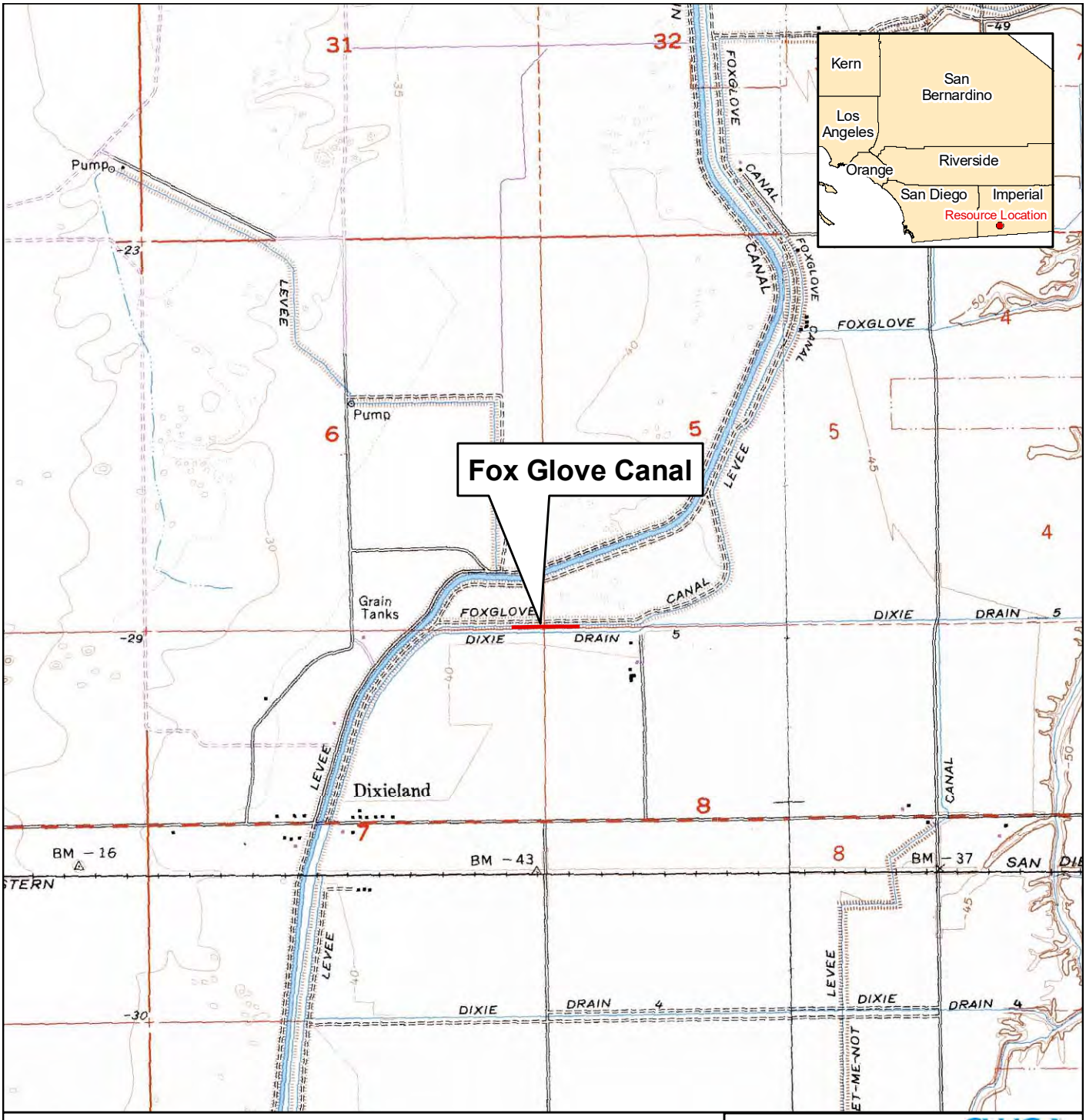
LOCATION MAP

Primary # P-13-009880
HRI#
Trinomial CA-IMP-8821

***Resource Name or #:** Fox Glove Canal (Imperial Irrigation District, All-American Canal system)

***Map Name:** Plaster City, CA

***Scale:** 1:24,000 ***Date of Map:** 1957 (Photorevised 1979)



Cultural Resource

0 250 500 Meters
0 1,000 2,000 Feet

USGS 7.5' Quadrangle
Plaster City, CA 1957 (Photorevised 1979)

1:24,000

SWCA ENVIRONMENTAL CONSULTANTS

Fox Glove Canal

Sunrise Powerlink

***Required information**

PC ORIGINAL PKG

LINEAR FEATURE RECORD

 Resource Name or #: Fox Glove Canal (Imperial Irrigation District, All-American Canal system)

L1. Historic and/or Common Name: Fox Glove Canal

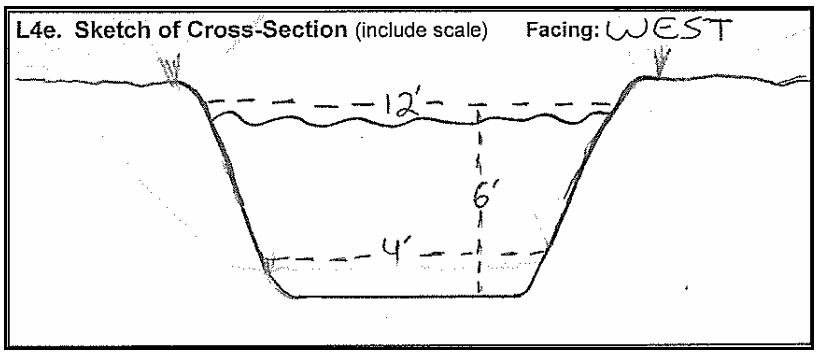
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:** A 300 foot segment within the survey corridor

b. Location of point or segment: Exit Interstate 8 at Drew Road and travel north for approximately 1.5 miles before turning left onto Evan Hewes Highway (old US 80). Follow Evan Hewes Highway for approximately 4 miles and then turn right (N) on Arizona Road. Arizona Road ends at Dixie Drain 5. Turn right and travel parallel with the drain for approximately .33 mile and park. Within the current survey corridor the western end of the drain is at UTM coordinate 615960 mE / 3629612 mN and the eastern point at at 616105 mE / 3629612 mN.

L3. Description: The Fox Glove Canal is a concrete-lined water channel that is fed upstream (south) by the larger Westside Main Canal, which flows from the southwest to the northeast of the current powerline survey corridor. The unlined Dixie Drain 5, c. 40 feet to the south of the canal, moves stormwater and any canal overflows away from the earthen structures and associated fields.

L4. Dimensions:
- **a. Top Width:** 12 feet
- **b. Bottom Width:** 4 feet
- **c. Height or Depth:** 6 feet
- **d. Length of Segment:** 300 feet

L4e. Sketch of Cross-Section (include scale) **Facing:** WEST



L5. Associated Resources: Westside Main Canal is west and north, and Dixie Drain 5 is approximately 40 meters directly south and in a parallel (east-west) manner to the Fox Glove Canal.

L6. Setting: Within the survey corridor, the Fox Glove Canal is surrounded by modern agricultural pursuits within a desert setting. The berm of the canal is level with a dirt road running parallel to the canal. The sediment is sandy with small rocks/pebbles. Besides the agricultural fields, the vegetation includes wild grasses and weeds.

L7. Integrity Considerations: The concrete-lined canal transports a large quantity of water for use in irrigating local crops. The canal appears to be in excellent working condition, though the edges of the drain are overgrown with invasive weeds.



L8b. Description of Photo, Map, or Drawing: Photograph # 49, Fox Glove Canal looking west; Dixie Drain 5 is in the line of vegetation to the left (S).

L9. Remarks: In 2006 the Bureau of Reclamation and California SHPO concurred that the All-American Canal is ELIGIBLE for the NRHP —inclusive of all components including Fox Glove Canal —and California Register of Historical Resources (CRHR) under Criterion A/1 for its significance in association with development of the Imperial Valley, and C/3 for its engineering significance.

L10. Form Prepared by:
J.Burkard, G. Connell, J. Covert, J. Steely
SWCA Environmental Consult.
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030

L11. Date: 4 / 24 / 07

PC ORIGINAL PKG

Resource Name or #: Fox Glove Canal (Imperial Irrigation District, All-American Canal system)
Year 2007

Camera Format: Digital
Film Type and Speed: Finepix

Lens Size:
Negatives Kept at: SWCA Environmental Consultants, South Pasadena office

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
4	24	-	0049	Fox Glove Canal, overview	Northwest	N/A

PC ORIGINAL PKG

*Recorded by: James W. Steely, SWCA Environmental Consultants *Date: 16 September 2008 ■ Update

*P11. Report Citation: SWCA Environmental Consultants and Applied EarthWorks 2008: *Cultural Resources Survey of Alternatives for the Sunrise Powerlink Project, San Diego, Imperial, Riverside, and Orange Counties, California.*

Context Discussion of Historic Canals and Drains

The Southern Pacific Railroad recognized when it first traversed the Imperial Valley in 1877 that fresh water was required to sustain potential agricultural pursuits, and profitable settlement, in the region. Dr. O.M. Wozencraft, who first passed through the region in 1849 during the Gold Rush, developed proposals over a period of four decades for irrigating the flat and dry, but fertile Imperial Valley. In 1892, engineer C.R. Rockwood investigated diverting water from the Colorado River westward into Mexico and northwestward into California for irrigation. By 1896, Rockwood and A.H. Heber of Chicago formed the California Development Company to raise funds for diverting Colorado River water into this natural drainage, and thence into a potentially vast agricultural irrigation network in Mexico and California (Imperial County 2007).

This activity brought engineer George Chaffey, with extensive experience in Australia, to the endeavor. Chaffey dredged a canal that led west from the Colorado River in 1900, and in May 1901 Chaffey's gates on the Colorado River opened to fill the new Alamo Canal. In six months the California Development Company successfully irrigated 1,500 acres on both sides of the border around its newly platted town of Calexico (Imperial County 2004). Other water companies followed, including "Water Co. No. 6" that served the Encina (aka Trifolium, now Westside Main) Canal (Hupp 1999). During the four years between 1901 and 1905, these companies collectively built 700 miles of distribution canals and 80 miles of main canals. With the ever-increasing reaches of canals, during those four years the amount of agricultural land increased from about 1,500 to 67,000 acres, a 44.7-fold increase (Imperial County 2007).

Sudden formation of the present Salton Sea in 1905 resulted from a dramatic and sustained breach near Chaffey's gates on the Colorado River, as well as the many irrigation canals of the Imperial Valley. The breach was not fixed until 1907. Losses of agricultural land and damage to the railroad were tremendous, eventually leading to the bankruptcy of the California Development Company in 1909. Its private assets were assumed by the public Imperial Irrigation District (IID) in 1911 (Imperial County 2007; Salton Sea Authority 2007).

The Mexican Revolution of the mid-1910s led to border troubles and more distinct international division of lands through the valley. U.S. interests pushed to ensure the valley's water supply independent of the Alamo Canal system passing through Mexico (Schaefer 2001). In 1922, the IID completed acquisition of the 13 independent water companies that had operated in the valley, including Water Co. No. 6 and its Westside Main Canal. In the 1920s with bond issues and fees, IID constructed 234 miles of deep drains, including Dixie Drain, to protect the delivery canals and to drain croplands quickly during and after storms. A major storm in 1939 far exceeded system drainage, however, and the Westside Main along with other canal segments suffered serious damage (Hupp 1999).

In 1928, President Calvin Coolidge signed the bill authorizing construction of Hoover Dam and other Colorado River projects, including the All-American Canal. Construction on the new delivery canal for Imperial Valley began in 1934, and on the new Imperial Dam with its massive de-silting works in 1936. Reclamation finished the dam in 1938 and began water delivery through the All-American Canal to IID service canals in 1940 (Reclamation 2008). The IID's All-American Canal system now consists of the 82-mile trunk canal, 148 miles of mains—including Westside Main—1,438 miles of laterals, and 1,406 miles of drainage ditches—including Dixie Drain (Schafer 2001). The District continues to improve the engineering quality of its canals, delivery laterals, and drainage ditches, annually moving more than 3 million acre-feet of water from the All-American Canal into its delivery systems. Irrigation and agriculture continue to be important themes for the Imperial Valley, with more than 450,000 acres of cropland in production today (Imperial County 2007).

PC ORIGINAL PKG

*Recorded by: James W. Steely, SWCA Environmental Consultants *Date: 16 September 2008 ■ Update

Fox Glove Canal (CA-IMP-8821)

In 2006 the Bureau of Reclamation and California State Historic Preservation Officer (SHPO) concurred that the All-American Canal is eligible for the NRHP; the referenced Imperial Irrigation District report (Shaefer 2001) includes the entire IID system with all its delivery canals. Further, SEIC (Collins 2008) confirmed that SHPO considers eligible all components of the All-American Canal system. Fox Glove Canal is therefore determined eligible for the NRHP and CRHR under Criterion A/1 for its significance in association with development of the Imperial Valley and Criterion C/3 as part of "one of the great engineering marvels of the American West" (Schaefer 2001), as a contributor to the All-American Canal system (a linear historic district).

NRHP Status Code: 2D2. Contributor to a district determined eligible for NRHP by consensus through Section 106 process; listed in the CRHR.

*B10. Significance: **Theme:** Water Technology and Utilization **Area:** Imperial Valley, California
Period of Significance: 1901–1978 **Property Type:** Irrigation System, Drain **Applicable Criteria:** A/1, C/3

*B12. References:

Collins, Karen
2008 Personal communication between SHPO and SEIC coordinator Karen Collins, as conveyed to Kevin Hunt, SWCA. 20 August 2008.

Donaldson, Milford Wayne
2006 "Determination of National Register of Historic Place [sic] Eligibility for the All-American Canal (AAC), Imperial Valley, Californian [sic] (LC-CA-02-13 P). Letter from SHPO to USDI Bureau of Reclamation, % Deanna J. Miller, Director, Resources Management Office, Boulder City, NV. April 10, 2006.

Hupp, Jill
1999 "Westside Main Canal" original DPR form. Caltrans Environmental Program. Sacramento. 5/24/99. Attached to this DPR form are a number of historic IID documents that informed this further evaluation of All-American Canal components.

Imperial County
2004 Imperial County History. Electronic document, http://www.calarchives4u.com/history/imperial/index.htm, accessed April 30, 2008.

2007 Imperial County History. Electronic document, http://www.calarchives4u.com/history/imperial/index.htm, accessed April 30, 2008.

Reclamation, U.S. Bureau
2008 Boulder Canyon Project, All American Canal System. Electronic document, http://www.usbr.gov/dataweb/html/allamcanal.html, accessed March 11, 2008.

Salton Sea Authority
2007 Historical Chronology. Electronic document, http://www.saltonsea.ca.gov/histchron.htm, accessed April 30, 2008.

Schaefer, Jerry, and Collin O'Neill.
2001 *The All-American Canal: An Historic Properties Inventory and Evaluation.* Prepared for The Imperial Irrigation District. Imperial. Prepared by ASM Affiliates. Encinitas. July 2001.

PC ORIGINAL PKG

*Resource Name or #: Wagon Road From Fort Yuma to Warners Ranch
☐ Continuation X Update

Map Reference Number: 16

P1. Other Identifier: Site No. 46-IMP-(1856)-284
e. Other Locational Data: UTM: Crosses northwest to southeast across Township 16S; Range 12E; Section 16 and Section 15; San Bernardino B.M.

*P3a. Description:

The location of the Wagon Road was noted on the previously completed site record in the API in Township 16 South, Range 12 East in Sections 21 and 22, adjacent to the Fern Canal and north of West Vaughn Road. However, the Wagon Road appears on the GLO maps from 1857 bisecting Sections 15 and 16 running southeast to northwest. This is north of the API, beyond the Kumeyaay Highway. It seems likely that the road was noted incorrectly on the previous study. There is no indication of the road in the location where it was previously recorded. (Photograph 1 and Photograph 2) (GLO 1857: 28916; Imperial Valley College Museum: site No.CA-IMP=3403H).

*P3b. Resource Attributes: HP37: Highway/Trail

*P8. Recorded by: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*P11. Report Citation: Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*B10. Significance:

According to the SCIC records search, the road was recorded as recently as 2009. The associated site form provides limited information and no evaluation was completed at this time. On April 11, 2023, Dudek revisited the site and did not find any indications the road was ever at this location and was likely incorrectly mapped in the API. Dudek concluded that the resource as it was previously mapped is not extant in this location.

*B14. Evaluator: Evan Brisentine, MSHP, Dudek. 605 NE 21st Avenue, Suite 200, Portland, Oregon. 97232.

*Date of Evaluation: September 21, 2023.

Photograph(s):

PC ORIGINAL PKG

Photograph 1. Previously Recorded Site form map (P-13-003403).



Photograph 2. Aerial view of a GLO Overlay from 1857 and Google Earth



PC ORIGINAL PKG

References

GLO 1857. "Original Survey: 28916." Accessed September 21, 2023. https://glorecords.blm.gov/search/default.aspx#searchTabIndex=1

Imperial Valley College Museum. 2009. "Site No.CA-IMP=3403H." On File with the South San Joaquin Valley Information Center.

PC ORIGINAL PKG

3403-H

MAPPED ~~225-H~~

4-IMP ~~2168~~

Imperial Valley College Museum

Site No. 46-IMP-(1856)-284

163 7.5 57

ARCHAEOLOGICAL SITE SURVEY RECORD

1. Map SEELEY CALIF 7.5' QUAD 16c-57 2. County IMPERIAL

3. Twp. 16S Range 12E : ___ 1/4 of ___ 1/4 of Sw 1/4 of Sw 1/4 of Sec. 21

4. Location 92.40 FT. SOUTH OF E¼ COR TRACT 107 SEC. 21

619270E, 3625370 N

5. On contour elevation -40'

6. Previous designations for site 46-IMP-(1856)-284 4-IMP-2168 & 225-H

7. Owner ___ 8. Address ___

City ___ Zip ___ 10. Phone ___

11. Present tenant ___

12. Description and type of site CROSSED WAGON ROAD FROM FORT YUMA TO WARNERS RANCH, COURSE NORTH OF WEST

13. Area ___ 14. Depth ___ 15. Height ___

16. Vegetation ___

16a. Animal life ___

17. Nearest water ___

18. Soil of site ___

19. Surrounding soil type ___

20. Previous excavation ___

21. Cultivation ___ 22. Erosion ___

23. Buildings, roads, etc. ___

24. Possibility of destruction ___

25. House pits ___

PC ORIGINAL PKG

Site No CA-IMP-3403H

26. Other features

27. Burial or cremation evidence

28. Artifacts

29. Remarks

30. Published references 1856 USGLO SURVEY NOTES BY R.C. MATTHEWSON

31. IVCM Accession No. _____ 32. Sketch Map _____ 33. Photos _____

34. Date _____ 35. Recorded by _____

36. Address _____ 37. Phone _____

PC ORIGINAL PKG

CA-IMP-3403H

2.25-H

seeley calif 7.5



PC ORIGINAL PKG

Appendix D

Newly Recorded Resources/DPR Form Sets

PC ORIGINAL PKG

State of California ♉ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial _____
NRHP Status Code 6Z

Other listings
Review Code Reviewer Date

 *Resource Name or #: (Assigned by recorder) 2250 West Vaughn Road
P1. Other Identifier: Mobile Home Complex at 2250 West Vaughn Road

*P2.Location: ☒ Not for Publication ■ Unrestricted *a. County Imperial
and P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Seeley Quadrangle Date 2023 T 16S; R 12E; of Sec 21; San Bernardino B.M.
c. Address 2250 West Vaughn Road City El Centro Zip 92243
d. UTM: (Give more than one for large and/or linear resources) Zone: 11S; 6188875.52 m E; 3625301.99 m N
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
Assessor's Parcel Number (APN) 051-300-027

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property, addressed at 2250 W Vaughn Road is located on a 13.7-acre parcel (051-300-027). at the intersection of Westside Road and West Vaughn Road (photograph 1). See Continuation Sheet

*P3b. Resource Attributes: (List attributes and codes) HP-3. Multiple Family Property, HP-4. Ancillary building

*P4.Resources Present: ■ Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)
P5b. Description of Photo: Photograph 1. View from the right-of-way of Westside Elementary School at Mobile Home A (central) and Outbuilding 1 (left) looking northeast. (Dudek 2023).

*P6. Date Constructed/Age and Source: ■ Historic ☐Prehistoric ☐ Both circa 1976 (Parcel Quest 2023).

P5a. Photograph 1.



*P7. Owner and Address:
Rosalynne M Young
2961 Wensley Avenue,
El Centro, California 92243

*P8. Recorded by:
Evan Brisentine, Dudek
605 NE 21st Avenue, Ste. 200
Portland, Oregon, 97232

*P9. Date Recorded: 4/11/2023

*P10. Survey Type: (Describe)
Intensive Pedestrian

*P11. Report Citation: (Cite survey report and other sources or enter "none.") Brisentine, E and Jones, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2023.

*Attachments: ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record

PC ORIGINAL PKG

*Required information

State of California - The Resources Agency Primary # _____
DEPARTMENT OF PARKS AND RECREATION HRI # _____

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or # (Assigned by recorder) 2250 West Vaughn Road *NRHP Status Code 6Z

B1. Historic Name: None.
B2. Common Name: None.
B3. Original Use: Agricultural B4. Present Use: Residential
*B5. Architectural Style: Residential Mobile/ Manufactured Home type

*B6. Construction History: (Construction date, alterations, and date of alterations)
2250 West Vaughn Road was developed in the 1940s as agricultural farmland and turned residential in the 1970s. no alterations were documented or observed.

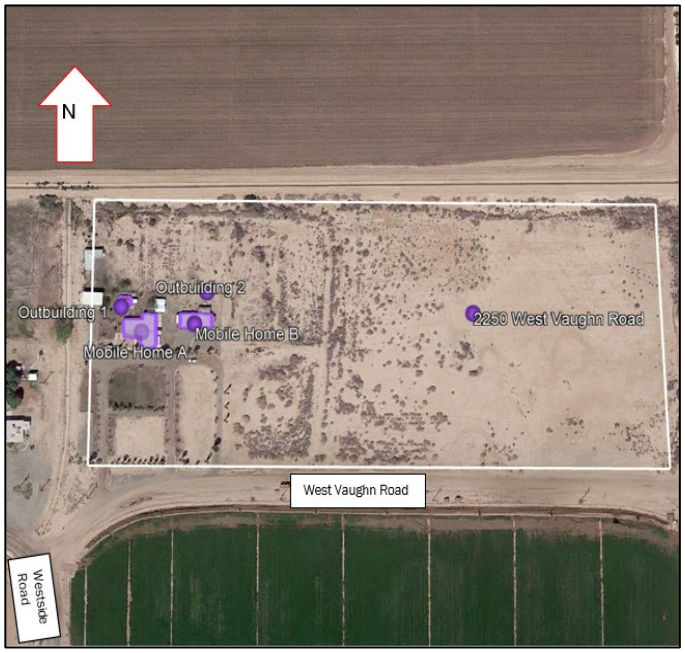
*B7. Moved? ■ No ☐Yes ☐Unknown Date: N/A Original Location: N/A
*B8. Related Features: N/A

B9a. Architect Unknown b. Builder: Unknown
*B10. Significance: Theme Residential Development Area El Centro
Period of Significance circa 1976 Property Type Residential Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property, located at 2250 West Vaughn Road does not meet any of the criteria for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), either individually or as part of an existing or potential historic district. The property was evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and found not to be a historical resource for the purposes of CEQA.

(See Continuation Sheet)

B11. Additional Resource Attributes: None.
*B12. References: See Continuation Sheet
B13. Remarks: None
*B14. Evaluator: Evan Brisentine, MSHP, Dudek *Date of Evaluation: 09/18/2023



(This space reserved for official comments.)

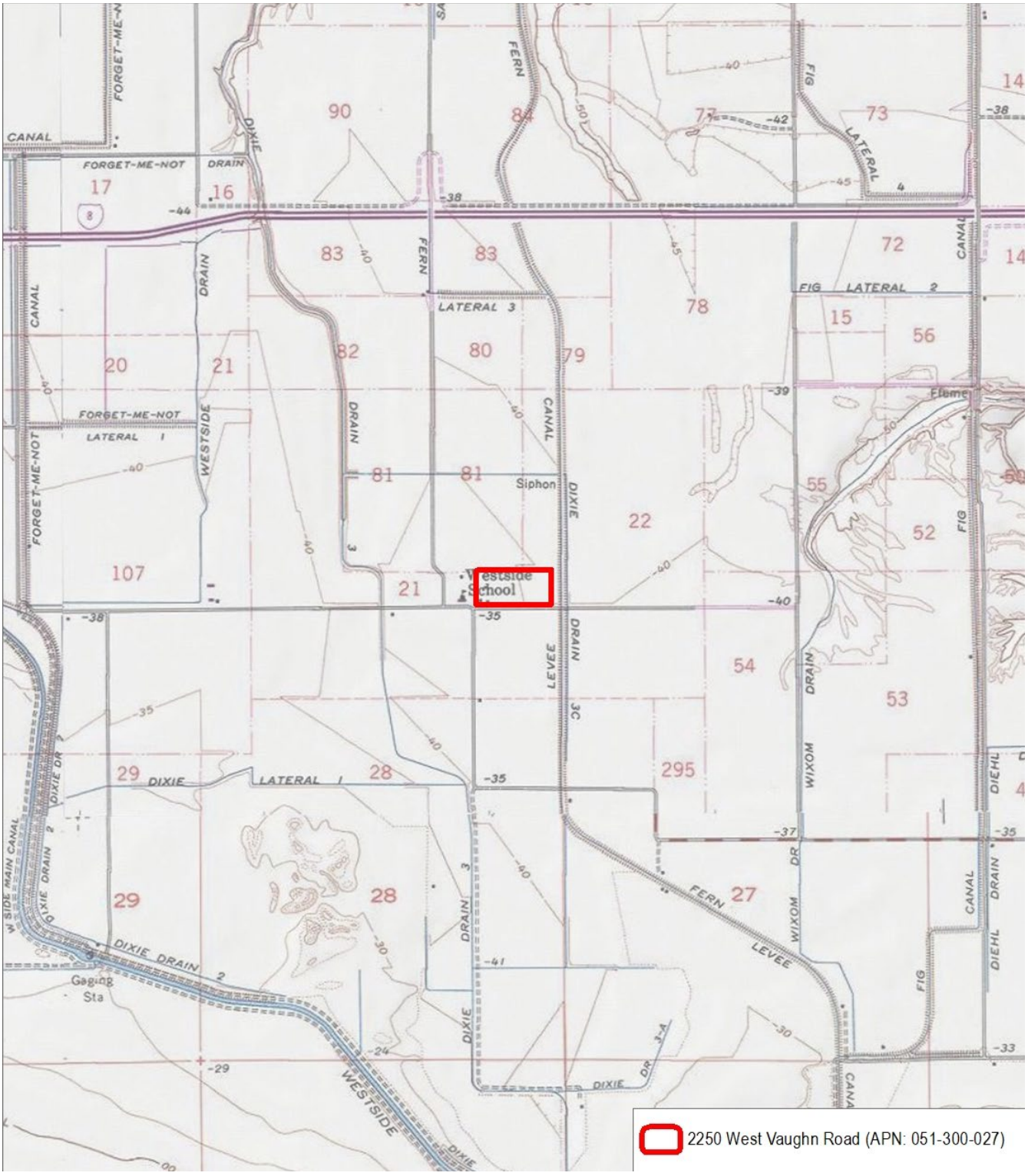
PC ORIGINAL PKG
*Required information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI # _____
Trinomial_____

 *Resource Name or # (Assigned by recorder) 2250 W Vaughn Road
*Map Name: Seeley Quadrangle *Scale: 1:24,000 *Date of map: 2000



PC ORIGINAL PKG

*Required information

*P3a. Description (Continued):

This 13.7-acre, rectangular-shaped parcel (051-300-027) is located adjacent to the API at the intersection of Westside Road and W Vaughn Road, directly east of APN 051-300-010. Mobile Home A is a single-story mobile home with an irregular-shaped floor plan with a cross-gabled roof. There are metal roof overhangs on the east and south elevations. The roof appears to be made of corrugated metal and the sidings are unknown due to the façade covered by a lattice fence. Features include palm tree landscaping and a front-facing gable porch covered with a red composite material. Mobile Home B is a single-story mobile home with a rectangular-shaped floor plan and a side-gabled roof. The roof appears to be made of corrugated metal, and the siding consists of horizontal and vertical boards along the southern elevation. Additions to the property include metal porch overhangs on the north, east, and west elevations.

Outbuilding 1, located directly 25 feet north of Mobile Home A, is a single-story shed with a rectangular floor plan built in ca. 1976 The subject property has a side-gabled roof made of corrugated metal with a pyramidal cupola on the interior north side of the building (Photograph 1). The entrance to the building appears to be on the west elevation. Alterations to the building include repairs to the roof. Outbuilding 2, located 30 feet north of Mobile Home B, is a single-story shed built in ca. 1976 The subject property has a rectangular-shaped floor plan with a side gabled roof made of corrugated metal. The main elevation is most likely on the west elevation and the material of the siding is unknown. Additions or alterations to the building are unknown (Photograph 2).

Photograph 2. View of Mobile Home A (left) and Mobile Home B (right) from gravel driveway on W Vaughn Road, facing north (Dudek 2023).



PC ORIGINAL PKG

*B10. Significance (Continued):

Historic Context

The California Development Company and the Imperial Land Company began building canal systems from Calexico heading north and west to El Centro and Holtville beginning in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000).

Vaughn Road was likely named after the Vaughn family, who were ranchers around the project API in the early 1910s. John Chester (J.C.) Vaughn Sr. and son J. Chester Vaughn were ranchers in Seeley, California, which was unincorporated lands west of El Centro (Ancestry 1918: 893). In 1911, the Vaughn family purchased land in Township 16 South, Range 12 East, in Sections 21 and 28. Prior to purchasing land in 1911, J.C. Vaughn Sr. (68) lived with his wife Huldah H. (53) and son J. Chester (28) in what was documented as "Road West of Calexico City" (U.S. Census Bureau 1910: 21). By 1920, J. Chester Vaughn was registered as farm manager in Silsbee, California, separate from J.C. Vaughn and Huldah H. Vaughn at their home in Seeley (U.S. Census Bureau 1920: 17). Huldah Vaughn was known for hosting Girls War Work Committee meetings and was the department chairmen for Home Economics, and later Westside Country Club Meetings (IVP 1918a: 2; IVP 1923a: 2). Into the 1920s, the property was used as ranching land for cattle, and dairy sales (IVP 1923b: 3). The Westside Elementary School was also a gathering place for the Seeley-Westside Farm Bureau and the Woman's Christian Temperance Union. In 1931, it was announced that J. Chester Vaughn was building an addition to his ranch home near the Westside Elementary School (IVP 1931: 2); it was also announced that year that several ranchers would organize the Westside Ranchers Association (IVP 1932: 3). In 1938, Rosielee McCoy Vaughn asked for a divorce from J. Chester Vaughn due to irritable behavior and forcing to deed some of their property to her brother (IVP 1938: 8).

Archival research does not conclude that the two buildings located on the property in the 1950s were part of the Vaughn Ranch addition that was announced in 1931. Prior to the construction of the current residential buildings ca. 1978, the property was mostly agricultural lands with two small farm buildings located in the far southwest corner near the corner of West Vaughn Road. By 1984, aerials show the two small farm buildings were demolished, and the two residences are set farther back on the property. There are currently five buildings and two garage structures on the subject parcel. Only one of the existing buildings appears on the 1980 topographic maps. The other four buildings appear on historical aerials from 1984–1985 (Ancestry 1956: 245; NETR 2023a, 2023b).

Significance Evaluation

National Register of Historic Places/California Register of Historical Resources Statement of Significance

Under NRHP Criterion A and CRHR Criterion 1, the property at 2250 West Vaughn Road lacks a direct and important association with any event significant in local, state, or national history. The Mobile Home Complex does not appear to have had a direct involvement in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, 2250 West Vaughn Road does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

PC ORIGINAL PKG

Under NRHP Criterion B and CRHR Criterion 2, the property at 2250 West Vaughn Road lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the mobile home complex at 2250 West Vaughn Road is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP Criterion B or CRHR Criterion 2.

Under NRHP Criterion C and CRHR Criterion 3, the property at 2250 West Vaughn Road does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possesses high artistic values. The extant buildings located on the subject property were developed ca. 1978. The built environment resources located on the subject property do not possess high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect for the original design of the subject property buildings. Therefore, nothing suggests that the property is associated with an expert architect. Due to the pervasive nature of the buildings and structures, a lack of high artistic value, and a lack of evidence to suggest the extant buildings and structures are associated with an expert architect, the subject property buildings are not eligible under NRHP Criterion C or CRHR Criterion 3.

Under NRHP Criterion D and CRHR Criterion 4, the property at 2250 West Vaughn Road is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, 2250 West Vaughn Road lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the property at 2250 West Vaughn Road, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), either individually or as a contributing element to an existing or potential historic district.

PC ORIGINAL PKG

B12. References

Ancestry. 1956. "California, U.S. Voter Registrations. For Raymond C. Vaughn. Imperial County." Page 295. Accessed August 17, 2023. Ancestry.com.

Farr, F.C. 1918. *The History of Imperial County*. Berkeley, California: Elms and Franks.

Gallegos, D. 1979. *Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions, Imperial Valley, California*. Volume 1. WESTEC Services. Prepared for U.S. Department of Interior.

IVP 1918b. "Doings of Clubs Personals". Imperial Valley Press October 7, 1918.

IVP 1923a. "Imperial Valley Society: Westside Country Club Holds Enjoyable Meeting". Imperial Valley Press. April 28, 1923.

IVP. 1923b. "Dairy Sale". Imperial Valley Press. March 6, 1923.

IVP. 1931. "Doings in and about Seeley" Imperial Valley Press. January 2, 1931

IVP. 1932. "Petitions for Charter to be Given Board." *Imperial Valley Press*. May 2, 1932.

IVP. 1938. "Husband Irritable, Wife Asks Divorce." Imperial Valley Press. November 10, 1938.

NETR (National Environmental Title Agency). 2023a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 27, 2023. https://www.historicaerials.com/viewer.

NETR. 2023b. "Historic Topographic Maps of the Imperial Valley, CA, dating from 1944, 1945, 1955, 1956, 1958, 1960, 1961, 1964, 1968, 1976, 1977, 1979, 1980, 1983, 1985, 1991, 2012, 2015, 2018, and 2021." Accessed April 27, 2023. https://www.historicaerials.com/viewer.

Office of Agricultural Commissioner. 2019. *Imperial County Agricultural Crop & Livestock Report*. Imperial County, California. Accessed May 3, 2023. https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf.

ParcelQuest. 2023. "Parcel Information for APN 051-300-027." Accessed May 9, 2023. https://pqweb.parcelquest.com/#home.

Pioneers Museum of Imperial Valley. 2000. History of the Imperial Valley- California. Accessed June 2, 2023.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." *Southern California Quarterly* 50(3): 279–307. https://doi.org/10.2307/41170190.

PC ORIGINAL PKG

U.S. Census Bureau. 1910. "Calexico Township, Imperial County, California." United States Government. District 0004. Image 21. Accessed August 17, 2023. Ancestry.com.

U.S. Census Bureau. 1920. "Silsbee Township, Imperial County, California." United States Government. District 0032. Image 4. Accessed August 17, 2023. Ancestry.com.

PC ORIGINAL PKG

State of California ◆ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial _____
NRHP Status Code 6Z

Other listings
Review Code Reviewer Date

 *Resource Name or #: (Assigned by recorder) 2104 West Wixom Road
P1. Other Identifier: Property between the Fern Canal and Wixom Drain on West Wixom Road

*P2.Location: ☐ Not for Publication ■ Unrestricted *a. County Imperial
and P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Mount Signal Quadrangle Date 2023 T 16S; R 12E; of Sec 27; San Bernadino B.M.
c. Address 2104 West Wixom Road City El Centro Zip 9243
d. UTM: (Give more than one for large and/or linear resources) Zone: 11S; 620247.22 m E; 3623737.78 m N
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
Assessor's Parcel Number (APN) 051-330-021

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property at address 2104 West Wixom Road (APN 051-330-021), is bound by West Wixom Road to the south, Diehl Road to the north, and located in between the Fern Canal and the Wixom Drain (*Continuation Sheet*)

See Continuation Sheet

*P3b. Resource Attributes: (List attributes and codes) HP2 Single Family Property; HP4. Ancillary building
*P4.Resources Present: ■ Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: Photograph 1. View from dirt road between Wixom Drain and Fern Canal of residential farmstead, looking northwest.

P5a. Photograph 1.



*P6. Date Constructed/Age and Source:
■ Historic ☐Prehistoric ☐ Both circa 1975 (Parcel Quest 2023)

*P7. Owner and Address:
Paul C & Alice Rodriguez
10362 Vista Del Cerro
Santee, California 92071

*P8. Recorded by:
Evan Brisentine, Dudek
605 NE 21st Avenue Ste. 200
Portland, OR, 97232

*P9. Date Recorded: 4/11/2023

*P10. Survey Type: (Describe)
Intensive Pedestrian

*P11. Report Citation: (Cite survey report and other sources or enter "none.") Brisentine, E and Jones, E. 2023. Built Environment Inventory and Evaluation Report. El Centro, California: Dudek. September 2023.

*Attachments: ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record

PC ORIGINAL PKG

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # _____
HRI # _____

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or # (Assigned by recorder) 2104 W Wixom Road *NRHP Status Code 6Z
Page 2 of 8

B1. Historic Name: None.
B2. Common Name: None.
B3. Original Use: Agricultural B4. Present Use: Residential
*B5. Architectural Style: Residential Mobile/ Manufactured Home type

*B6. Construction History: (Construction date, alterations, and date of alterations) 2104 West Wixom Road was first developed in the 1940s as agricultural farmland with multiple buildings, which were later demolished and then rebuilt in the 1970s (See Continuation Sheet)

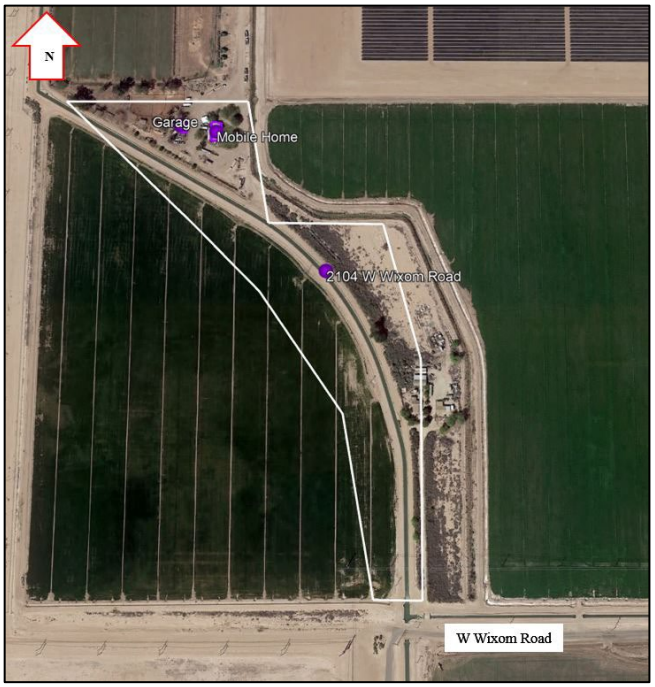
*B7. Moved? ■ No ☐Yes ☐Unknown Date: N/A Original Location: N/A
*B8. Related Features: N/A

B9a. Architect Unknown b. Builder: Unknown
*B10. Significance: Theme N/A Area N/A
Period of Significance N/A Property Type N/A Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property, located at 2104 West Wixom Road, does not meet any of the criteria for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), either individually or as part of an existing or potential historic district. The property was evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and found not to be a historical resource for the purposes of CEQA.

(See Continuation Sheet)

B11. Additional Resource Attributes: None.
*B12. References: See Continuation Sheet
B13. Remarks: Buildings located on the southeast border of the parcel were associated with 2094 West Wixom Road (APN 051-330-024)
*B14. Evaluator: Evan Brisentine, MSHP, Dudek *Date of Evaluation: 09/18/2023



(This space reserved for official comments.)

PC ORIGINAL PKG

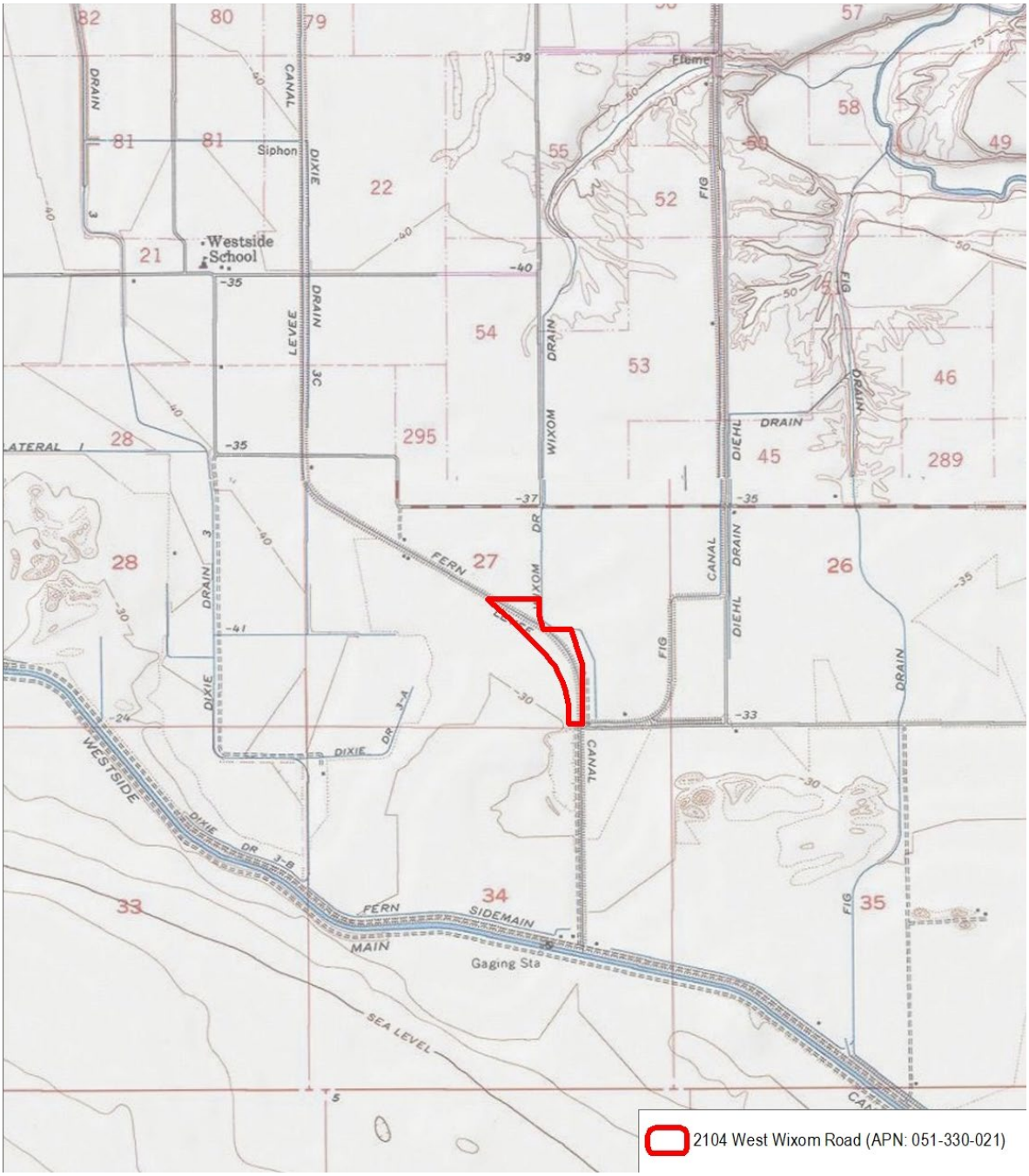
*Required information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #_____
HRI # _____
Trinomial_____

LOCATION MAP

 *Resource Name or # (Assigned by recorder) 2104 W Wixom Road
*Map Name: Mount Signal Quadrangle *Scale: 1:24,000 *Date of map: 2000



PC ORIGINAL PKG

*Required information

*P3a. Description (Continued):

The subject property was identified using aerial images and observed from the access roads. Parcel information reveals that the subject property was built in 1940. The residential property includes one residential building with two garage-like structures. Historical aerials reveal multiple structures on the property before 1953, including a residence and other ancillary buildings that were removed by 1959. Today, the property includes one mobile home located near where the Wixom Drain and the Fern Canal meet. The mobile home is a shotgun-style rectangular floor plan elevated with concrete slabs and a front gabled roof. The main façade faces east and has an overhanging roof extension over the main entrance. The roof is made of composite shingles, and the siding appears to be horizontal board. Windows on the east and south elevations include one-by-one siding windows. The west elevation includes an extended wall made of concrete and appears to have an entrance on the south elevation with decorative concrete ornament slabs (Photograph 1 and 2). Other structures located on the property include standalone metal garage overhang with metal pole siding and a flat wooden roof (NETR 2023a; ParcelQuest 2023).

Photograph 2. Road between the Fern Canal (left) and the subject property (right), showing the residence, RV, and garage structures (Dudek 2023).



PC ORIGINAL PKG

*B10. Significance (Continued):

Historic Context

The Imperial Valley has been one of the most successful farm areas in the United States since the early twentieth century. Agricultural production was slowly introduced to the valley after the first canal was created in 1901. Nutrient-rich soil varied throughout the valley and included heavy clay and loose sand. The soil type determined the type of crop grown in each region. Fruits were often grown in sands and sandy loams, while grains were cultivated in clays and clay loams. However, most of the valley was devoted to grain and alfalfa. Alfalfa was grown to supply the soil with organic matter and proved important during the valley's early agricultural industry. The land used to grow alfalfa was worth more than raw land and was in great demand for the growth of cotton and fruit. Additionally, the crops varied by season, with barley and wheat grown in the winter and corn in the summer (Farr 1918; Schonfeld 1968).

Early farming techniques involved planting on newly leveled ground, discing it, and irrigating it before harvesting it, then relying on volunteer crop growth for 3 to 4 years. Such methods did not result in a high crop yield but produced a profit for little investment. Early County settlers did not have much wealth and were dependent on crop yields. Barley provided the highest crop yield and was the main crop grown during the winters. Alfalfa grew during the spring, so barley could be planted in its nutrient-rich soil by the fall and produce a winter pasture. This practice is still used today in barley cultivation in the Imperial Valley. Most of the barley is produced today to support the livestock and dairy industries as feed for the cows (Farr 1918).

While large areas of clay are still devoted to the growth of barley, the acreage of other crops has increased throughout the County's history. By 1909, when 300 acres and a cotton gin were established, cotton became an important crop in the valley. By 1910, the acreage increased to 1,400 acres, and by 1911, the valley supported 14,000 acres of cotton, reaching a peak of 70,000 acres in 1917. Likewise, cotton and oil mills were constructed to produce the crop (Farr 1918).

The production of agricultural products continued to increase throughout the twentieth century due to the area's temperate climate. Low humidity and high temperatures have created a stable environment for the growth of crops supported by the region's extensive irrigation system (Schonfeld 1968). During the area's growth, cantaloupe and lettuce became popular summer crops and cabbage, onions, asparagus, and peas were plentiful during winter (VRIC 2023). Although the cattle industry surpassed the agricultural industry during the twenty-first century, the County's agricultural production remains significant. As of 2019, alfalfa, lettuce, broccoli, carrots, sugar beets, and spinach have dominated agricultural production in the County (Office of Agricultural Commissioner 2019).

The California Development Company and the Imperial Land Company began building canal systems from Calexico heading north and west to El Centro and Holtville beginning in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 acres to 67,000 acres. Between 1905 and 1907, the community of Silsbee was largely destroyed by flooding and was relocated. Seeley was established in 1910 along U.S. Highway 80 (Pioneers Museum of the Imperial Valley 2000; Gallegos 1979: 47).

The earliest depiction of residential development in the specific property location is of 1905 Wixom Road (Map ID 9) in 1940 topographic maps (USGS 2023). The original construction from the 1940s is not present by 1959. The subject

PC ORIGINAL PKG

*B10. Significance (Continued):

property is first visible in 1984 but was likely constructed in ca. 1975. The parcel north of the subject property and south of the Fern Canal has remained agriculture land (NETR 2023a).

Significance Evaluation

National Register of Historic Places/California Register of Historical Resources Statement of Significance

Under NRHP Criterion A and CRHR Criterion 1, the property at 2104 West Wixom Road lacks a direct and important association with any event significant in local, state, or national history. The residential farmstead does not appear to have had a direct involvement in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, 2104 West Wixom Road does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP Criterion B and CRHR Criterion 2, the property at 2104 West Wixom Road lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the subject property is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP Criterion B or CRHR Criterion 2.

Under NRHP Criterion C and CRHR Criterion 3, the property at 2104 West Wixom Road does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possesses high artistic values. The extant buildings located on the subject property were developed in ca. 1975. The built environment resources located on the subject property do not possess high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect for the original design of the subject property buildings. Therefore, nothing suggests that the property is associated with an expert architect. Due to the pervasive nature of the buildings and structures, a lack of high artistic value, and a lack of evidence to suggest the extant buildings and structures are associated with an expert architect, the subject property buildings are not eligible under NRHP Criterion C or CRHR Criterion 3.

Under NRHP Criterion D and CRHR Criterion 4, the property at 2104 West Wixom Road is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, 2104 West Wixom Road lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the property at 2104 West Wixom Road, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC

PC ORIGINAL PKG

Section 5024.1 and 14 CCR Section 15064.5(a), either individually or as a contributing element to an existing or potential historic district

PC ORIGINAL PKG

References

Farr, F.C. 1918. *The History of Imperial County*. Berkeley, California: Elms and Franks.

Gallegos, D. 1979. *Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions, Imperial Valley, California*. Volume 1. WESTEC Services. Prepared for U.S. Department of Interior.

NETR (National Environmental Title Agency). 2023a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 27, 2023. https://www.historicaerials.com/viewer.

NETR. 2023b. "Historic Topographic Maps of the Imperial Valley, CA, dating from 1944, 1945, 1955, 1956, 1958, 1960, 1961, 1964, 1968, 1976, 1977, 1979, 1980, 1983, 1985, 1991, 2012, 2015, 2018, and 2021." Accessed April 27, 2023. https://www.historicaerials.com/viewer.

Office of Agricultural Commissioner. 2019. *Imperial County Agricultural Crop & Livestock Report*. Imperial County, California. Accessed May 3, 2023. https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." *Southern California Quarterly* 50(3): 279–307. https://doi.org/10.2307/41170190.

ParcelQuest. 2023. "Parcel Information for APN 051-330-021." Accessed May 9, 2023. https://pqweb.parcelquest.com/#home.

Pioneers Museum of Imperial Valley. 2000. History of the Imperial Valley- California. Accessed June 2, 2023.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." *Southern California Quarterly* 50(3): 279–307. https://doi.org/10.2307/41170190.

USGS (U.S. Geological Survey). 2023. "Historic Topographic Maps of Imperial County, CA, Dating from 1940 to 1989." Accessed April 2023. https://livingatlas.arcgis.com/topoexplorer/.

PC ORIGINAL PKG

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

***Resource Name or #:** (Assigned by recorder) Cattle Corral Shelter

P1. Other Identifier: Cattle Corral Shelter along Derrick Road

*__P2. Location:__ ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Imperial

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** *Seeley, Calif.* **Date** 04/2024 T 16S; **R** 12E; SW ¼ **of** SW ¼ **of Sec** 23; San Bernardino **B.M.**

c. Address No Situs Address City El Centro Zip 92243

d. UTM: (Give more than one for large and/or linear resources) Zone 11, 621045 mE/ 3625023 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
Parcel Number (APN) 051-310-026

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This 40-acre, square-shaped parcel (051-310-026) is adjacent to Derrick Road, directly north of APN 051-310-027. The Cattle Corral Shelter has a rectangular floor plan and a front-gabled roof. See Continuation Sheet.

***P3b. Resource Attributes:** (List attributes and codes) HP4. Ancillary Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)Photograph 1



P5b. Description of Photo: (View, date, accession #) Photograph 1, View from the elevated dirt road between Derrick Road and the Fig Canal, looking W, 4/4/2024,

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1956 (NETR 2024)

***P7. Owner and Address:**
J R Preece Inc
2396 W. Vaughn Rd.
El Centro 92243

***P8. Recorded by:** (Name, affiliation, address)
Evan Brisentine, Dudek
605 NE 21st Avenue, Ste. 200
Portland,Oregon,97232

***P9. Date Recorded:**
04/04/2024

***P10. Survey Type:** (Describe)
Intensive Pedestrian

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Brisentine, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2024.

***Attachments:** ☐ NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐Sketch Map ☐Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** Choose an item.

***Resource Name or #** (Assigned by recorder) Cattle Corral Shelter

B1. Historic Name: None
B2. Common Name: None
B3. Original Use: Agricultural
B4. Present Use: Agricultural
***B5. Architectural Style:** Barn
***B6. Construction History:** (Construction date, alterations, and date of alterations) The Cattle Corral Shelter was constructed between 1953 and 1959. No alterations were documented or observed.

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** Click here to enter a date. **Original Location:**
***B8. Related Features:** N/A

B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance:** **Theme** Agricultural Development **Area:** El Centro
Period of Significance circa 1956 Property **Type** agricultural **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property, The Cattle Corral Shelter, does not meet the criteria for the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), either individually or as part of an existing or potential historic district. The property was evaluated in accordance with Section 106 of the National Historic Preservation Act (Section 106) and Section 15064.5 (a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The property is not considered a historic property for the purposes of Section 106 or a historical resource under CEQA. See Continuation Sheet

B11. Additional Resource Attributes: (List attributes and codes) None

***B12. References:** See Continuation Sheet

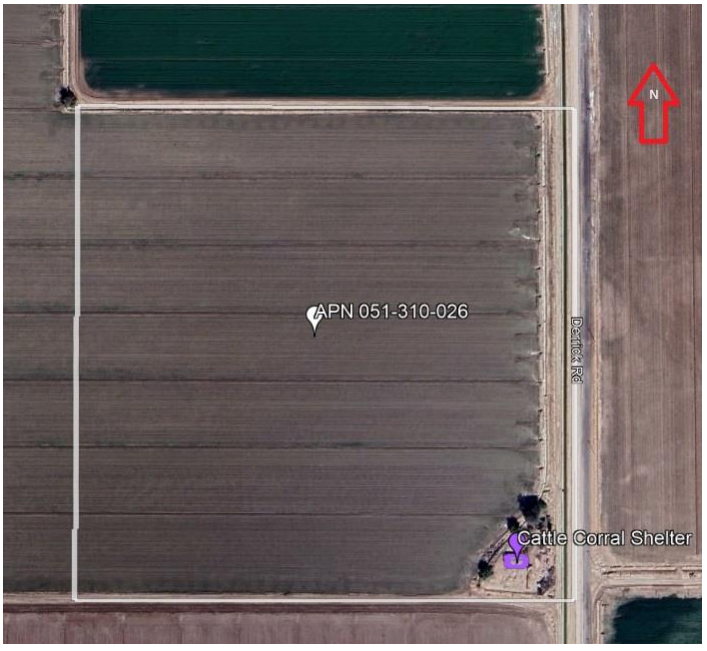
B13. Remarks: None

***B14. Evaluator:** Evan Brisentine, MSHP, Dudek

***Date of Evaluation:** 04/20/2024

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



PC ORIGINAL PKG

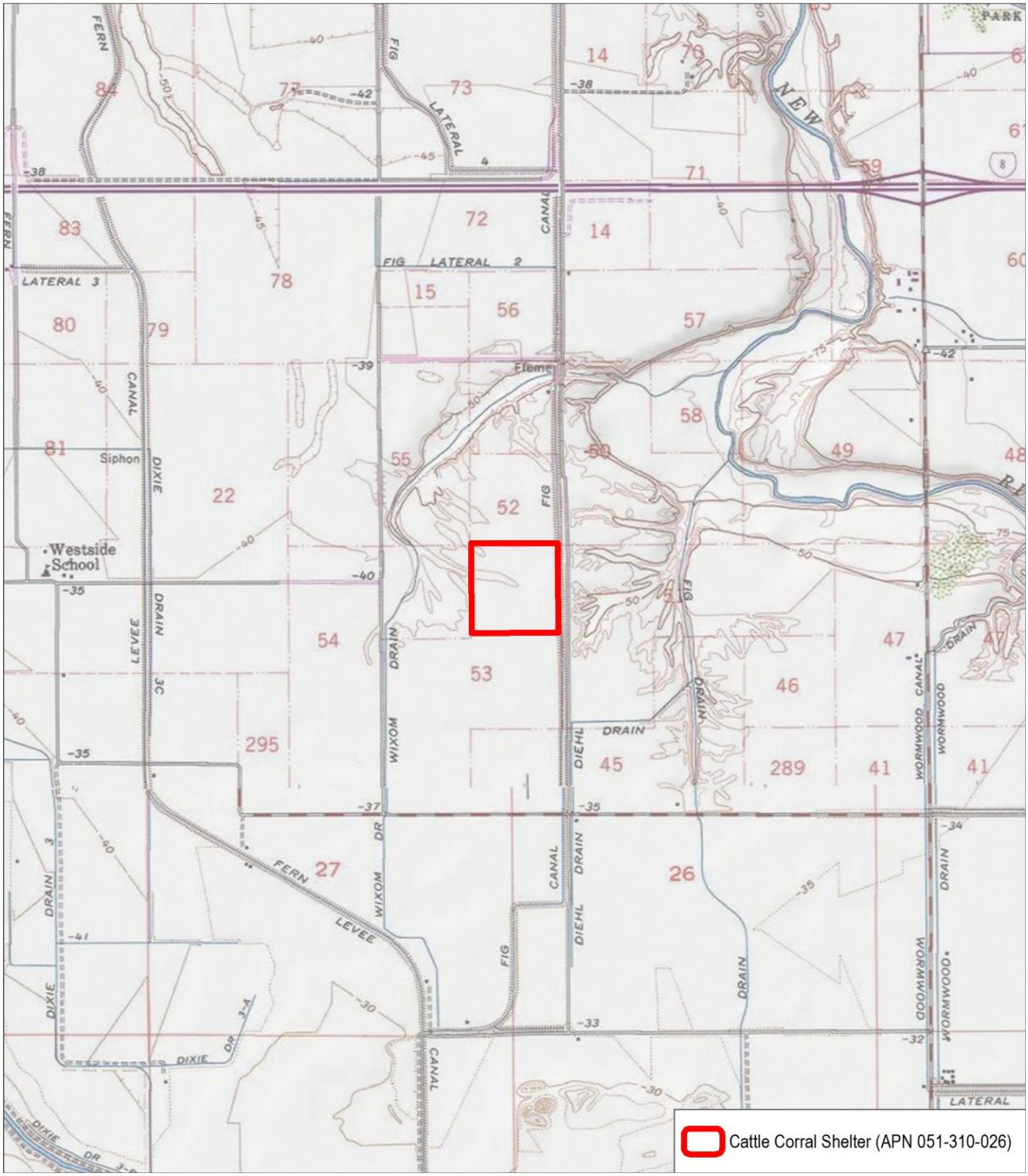
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #** (Assigned by recorder) Cattle Corral Shelter

***Map Name:** *Seeley Quadrangle* ***Scale:** 1:24,000 ***Date of map:** 2000



PC ORIGINAL PKG

* Required information

P3a. Description (cont.)

This 40-acre, square-shaped parcel (051-310-026) is adjacent to Derrick Road, directly north of APN 051-310-027. The Cattle Corral Shelter has a rectangular floor plan and a front-gabled roof. The roof overhang is oriented east to west and appears to be made of corrugated metal. There are four horizontal wood beam pillars on the south and north elevations, maintaining the roof shelter. No exterior or interior walls are present. Features of the property include triangle-shaped metal fences along the west and east borders of the corral, with a gate on the north side for entry and exit. The southern border of the corral is the only concrete-lined fence surrounding the Cattle Corral Shelter. There are no noticeable additions to the property. The fencing appears in disrepair and is surrounded by refuse such as tires, downed trees, and metal debris.

Photograph 2 View from the southeast corner of the Cattle Corral Shelter near the Fig Canal, facing northwest.



***B10. Significance (cont.)**

The Imperial Valley has been one of the most successful farm areas in the United States since the early twentieth century. Agricultural production was slowly introduced to the valley after the first canal was created in 1901. Nutrient-rich soil varied throughout the valley and included heavy clay and loose sand. The soil type determined the type of crop grown in each region. Fruits were often grown in sands and sandy loams, while grains were cultivated in clays and clay loams. However, most of the valley was devoted to grain and alfalfa. Alfalfa was grown to supply the soil with organic matter and proved crucial during the valley's early agricultural industry. The land used to grow alfalfa was worth more than raw land and was in great demand for the growth of cotton and fruit. Additionally, the crops varied by season, with barley and wheat grown in the winter and corn in the summer (Farr 1918; Schonfeld 1968).

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000).

Early farming techniques involved planting in newly leveled ground, discing it, and irrigating it before harvesting. Farmers relied on volunteer crop growth for 3 to 4 years following this establishment period. Such methods did not result in a

high crop yield but produced a profit for little investment. Early County settlers did not have much wealth and depended on crop yields. Barley provided the highest crop yield and was the main crop grown during winter. Alfalfa grew during the spring so that barley could be planted in its nutrient-rich soil by the fall and produce a winter pasture. This practice is still used today in barley cultivation in the Imperial Valley. Most of the barley is produced today to support the livestock and dairy industries as cow feed (Farr 1918).

While large areas of clay are still devoted to the growth of barley, the acreage of other crops has increased throughout the County's history. By 1909, when 300 acres and a cotton gin were established, cotton became an important crop in the valley. By 1910, the acreage increased to 1,400 acres, and by 1911, the valley supported 14,000 acres of cotton, reaching a peak of 70,000 acres in 1917. Likewise, cotton and oil mills were constructed to produce the crop (Farr 1918).

The production of agricultural products continued to increase throughout the twentieth century due to the area's temperate climate. Low humidity and high temperatures have created a stable environment for the growth of crops supported by the region's extensive irrigation system (Schonfeld 1968). During the area's development, cantaloupe and lettuce became popular summer crops, and cabbage, onions, asparagus, and peas were plentiful during winter (VRIC 2023). Although the cattle industry surpassed the agricultural industry during the twenty-first century, the County's agricultural production remains significant. As of 2019, alfalfa, lettuce, broccoli, carrots, sugar beets, and spinach have dominated agricultural production in the County (Office of Agricultural Commissioner 2019).

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000).

The subject property is in the southwest corner of Section 23 of Township 16 South, Range 12 East. The earliest map of the area shows the "road from Warners Rancho to Fort Yuma" in the northeast corner of Section 23, about 0.5 miles from the property, in 1857 (GLO 1857). By 1909, the entire area was divided into tracts, with the subject property is located in Tract No. 52 (GLO 1909). Derrick Road was likely named after the Derrick family, who were farmers around the area as early as 1893. Anderson B. Derrick first came to the Imperial Valley in 1893 and began buying land in the 1910s (IVP 1933a:2).

In 1911, George H. Woolliscroft applied for a desert land entry to establish a claim of the southwest corner of Section 23, Township 16 South, Range 12 East. Woolliscroft was an alfalfa farmer into the 1930s. Census data show George H. and Bertha M. had two children, Mabel and Merlin, and lived along San Diego Highway and Fern Ditch Road. Woolliscroft also sold Guernsey bulls and milk cows in the 1930s (IVP 1911:2, 1928:5, 1933b:5; U.S. Census Bureau 1930:16).

Prior to 1953, two buildings were located near the same area where the current Cattle Corral Shelter stands today. By 1959, the current structure and a building to the south and the north were present. The farmlands to the west and south are split into two sections, and a dirt road bisects them between Derrick Road and Jessup Road. By 1996, the only building on the property is the Cattle Corral Shelter. Today, the property is owned by J.R. Preece Inc., a large alfalfa, Bermuda grass, and oat hay grower in Imperial Valley (NETR 2024a, 2024b; ParcelQuest 2024; Preece Farms 2014).

Significance Evaluation

Under NRHP/CRHR Criterion A/1, the Cattle Corral Shelter lacks a direct and important association with any event significant in local, state, or national history. The Cattle Corral Shelter does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, the Cattle Corral Shelter does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the Cattle Corral Shelter lacks a significant association with the productive life of any person important in local, state, or national history. Archival research did reveal the original owner of the property. However, it did not reveal the property owner at the time the structure was built. Therefore, there is no known connection

to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the Cattle Corral Shelter does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possess high artistic values. The extant structures located on the subject property were developed ca. 1956. The built environment resources located on the subject property do not have high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the builder for the subject property buildings. Therefore, nothing suggests that the property is associated with an expert architect or builder. Due to the pervasive nature of the buildings and structures, a lack of high artistic value, and a lack of evidence to suggest the extant buildings and structures are associated with an expert architect, the subject property buildings are not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the Cattle Corral Shelter is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, the Cattle Corral Shelter lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the Cattle Corral Shelter, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further study of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

References (cont.)

GLO (General Land Office) 1857. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289216. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

GLO. 1909. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289218. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

Farr, F.C. 1918. *The History of Imperial County*. Berkeley, California: Elms and Franks.

IVP. 1911. "Notice for Publication." *Imperial Valley Press*. September 30, 1911. IVP. 1917.

IVP. 1928. "El Centro Lumber & Trading Co." Imperial Valley Press. December 6, 1928.

IVP. 1933a. "I.V. Hardware Company Host to Pioneers." *Imperial Valley Press*. October 30, 1933.

IVP. 1933b. "Livestock for Sale." *Imperial Valley Press*. January 9, 1933.

NETR (National Environmental Title Agency). 2024a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 2024. https://www.historicaerials.com/viewer.

NETR. 2024b. "Historic Topographic Maps of the Imperial Valley, CA, dating from 1944, 1945, 1955, 1956, 1958, 1960, 1961, 1964, 1968, 1976, 1977, 1979, 1980, 1983, 1985, 1991, 2012, 2015, 2018, and 2021." Accessed April 2024. https://www.historicaerials.com/viewer.

Office of Agricultural Commissioner. 2019. *Imperial County Agricultural Crop & Livestock Report*. Imperial County, California. Accessed May 3, 2023. https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf.

ParcelQuest. 2024. "Parcel Information for APN 051-310-026." Accessed April 2024. https://pqweb.parcelquest.com/#home.

Pioneers Museum of the Imperial Valley. 2000. History of the Imperial Valley- California. Accessed June 2, 2023.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." *Southern California Quarterly* 50(3): 279–307. https://doi.org/10.2307/41170190.

U.S. Census Bureau. 1930. "Silsbee Township, Imperial County, California." United States Government. District 0049. Image 16. Accessed April 8, 2024. Ancestry.com.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

***Resource Name or #:** (Assigned by recorder) Diehl Drain

P1. Other Identifier: Diehl Drain

*P2. **Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Imperial

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** *Seeley, Calif.* **Date** 04/2024 T 16S; **R** 12E; **Sec** 23; 26, 35 San Bernardino **B.M.**

c. Address No Situs Address City El Centro Zip 92243

d. UTM: (Give more than one for large and/or linear resources) Zone 11, 621631 mE/ 3624748 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
N/A

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Diehl Drain is an earthen-dug irrigation drainage ditch located east of Derrick Road. It flows west from the Fig Drain south to the agricultural fields along Derrick Road. See Continuation Sheet.

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/ Aqueduct

***P4. Resources Present:** ☐ Building ☒ Structure ☒ Object ☐ Site ☐ District ☐ Element of District ☒ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)Photograph 1



P5b. Description of Photo: (View, date, accession #) Photograph 1, View from southern end of Diehl Drain, facing north., 4/4/2024,

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1950 (NETR 2024)

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded by:** (Name, affiliation, address)
Evan Brisentine, Dudek
605 NE 21st Avenue, Ste. 200
Portland,Oregon,97232

***P9. Date Recorded:**
04/04/2024

***P10. Survey Type:** (Describe)
Intensive Pedestrian

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Brisentine, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2024.

***Attachments:** ☐ NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐Sketch Map ☐Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** Choose an item.
***Resource Name or #** (Assigned by recorder) Diehl Drain

B1. Historic Name: Diehl Drain
B2. Common Name: Diehl drain
B3. Original Use: Water Conveyance for irrigation
B4. Present Use: Water Conveyance for irrigation
***B5. Architectural Style:** None
***B6. Construction History:** (Construction date, alterations, and date of alterations) circa 1950

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** Click here to enter a date. **Original Location:**
***B8. Related Features:** N/A

B9a. Architect: Unknown b. Builder: Mr. Edgar
***B10. Significance:** **Theme** Agricultural Water Conveyance **Area:** Imperial Valley
Period of Significance circa 1950 Property **Type** agricultural **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property, The Diehl Drain, does not meet the criteria for the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR), either individually or as part of an existing or potential historic district. The property was evaluated in accordance with Section 106 of the National Historic Preservation Act (Section 106) and Section 15064.5 (a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The property is not considered a historic property for the purposes of Section 106 or a historical resource under CEQA. See Continuation Sheet.

B11. Additional Resource Attributes: (List attributes and codes) None

***B12. References:** See Continuation Sheet

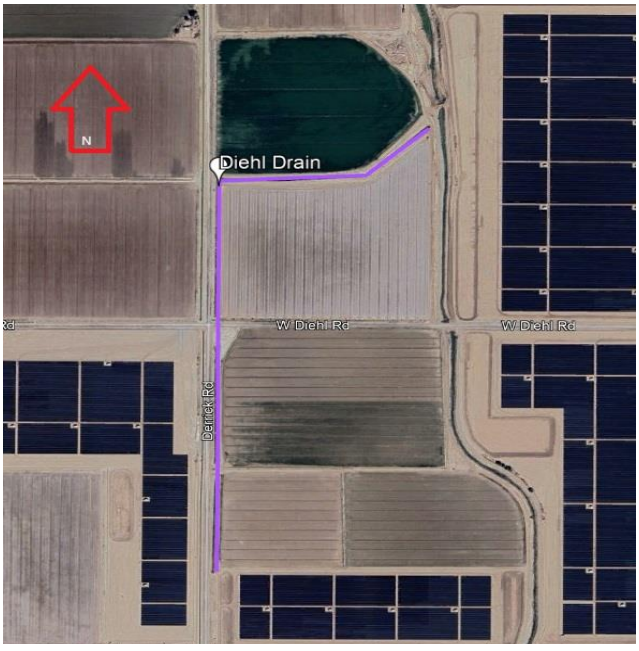
B13. Remarks: None

***B14. Evaluator:** Evan Brisentine, MSHP, Dudek

***Date of Evaluation:** 04/20/2024

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



PC ORIGINAL PKG

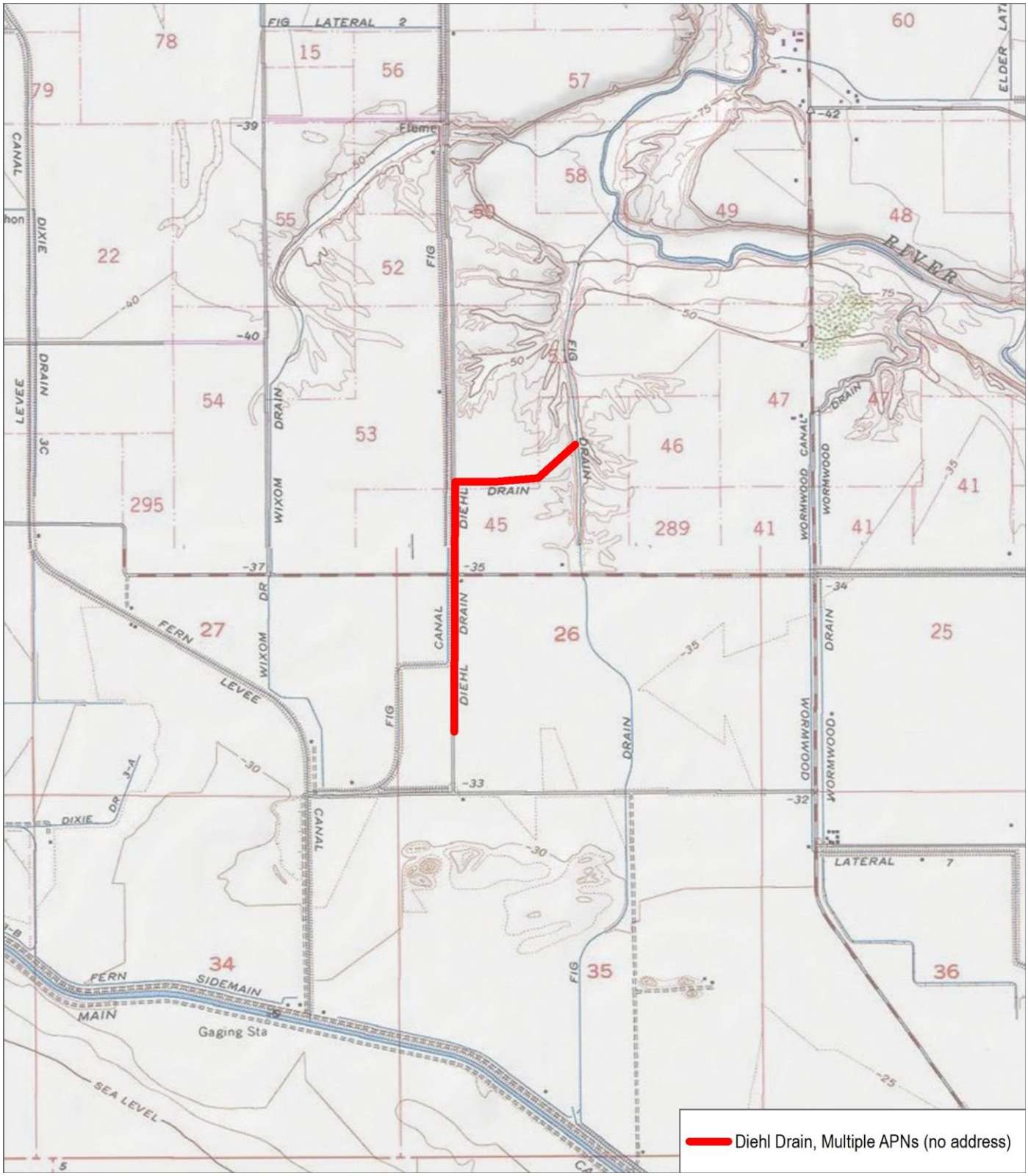
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #** (Assigned by recorder) Diehl Drain

***Map Name:** *Seeley Quadrangle* ***Scale:** 1:24,000 ***Date of map:** 2000



PC ORIGINAL PKG

* Required information

P3a. Description (cont.)

The Diehl Drain is an earthen-dug irrigation drainage ditch located east of Derrick Road. It flows west from the Fig Drain south to the agricultural fields along Derrick Road. The 1.1-mile drainage ditch is approximately 10–20 feet wide and about 10–15 feet deep. Concrete weirs are located intermittently along the drain to control water flow, including underneath Diehl Road and other paths between agricultural fields. It appears the Diehl Drain would allow overflow water to drain into the Fig Drain. However, the concrete weirs connecting the irrigation system appear out of use and in decay. The Diehl Drain connects to the agricultural lands to the north and south.

Photograph 2 View of Diehl Drain and its connection to the Fig Drain, facing east.



***B10. Significance (cont.)**

Historic Context

On one of the railroad corridor expeditions in 1853, led by Lieutenant R.S. Williamson of the U.S. Topographical Engineers, geologist Dr. W.P. Blake discovered the possibility of irrigating Imperial Valley from the Colorado River. Blake observed a region of fertile soil capable of sustaining agriculture but lacking in water. He measured the elevation of the dry bed of the Salton Sea at below sea level, a fact that made feasible the cutting of a canal from the Colorado River to the interior of the desert, which would bring with it a constant supply of water. Dr. Oliver Wozencraft, a proponent of irrigating Imperial Valley, lobbied for support from the California legislature, who, in turn, asked Congress to convey 6 million acres to Wozencraft. He endeavored to secure action by Congress on his plan to bring potable water to the desert for more than 30 years without success. Despite Wozencraft's failed attempts at reclamation, by his death in 1887, settlers and developers alike were eager to bring water to Imperial Valley.

Preliminary investigations into the feasibility of irrigating the Colorado Desert began in 1893 with the Colorado River Irrigation Company, but an inability to procure financing quickly led to the company's demise. In 1896, the California Development Company was organized to take charge of the project under the direction of Charles Rockwood and George Chaffey. The proposed canal route would run from the diversion point at the Colorado River through lower California, Mexico, and back into the United States to reach Imperial Valley. To gain title to the Mexican lands, the California Development Company organized a Mexican subsidiary company in 1898, La Sociedad de Yrrigacion y Terrenos de la Baja California, S.A. With plans to colonize the region, the California Development Company divided Imperial Valley into

districts of varying size, each with its own mutual water company.

By August 1900, the construction of the first diversion canal and irrigation system was underway. The canal was excavated from the point of diversion from the Colorado River south about 4 miles into Mexico, where it swung west and connected for 40 miles within the Alamo River channel until it reached Sharp's Heading and turned north to the Salton Sea. A series of main canals were constructed to divert from Sharp's Heading into various stretches of Imperial Valley: Central Main, Boundary, West Side Main, and East Side Main. The Central Main Canal continued from the international boundary line and traveled north through the present cities of Brawley and Imperial; the Boundary Canal diverted west toward Calexico; the West Side Main Canal traveled west toward Calexico then north; and the East Side Main Canal traveled east then north to the eastern Salton Sea. Water delivery reached Calexico through the Boundary Canal less than 1 year after construction. That same year, nearly 1,500 acres of land were put under crops.

Few natural resources existed for potable water prior to the construction of the irrigation system. Domestic use water had to be hauled to the valley via the Southern Pacific Railroad Company. Once considered a barren wasteland, Imperial Valley was making good progress with colonization by the early 1900s. The Imperial Land Company, under the direction of the California Development Company, began laying out townsites in Imperial Valley based primarily on the density of purchased water stock. The town of Imperial was the first to be laid out, with settlement commencing in 1901. Over 10 years, from 1901 to 1911, irrigable land in Imperial Valley jumped from 1,500 to 220,000 acres. As the water flowed into the valley, so did the people. In 1902, a year after the first water reached Calexico, nearly 2,000 settlers came to Imperial Valley. The population grew to seven times that amount within 4 years. The Southern Pacific Railroad Company constructed the Niland to Calexico branch rail to accommodate the growing population. At the same time, the newly developed Imperial Valley broke apart from San Diego County to form its government as Imperial County, with El Centro being designated as the county seat.

The rapid colonization of Imperial Valley in the early 1900s strained the relationship between settlers and the California Development Company. Initial land and soil surveys were inaccurate, leading to discrepancies with land titles, and water rights held by the California Development Company were called into question. The Reclamation Act was proposed in 1902 to take the Imperial Valley project from the California Development Company and organize it under government control. Further dissatisfaction with the California Development Company arose after hurried and negligible attempts to correct the Colorado River's heavily silt-laden waters, ultimately leading to grave damage to Imperial Valley following the massive flooding events of 1905 and 1906. The Colorado River break destroyed nearly 12,000 acres of cultivated land and more than 30,000 acres of irrigable land, caused immense damage to the Southern Pacific Railroad Company lines, and severed the ties between settlers and the California Development Company. The Colorado River break took two years to repair, during which time the Salton Sea filled and expanded to a length of 50 miles and a width of 10 to 15 miles.

Preceding litigation brought to the California Development Company following the flood resulted in bankruptcy. In 1911, a petition to form an irrigation district was presented to the Imperial County Board of Supervisors. IID was formed to acquire properties of the bankrupt California Development Company and its Mexican subsidiary. Over a decade, IID completed improvements and repairs to the canal and distribution system, rebuilt the entire Westside Main Canal, received deeds to all the properties of the California Development Corporation, and acquired 13 mutual water companies. Within a few years of acquiring the mutual companies, IID was delivering water to nearly 550,000 acres of Imperial Valley. Over a century later, IID is still servicing communities of the Imperial Valley. IID is the largest irrigation district in the nation, and Imperial County ranks among the top 10 agricultural counties in the nation. Of the water IID transports, 98% is used for agriculture, and the remaining 2% is treated potable water and delivered to the nine current Imperial Valley cities (Dowd 1956; IID 2024).

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000). Between 1905

and 1907, the community of Silsbee was largely destroyed by flooding and was relocated. Seeley was established in 1910 along U.S. Highway 80 (Pioneers Museum of the Imperial Valley 2000; Gallegos 1979: 47).

The Imperial Valley has been one of the most successful farm areas in the United States since the early twentieth century. Agricultural production was slowly introduced to the valley after the first canal was created in 1901. Nutrient-rich soil varied throughout the valley and included heavy clay and loose sand. The soil type determined the type of crop grown in each region. Fruits were often grown in sands and sandy loams, while grains were cultivated in clays and clay loams. However, most of the valley was devoted to grain and alfalfa. Alfalfa was grown to supply the soil with organic matter and proved crucial during the valley's early agricultural industry. The land used to grow alfalfa was worth more than raw land and was in great demand for the growth of cotton and fruit. Additionally, the crops varied by season, with barley and wheat grown in the winter and corn in the summer (Farr 1918; Schonfeld 1968).

Early farming techniques involved planting in newly leveled ground, discing it, and irrigating it before harvesting. Farmers relied on volunteer crop growth for 3 to 4 years following this establishment period. Such methods did not result in a high crop yield but produced a profit for little investment. Early County settlers did not have much wealth and depended on crop yields. Barley provided the highest crop yield and was the main crop grown during winter. Alfalfa grew during the spring so that barley could be planted in its nutrient-rich soil by the fall and produce a winter pasture. This practice is still used today in barley cultivation in the Imperial Valley. Most of the barley is produced today to support the livestock and dairy industries as cow feed (Farr 1918).

While large areas of clay are still devoted to the growth of barley, the acreage of other crops has increased throughout the County's history. By 1909, when 300 acres and a cotton gin were established, cotton became an important crop in the valley. By 1910, the acreage increased to 1,400 acres, and by 1911, the valley supported 14,000 acres of cotton, reaching a peak of 70,000 acres in 1917. Likewise, cotton and oil mills were constructed to produce the crop (Farr 1918).

The production of agricultural products continued to increase throughout the twentieth century due to the area's temperate climate. Low humidity and high temperatures have created a stable environment for the growth of crops supported by the region's extensive irrigation system (Schonfeld 1968). During the area's development, cantaloupe and lettuce became popular summer crops, and cabbage, onions, asparagus, and peas were plentiful during winter (VRIC 2023). Although the cattle industry surpassed the agricultural industry during the twenty-first century, the County's agricultural production remains significant. As of 2019, alfalfa, lettuce, broccoli, carrots, sugar beets, and spinach have dominated agricultural production in the County (Office of Agricultural Commissioner 2019).

In 1910, the Fig Canal, along with other distribution ditches were constructed as part of the irrigation land extension system by Mr. Edgar (IVP 1910:4). Both the Fig Canal and Fig Drain were not visible until a 1940s topographic map (NETR 2024b). A 1953 aerial photo shows the earliest visual of the Diehl Drain. However, it does not appear to be connected to the Fig Drain. By 1959, the Diehl Drain was widened and appeared regulated in size. A connection to the Fig Drain appears to be constructed. Between 1959 and 1984, a residential building was removed near the Diehl Drain on the southeast corner of Derrick Road and Diehl Road. The drain appeared unchanged until the late 1990s and 2000s, when the section connecting to the Fig Drain appeared slightly wider, with farm equipment and hay derricks staged north of the drain (NETR 2024a, 2024b).

Significance Evaluation

Under NRHP/CRHR Criterion A/1, the Diehl Drain lacks a direct and important association with any event significant in local, state, or national history. The Diehl Drain does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. For these reasons, the Diehl Drain does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the Diehl Drain lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the Diehl Drain is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the Diehl Drain does not include resources that fully embody the distinctive characteristics of a type, period, or construction method or represent the work of a master or creative individual or that possess high artistic values. The ditch appears to be constructed ca. 1950. The linear resource does not have high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect or builder for the original design of the earthen drainage ditch. Therefore, nothing suggests that the property is associated with an expert. Due to the pervasive nature of the resource, a lack of high artistic value, and a lack of evidence to suggest the drainage ditch associated with an expert architect, the subject property is not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the Diehl Drain is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, the Diehl Drain lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the Diehl Drain, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

References (cont.)

Dowd, M.J. 1956. *IID: The First 40 Years*. History of the Imperial Irrigation District and the Development of Imperial Valley. Unpublished manuscript on file at IID. Accessed November 12, 2021. https://www.iid.com/home/showpublisheddocument/6000/635648001335730000.

Farr, F.C. 1918. *The History of Imperial County*. Berkeley, California: Elms and Franks.

Gallegos, D. 1979. *Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions, Imperial Valley, California*. Volume 1. WESTEC Services. Prepared for U.S. Department of Interior.

GLO (General Land Office) 1857. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289216. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

GLO. 1909. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289218. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

IID (Imperial Irrigation District). 2024. "Water History." Imperial County, California. Accessed April 2024. https://www.iid.com/about-iid/mission-vision-statements/iid-history.

IVP. 1910. "District twelve Extensions." *Imperial Valley Press*. October 22, 1910.

NETR (National Environmental Title Agency). 2024a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 2024. https://www.historicaerials.com/viewer.

NETR. 2024b. "Historic Topographic Maps of the Imperial Valley, CA, dating from 1944, 1945, 1955, 1956, 1958, 1960, 1961, 1964, 1968, 1976, 1977, 1979, 1980, 1983, 1985, 1991, 2012, 2015, 2018, and 2021." Accessed April 2024. https://www.historicaerials.com/viewer.

Office of Agricultural Commissioner. 2019. *Imperial County Agricultural Crop & Livestock Report*. Imperial County, California. Accessed May 3, 2023. https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf.

Pioneers Museum of the Imperial Valley. 2000. History of the Imperial Valley- California. Accessed June 2, 2023.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." *Southern California Quarterly* 50(3): 279–307. https://doi.org/10.2307/41170190.

PC ORIGINAL PKG

U.S. Census Bureau. 1930. "Silsbee Township, Imperial County, California." United States Government. District 0049. Image 16. Accessed April 8, 2024. Ancestry.com.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

***Resource Name or #:** (Assigned by recorder) Fig Drain

P1. Other Identifier: Fig Drain

*P2. **Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Imperial

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** *Seeley, Calif.* **Date** 04/2024 T 16S; **R** 12E; **Sec** 23; 26, 35 San Bernardino **B.M.**

c. Address No Situs Address City El Centro Zip 92243

d. UTM: (Give more than one for large and/or linear resources) Zone 11, 621690 mE/ 3624202 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
N/A

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Fig Drain is an earthen-dug irrigation drainage ditch located east of Derrick Road and flows in between the New River and the Westside Main Canal. See Continuation Sheet.

***P3b. Resource Attributes:** (List attributes and codes) HP20. Canal/ Aqueduct

***P4. Resources Present:** ☐ Building ☒ Structure ☒ Object ☐ Site ☐ District ☐ Element of District ☒ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)Photograph 1



P5b. Description of Photo: (View, date, accession #) Photograph 1, View of the Fig Drain and an intact concrete weir near Diehl Road, facing south 4/4/2024,

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
Circa 1940 (NETR 2024)

***P7. Owner and Address:**
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, CA 92251

***P8. Recorded by:** (Name, affiliation, address)
Evan Brisentine, Dudek
605 NE 21st Avenue, Ste. 200
Portland,Oregon,97232

***P9. Date Recorded:**
04/04/2024

***P10. Survey Type:** (Describe)
Intensive Pedestrian

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Brisentine, E. Confidential Built Environment Inventory and Evaluation Report near El Centro, Imperial County, California. Prepared by Dudek 2024.

***Attachments:** ☐ NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐Sketch Map ☐Other (List):

PC ORIGINAL PKG

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** Choose an item.
***Resource Name or #** (Assigned by recorder) Fig Drain

B1. Historic Name: Fig Drain
B2. Common Name: Fig Drain
B3. Original Use: Water Conveyance for irrigation
B4. Present Use: Water Conveyance for irrigation
***B5. Architectural Style:** None
***B6. Construction History:** (Construction date, alterations, and date of alterations) circa 1950

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** Click here to enter a date. **Original Location:**
***B8. Related Features:** N/A

B9a. Architect: Unknown b. Builder: Mr. Edgar
***B10. Significance:** **Theme** Agricultural Water Conveyance **Area:** Imperial Valley
Period of Significance circa 1940 Property **Type** agricultural **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property, The Fig Drain, does not meet the criteria for the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), either individually or as part of an existing or potential historic district. The property was evaluated in accordance with Section 106 of the National Historic Preservation Act (Section 106) and Section 15064.5 (a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The property is not considered a historic property for the purposes of Section 106 or a historical resource under CEQA. See Continuation Sheet.

B11. Additional Resource Attributes: (List attributes and codes) None

***B12. References:** See Continuation Sheet

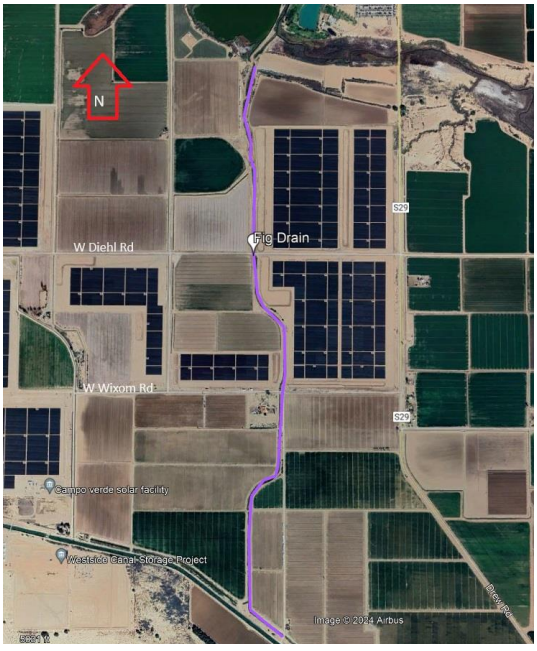
B13. Remarks: None

***B14. Evaluator:** Evan Brisentine, MSHP, Dudek

***Date of Evaluation:** 04/20/2024

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



PC ORIGINAL PKG

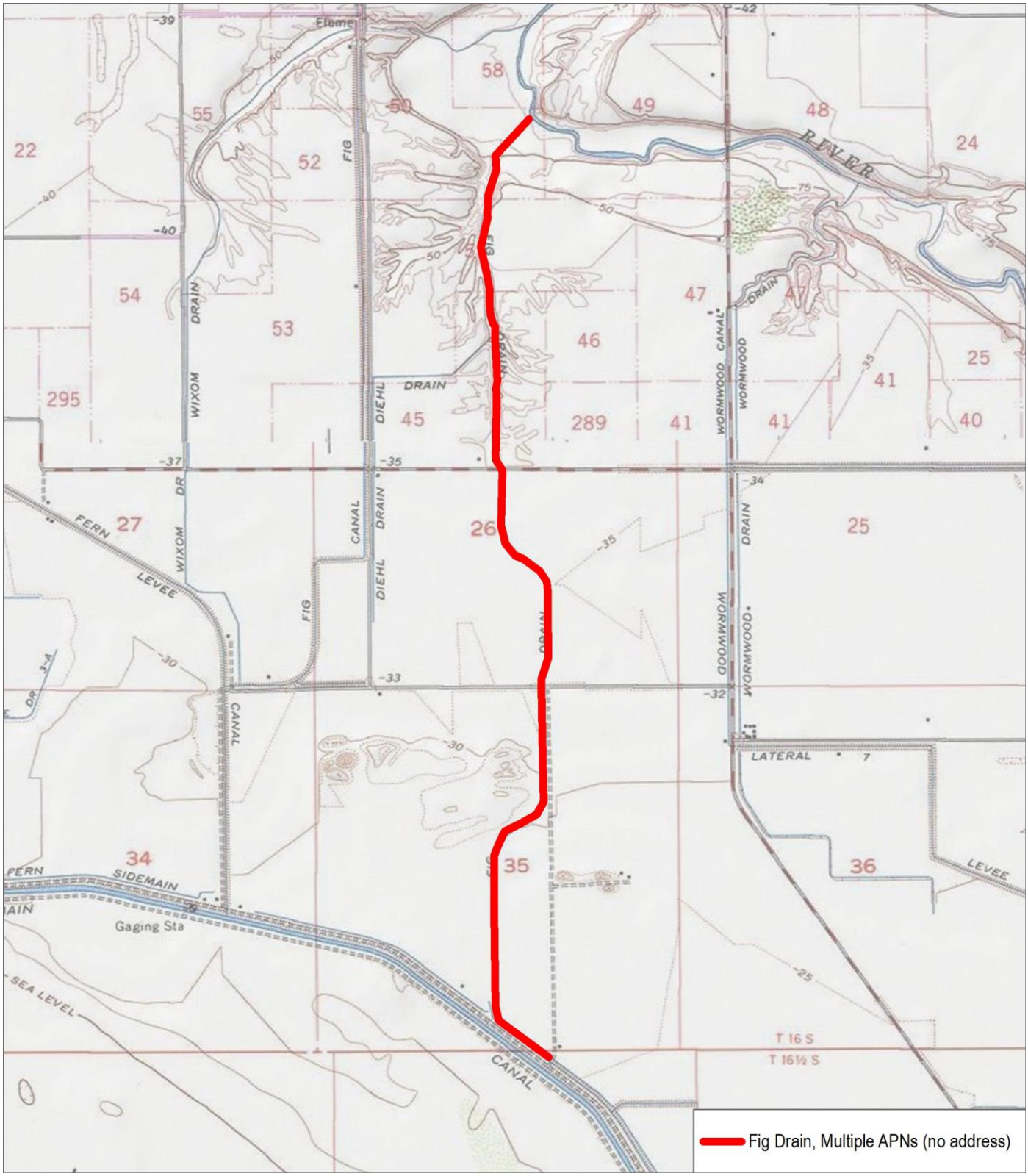
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #** (Assigned by recorder) Fig Drain

***Map Name:** *Seeley Quadrangle* ***Scale:** 1:24,000 ***Date of map:** 2000



PC ORIGINAL PKG

* Required information

***P3a. Description (cont.)**

The Fig Drain is an earthen-dug irrigation drainage ditch located east of Derrick Road and flows in between the New River and the Westside Main Canal. The 2.6-mile drainage ditch is approximately 20–30 feet wide and about 15–20 feet deep and runs north and south along agricultural land. Concrete weirs are located intermittently along the drain to control water flow, including underneath Diehl Road, Wixom Road, and other dirt paths between agricultural fields. The Fig Drain extends parallel to the Westside Main Canal 2 miles south towards Mt. Signal.

Photograph 2 View of Fig Drain near W Wixom Road, facing north.



***B10. Significance (cont.)**

Historic Context

On one of the railroad corridor expeditions in 1853, led by Lieutenant R.S. Williamson of the U.S. Topographical Engineers, geologist Dr. W.P. Blake discovered the possibility of irrigating Imperial Valley from the Colorado River. Blake observed a region of fertile soil capable of sustaining agriculture but lacking in water. He measured the elevation of the dry bed of the Salton Sea at below sea level, a fact that made feasible the cutting of a canal from the Colorado River to the interior of the desert, which would bring with it a constant supply of water. Dr. Oliver Wozencraft, a proponent of irrigating Imperial Valley, lobbied for support from the California legislature, who, in turn, asked Congress to convey 6 million acres to Wozencraft. He endeavored to secure action by Congress on his plan to bring potable water to the desert for more than 30 years without success. Despite Wozencraft's failed attempts at reclamation, by his death in 1887, settlers and developers alike were eager to bring water to Imperial Valley.

Preliminary investigations into the feasibility of irrigating the Colorado Desert began in 1893 with the Colorado River Irrigation Company, but an inability to procure financing quickly led to the company's demise. In 1896, the California Development Company was organized to take charge of the project under the direction of Charles Rockwood and George Chaffey. The proposed canal route would run from the diversion point at the Colorado River through lower California, Mexico, and back into the United States to reach Imperial Valley. To gain title to the Mexican lands, the California Development Company organized a Mexican subsidiary company in 1898, La Sociedad de Yrrigacion y Terrenos de la Baja California, S.A. With plans to colonize the region, the California Development Company divided Imperial Valley into districts of varying size, each with its own mutual water company.

PC ORIGINAL PKG

By August 1900, the construction of the first diversion canal and irrigation system was underway. The canal was excavated from the point of diversion from the Colorado River south about 4 miles into Mexico, where it swung west and connected for 40 miles within the Alamo River channel until it reached Sharp's Heading and turned north to the Salton Sea. A series of main canals were constructed to divert from Sharp's Heading into various stretches of Imperial Valley: Central Main, Boundary, West Side Main, and East Side Main. The Central Main Canal continued from the international boundary line and traveled north through the present cities of Brawley and Imperial; the Boundary Canal diverted west toward Calexico; the West Side Main Canal traveled west toward Calexico then north; and the East Side Main Canal traveled east then north to the eastern Salton Sea. Water delivery reached Calexico through the Boundary Canal less than 1 year after construction. That same year, nearly 1,500 acres of land were put under crops.

Few natural resources existed for potable water prior to the construction of the irrigation system. Domestic use water had to be hauled to the valley via the Southern Pacific Railroad Company. Once considered a barren wasteland, Imperial Valley was making good progress with colonization by the early 1900s. The Imperial Land Company, under the direction of the California Development Company, began laying out townsites in Imperial Valley based primarily on the density of purchased water stock. The town of Imperial was the first to be laid out, with settlement commencing in 1901. Over 10 years, from 1901 to 1911, irrigable land in Imperial Valley jumped from 1,500 to 220,000 acres. As the water flowed into the valley, so did the people. In 1902, a year after the first water reached Calexico, nearly 2,000 settlers came to Imperial Valley. The population grew to seven times that amount within 4 years. The Southern Pacific Railroad Company constructed the Niland to Calexico branch rail to accommodate the growing population. At the same time, the newly developed Imperial Valley broke apart from San Diego County to form its government as Imperial County, with El Centro being designated as the county seat.

The rapid colonization of Imperial Valley in the early 1900s strained the relationship between settlers and the California Development Company. Initial land and soil surveys were inaccurate, leading to discrepancies with land titles, and water rights held by the California Development Company were called into question. The Reclamation Act was proposed in 1902 to take the Imperial Valley project from the California Development Company and organize it under government control. Further dissatisfaction with the California Development Company arose after hurried and negligible attempts to correct the Colorado River's heavily silt-laden waters, ultimately leading to grave damage to Imperial Valley following the massive flooding events of 1905 and 1906. The Colorado River break destroyed nearly 12,000 acres of cultivated land and more than 30,000 acres of irrigable land, caused immense damage to the Southern Pacific Railroad Company lines, and severed the ties between settlers and the California Development Company. The Colorado River break took two years to repair, during which time the Salton Sea filled and expanded to a length of 50 miles and a width of 10 to 15 miles.

Preceding litigation brought to the California Development Company following the flood resulted in bankruptcy. In 1911, a petition to form an irrigation district was presented to the Imperial County Board of Supervisors. IID was formed to acquire properties of the bankrupt California Development Company and its Mexican subsidiary. Over a decade, IID completed improvements and repairs to the canal and distribution system, rebuilt the entire Westside Main Canal, received deeds to all the properties of the California Development Corporation, and acquired 13 mutual water companies. Within a few years of acquiring the mutual companies, IID was delivering water to nearly 550,000 acres of Imperial Valley. Over a century later, IID is still servicing communities of the Imperial Valley. IID is the largest irrigation district in the nation, and Imperial County ranks among the top 10 agricultural counties in the nation. Of the water IID transports, 98% is used for agriculture, and the remaining 2% is treated potable water and delivered to the nine current Imperial Valley cities (Dowd 1956; IID 2024).

The California Development Company and the Imperial Land Company began building canal systems from Calexico, heading north and west to El Centro and Holtville, in 1900. During the next 5 years, water companies were formed, and water from the Colorado River was distributed throughout the Imperial Valley, allowing settlers to apply for a desert land entry claim and settle along newly irrigated lands. By 1905, residents in the Imperial Valley numbered 12,000, and irrigated acreage increased from 1,500 to 67,000 acres (Pioneers Museum of the Imperial Valley 2000). Between 1905 and 1907, the community of Silsbee was largely destroyed by flooding and was relocated. Seeley was established in 1910 along U.S. Highway 80 (Pioneers Museum of the Imperial Valley 2000; Gallegos 1979: 47).

The Imperial Valley has been one of the most successful farm areas in the United States since the early twentieth century. Agricultural production was slowly introduced to the valley after the first canal was created in 1901. Nutrient-rich soil varied throughout the valley and included heavy clay and loose sand. The soil type determined the type of crop grown in each region. Fruits were often grown in sands and sandy loams, while grains were cultivated in clays and clay loams. However, most of the valley was devoted to grain and alfalfa. Alfalfa was grown to supply the soil with organic matter and proved crucial during the valley's early agricultural industry. The land used to grow alfalfa was worth more than raw land and was in great demand for the growth of cotton and fruit. Additionally, the crops varied by season, with barley and wheat grown in the winter and corn in the summer (Farr 1918; Schonfeld 1968).

Early farming techniques involved planting in newly leveled ground, discing it, and irrigating it before harvesting. Farmers relied on volunteer crop growth for 3 to 4 years following this establishment period. Such methods did not result in a high crop yield but produced a profit for little investment. Early County settlers did not have much wealth and depended on crop yields. Barley provided the highest crop yield and was the main crop grown during winter. Alfalfa grew during the spring so that barley could be planted in its nutrient-rich soil by the fall and produce a winter pasture. This practice is still used today in barley cultivation in the Imperial Valley. Most of the barley is produced today to support the livestock and dairy industries as cow feed (Farr 1918).

While large areas of clay are still devoted to the growth of barley, the acreage of other crops has increased throughout the County's history. By 1909, when 300 acres and a cotton gin were established, cotton became an important crop in the valley. By 1910, the acreage increased to 1,400 acres, and by 1911, the valley supported 14,000 acres of cotton, reaching a peak of 70,000 acres in 1917. Likewise, cotton and oil mills were constructed to produce the crop (Farr 1918).

The production of agricultural products continued to increase throughout the twentieth century due to the area's temperate climate. Low humidity and high temperatures have created a stable environment for the growth of crops supported by the region's extensive irrigation system (Schonfeld 1968). During the area's development, cantaloupe and lettuce became popular summer crops, and cabbage, onions, asparagus, and peas were plentiful during winter (VRIC 2023). Although the cattle industry surpassed the agricultural industry during the twenty-first century, the County's agricultural production remains significant. As of 2019, alfalfa, lettuce, broccoli, carrots, sugar beets, and spinach have dominated agricultural production in the County (Office of Agricultural Commissioner 2019).

A 1945 topographic map provides the earliest visual of the Fig Drain. However, it only shows the portion of the Fig Drain south of Diehl Road. By 1959, agricultural fields populated the area along the Fig Drain. By this time, the Fig and Deihl Drains appeared to be connected and widened. By 1984, agricultural fields were established along the Fig Drain near the confluence of the New River Wixom Drain area. The Fig Drain has experienced minimal changes since the 1980s (NETR 2024a, 2024b).

Significance Evaluation

Under NRHP/CRHR Criterion A/1, the Fig Drain lacks a direct and important association with any event significant in local, state, or national history. The Fig Drain does not appear to have been directly involved in significant events or activities by contributing to the area's economy, productivity, or identity as an agricultural community. The Fig Drain was just an addition to a preexisting irrigation system that had already been established throughout the area. Therefore, the Fig Drain does not appear eligible for listing in the NRHP/CRHR under Criterion A/1.

Under NRHP/CRHR Criterion B/2, the Fig Drain lacks a significant association with the productive life of any person important in local, state, or national history. Archival research does not indicate that the Fig Drain is connected to any significant individuals or persons at a local, state, or national level. Due to a lack of significant associations with important persons in history, the subject property is not recommended to be eligible under NRHP/CRHR Criterion B/2.

Under NRHP/CRHR Criterion C/3, the Fig Drain does not include resources that fully embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or creative individual or that possess high artistic values. The ditch appears to be constructed ca. 1940. The linear resource does not possess high artistic value or contribute to the significance of a larger resource. Despite archival research, no information was found about the architect for the original design of the earthen drainage ditch. Therefore, nothing suggests that the property is associated with an expert architect. Due to the pervasive nature of the resource, a lack of high artistic value, and a lack of evidence to suggest the drainage ditch associated with an expert architect, the subject property is not eligible under NRHP/CRHR Criterion C/3.

Under NRHP/CRHR Criterion D/4, the Fig Drain is not significant as a source, or likely source, of important information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. Therefore, the property is not eligible under NRHP/CRHR Criterion D/4.

In conclusion, the Fig Drain lacks sufficient significance to meet any criteria for listing in the NRHP or CRHR. To be eligible for listing in either register, a resource must first meet one or more of the significance criteria outlined above before determining whether the resource retains its historic character and can convey its significance. In the specific case of the Fig Drain, an integrity analysis was considered immaterial because the evaluation found that the property lacked the necessary significance to warrant further analysis of its physical and historic integrity.

Consequently, the subject property is not a historic property based on the NRHP criteria outlined in 36 CFR Section 60.4, individually or as a contributing element to an existing or potential historic district. Similarly, the evaluation also concludes that the subject property is not a historical resource for the purposes of CEQA as defined under PRC Section 5024.1 and 14 CCR Section 15064.5(a), individually or as a contributing element to an existing or potential historic district.

References (cont.)

Dowd, M.J. 1956. *IID: The First 40 Years*. History of the Imperial Irrigation District and the Development of Imperial Valley. Unpublished manuscript on file at IID. Accessed November 12, 2021. https://www.iid.com/home/showpublisheddocument/6000/635648001335730000.

Farr, F.C. 1918. *The History of Imperial County*. Berkeley, California: Elms and Franks.

Gallegos, D. 1979. *Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions, Imperial Valley, California*. Volume 1. WESTEC Services. Prepared for U.S. Department of Interior.

GLO (General Land Office) 1857. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289216. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

GLO. 1909. General Land Survey of Township 16S, Range 12E. San Bernadino Meridian, California. DM ID 289218. Available at the Bureau of Land Management. U.S. Department of the Interior. https://glorecords.blm.gov/search/default.aspx.

IID (Imperial Irrigation District). 2024. "Water History." Imperial County, California. Accessed April 2024. https://www.iid.com/about-iid/mission-vision-statements/iid-history.

IVP. 1910. "District twelve Extensions." *Imperial Valley Press*. October 22, 1910.

NETR (National Environmental Title Agency). 2024a. "Historic Aerial Photographs the Imperial Valley, CA, dating from 1953, 1984, 1985, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020." Accessed April 2024. https://www.historicaerials.com/viewer.

NETR. 2024b. "Historic Topographic Maps of the Imperial Valley, CA, dating from 1944, 1945, 1955, 1956, 1958, 1960, 1961, 1964, 1968, 1976, 1977, 1979, 1980, 1983, 1985, 1991, 2012, 2015, 2018, and 2021." Accessed April 2024. https://www.historicaerials.com/viewer.

Office of Agricultural Commissioner. 2019. *Imperial County Agricultural Crop & Livestock Report*. Imperial County, California. Accessed May 3, 2023. https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf.

Pioneers Museum of the Imperial Valley. 2000. History of the Imperial Valley- California. Accessed June 2, 2023.

Schonfeld, R.R. 1968. "The Early Development of California's Imperial Valley: Part I." Southern California Quarterly 50(3): 279–307. https://doi.org/10.2307/41170190.

PC ORIGINAL PKG

U.S. Census Bureau. 1930. "Silsbee Township, Imperial County, California." United States Government. District 0049. Image 16. Accessed April 8, 2024. Ancestry.com.

PC ORIGINAL PKG

Appendix D

Paleontological Resources Inventory Report
for the Big Rock 2 Cluster Solar and Storage Project

PC ORIGINAL PKG

PC ORIGINAL PKG

Paleontological Resources
Inventory Report

Big Rock 2 Cluster Solar and Storage Project Imperial County, California

MAY 2024

Lead Agency:

IMPERIAL COUNTY
801 Main Street
El Centro, California 92243

Project Proponent:

90FI 8ME LLC
4370 Town Center Boulevard,
Suite 110 El Dorado Hills, California 95762

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Sarah Siren, MSc Michael Williams, PhD

PC ORIGINAL PKG

This report was prepared by Dudek Paleontologists Sarah Siren, MSc and Michael Williams, PhD, who meet the Society for Vertebrate Paleontology's qualification standards for qualified professional paleontologists. This report is intended for the exclusive use of the Client and its representatives. It contains professional conclusions and recommendations concerning the potential for project-related impacts to paleontological resources based on the results of Dudek's investigation. It should not be considered to constitute project clearance with regard to the treatment of paleontological resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

Printed on 30% post-consumer recycled material.

PC ORIGINAL PKG

Table of Contents

SECTION **PAGE NO.**

Management Summary iii

1 Introduction 1
1.1 Paleontological Resources 1

2 Project Description and Location 3
2.1 Regulatory Context 3

3 Methods 5
3.1 Geological Map and Literature Review 5
3.2 Paleontological Records Search 5
3.3 Field Survey 5

4 Results 7
4.1 Geological Map and Literature Review 7
4.2 Paleontological Records Search 7
4.3 Field Survey 8

5 Summary and Management Recommendations 9

6 References 11

TABLE

1 Paleontological Resource Sensitivity Criteria 1

FIGURES

1 Project Location Map 13
2 Overgrown cropland with low visibility. View to the northeast 15
3 Plowed field. View to the east 17
4 Recently flooded field. View to the north 19
5 Lake Cahuilla shells observed in exposed earthen berm. View to the west 21

APPENDIX

A SDNHM Records Search Results (Confidential)

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Management Summary

Dudek conducted a paleontological resources inventory study for the Big Rock 2 Energy Project (project). The project is located in unincorporated Imperial County, California (Figure 1, Project Location), south of Interstate Highway 8 and west of the town of El Centro, California. The project would involve development of a solar facility on approximately 1,849 acres of agricultural land. The entire 1,849 acres of the project area will be developed and disturbed by project implementation. The paleontological resources project area (project area) is composed of the following 24 Assessor's Parcel Numbers (APNs): 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300- 035, 051-300-036, 051-300-037, 051-310-027, 051-310-028, 051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350-007, and 051-350-008 (Figure 1).

This study was completed under the provisions of the state, California Environmental Quality Act (CEQA), local regulations, and the Society of Vertebrate Paleontology (SVP 2010) guidelines and included a paleontological records search through the San Diego Natural History Museum (SDNHM), a geological map and paleontological and geological literature review, a paleontological resources pedestrian survey of the 1,849-acre project area, and the preparation of this paleontological resources technical report.

The SDNHM paleontological records search results indicated a total of fourteen recorded fossil localities were found within a 1-mile radius buffer of the project area. The localities within a 1-mile radius buffer of the project area were discovered as a part of the Sunrise Powerlink, Imperial Valley Substation, and Campo Verde Solar Facility projects, and include fossil specimens from Lake Cahuilla deposits and the Brawley Formation.

No in situ fossils were observed during the paleontological survey; however, shell material within artificial fill deposits derived from ancient Lake Cahuilla was noted within man-made berms and along improvements for the farming canals.

Dudek's Paleontological Resources Inventory of the project area found that it is underlain by ancient Lake Cahuilla sediments that have high paleontological resource sensitivity or potential when not disturbed by agricultural activities. Surficial sediments that have been disturbed by agricultural activities or other man-made disturbances have low paleontological resource sensitivity and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments would be considered a potentially significant impact. Therefore, a paleontological monitoring program is recommended during grading within previously undisturbed sedimentary deposits within the project area.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

1 Introduction

Dudek completed a paleontological resources review of the potential for impacts during construction activities for the Big Rock 2 Cluster Solar and Storage Project (project) located in Imperial County, California (Figure 1, Project Location). This report was prepared by Sarah Siren, MSc and Michael William, PhD, qualified Principal Investigators (PI) for Paleontology, with assistance from Jason Collins, BA, in accordance with state California Environmental Quality Act (CEQA) guidelines and the Society of Vertebrate Paleontology (SVP) standards (SVP 2010).

The project consists of approximately 1,849 acres of agricultural lands, associated roads, and irrigation canals located in Imperial County, California. The project is anticipated to interconnect into approved transmission facilities in the paleontological resources project area (project area) via an above-ground generation transmission line (gen-tie). The project is located within the Seeley, Plaster City, and Mount Signal, California U.S. Geological Survey 7.5-Minute Series Topographic Quadrangle maps, Township 16S, Range 12E; Sections 14, 15, 16, 20, 21, 22, 23, 26, 27, 28, 29, 33, 34.

In accordance with CEQA, Appendix G and SVP (2010) standards, Dudek's qualified paleontologists completed a records search at the San Diego Natural History Museum (SDNHM), conducted a pedestrian field survey of the project area, and performed a desktop geological and paleontological literature review.

1.1 Paleontological Resources

Paleontological resources are the remains or traces of plants and animals that are preserved in Earth's crust, and per the SVP (2010) guidelines, are older than written history or older than approximately 5,000 years. They are limited, nonrenewable resources of scientific and educational value and are afforded protection under state laws and regulations. This study satisfies requirements in accordance with state guidelines (13 PRC, 21000 et seq.) and Public Resources Code Section 5097.5 (Stats 1965, c 1136, p. 2792). This analysis also complies with guidelines and significance criteria specified by SVP (2010). Table 1 provides definitions for high, undetermined, low, and no paleontological resource potential, or sensitivity, as set forth in and by the SVP (2010) Guidelines for Determining Significance: Paleontological Resources.

Table 1. Paleontological Resource Sensitivity Criteria

Resource Sensitivity / Potential	Definition
High	Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.). Paleontological potential consists of both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, plant, or trace fossils and (b) the importance of recovered evidence for new and

PC ORIGINAL PKG

Table 1. Paleontological Resource Sensitivity Criteria

Resource Sensitivity / Potential	Definition
	significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data. Rock units which contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and rock units which may contain new vertebrate deposits, traces, or trackways are also classified as having high potential.
Undetermined Potential	Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist (see "definitions" section in this document) to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.
Low Potential	Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e. g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.
No Potential	Some rock units have no potential to contain significant paleontological resources, for instance high- grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

Source: Society of Vertebrate Paleontology 2010.

PC ORIGINAL PKG

2 Project Description and Location

Dudek conducted a paleontological resources inventory study for the Big Rock 2 Energy Project (project). The project is located in unincorporated Imperial County, California (Figure 1), south of Interstate Highway 8 and west of the town of El Centro, California. The project proposes to develop a solar facility on agricultural land. The entire 1,849 acres of the project area will be developed and disturbed by project implementation. The project area is composed of the following 24 Accessors Parcel Numbers (APNs): 051-270-020, 051-270-028, 051-270-036, 051- 270-041, 051-280-054, 051-290-018, 051-290-019, 051-300-011, 051-300-016, 051-300-026, 051-300-032, 051-300-035, 051-300-036, 051-300-037,051-310-027, 051-310-028, 051-320-005, 051-320-006, 051-320-007, 051-330-003, 051-350-004, 051-350-006, 051-350- 007, and 051-350-008. Specifically, the project is located in Township 16 South, Range 12 East, in Sections 14, 15, 16, 20, 21, 22, 23, 26, 27, 28, 29, 33, 34 of the Seeley, Plaster City, and Mount Signal, California USGS 7.5-Minute Series Quadrangles (Figure 1).

The applicant proposes to develop a 1,849-acre solar and battery energy storage facility located in Imperial County, California. The project includes the construction and operation of a 500-megawatt (MW) utility-scale photovoltaic solar energy generation and a 500MW battery energy storage system (BESS). The project's permanent facilities would include service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, energy storage system(s), and operations and maintenance (O&M) facilities. Power generated by the project would be collected using up to 66-kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated project substation. A 230-kV overhead gen-tie line would then link the project substation to the planned Liebert Switchyard, which will be connected via an overhead 230-kilovolt gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation.

2.1 Regulatory Context

California Environmental Quality Act

The CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This study satisfies project requirements in accordance with CEQA (13 PRC, 21000 et seq.) and Public Resources Code Section 5097.5 (Stats 1965, c 1136, p. 2792). This analysis also complies with guidelines and significance criteria specified by SVP (2010).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the "Environmental Checklist Form," which addresses the potential for adverse impacts to "unique paleontological resource[s] or site[s] or … unique geological feature[s]." This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, CEQA provides that generally, a resource shall be considered "historically significant" if it has yielded or may be likely to yield information important in prehistory (PRC 15064.5 [a][3][D]). Paleontological resources would fall within this category. The PRC, Chapter 1.7, sections 5097.5 and 30244 also regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

PC ORIGINAL PKG

California Public Resources Code Section 5097.5

In addition to CEQA's requirements, Public Resources Code Section 5097.5 (Stats 1965, c 1136, p. 2792) regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

PC ORIGINAL PKG

3 Methods

3.1 Geological Map and Literature Review

Published geological maps (Dibblee and Minch 2008) and published and unpublished reports were reviewed to identify geological units on the project area and determine their paleontological sensitivity.

3.2 Paleontological Records Search

A paleontological records search was received from the SDNHM on April 11, 2023. The purpose of the museum records search is to determine whether there are any known fossil localities in or near the project area, identify the sensitivity of geological units present within the project area, and aide in determining whether a paleontological mitigation program is warranted to avoid or minimize potential adverse effects of construction on paleontological resources.

3.3 Field Survey

Dudek paleontological field lead, Jason Collins, conducted an initial independent pedestrian survey of the project area on April 10, 2023, and dual archaeological/paleontological surveys were conducted with field lead Javier Hernandez on April 11 through 14, 2023 and from April 4 to April 5, 2024. The survey was conducted to determine if any surficial paleontological resources were present within the project area and confirm geological mapping. The survey utilized standard paleontological survey procedures and consisted of systematic surface inspection of exposed geological units with high paleontological sensitivity. The ground surface was examined for the presence of exposed surficial fossils. Ground disturbances such as canals, drainages, road cuts, and animal burrows were also visually inspected for exposed fossils and sediments.

All fieldwork was documented using field notes and iPad technology with close-scale field maps and aerial photographs. Location-specific photographs were taken using an Apple iPad equipped with eight (8) mega-pixel (MP) 1080p resolution and georeferenced PDF maps of the project area. Accuracy of this device ranged between 3 and 10 meters. All field notes, photographs, and records related to the current study are on file at Dudek's Encinitas, California office.

PC ORIGINAL PKG

INTETNIONALLY LEFT BLANK

PC ORIGINAL PKG

4 Results

4.1 Geological Map and Literature Review

The project area lies within the Colorado Desert Geomorphic Province (CGS 2002). This Province is bound by a southern extension of the Mojave Desert Geomorphic Province on the east, the Peninsular Ranges Geomorphic Province on the west, the eastern Transverse Ranges and Mojave Desert Geomorphic Provinces to the north, and the United States – Mexico border on the south (CGS 2002).

According to the published geological mapping at a scale of 1:62,500 by Dibblee and Minch (2008) and the SDNHM records search (Confidential Appendix A), the project area is underlain by Quaternary alluvium and Lake Cahuilla deposits (map unit Qa-Qc). Repeated inundation and desiccation sequences are recorded in lacustrine and fluvial sediments associated with Lake Cahuilla within the Salton Trough. These freshwater inundation and desiccation events bring with them assemblages of fossils and subfossils, including freshwater invertebrates and freshwater and terrestrial vertebrates, that provide a snapshot of the biota living in a given location at a time in the distant past.

The Holocene to late Pleistocene (Li et al. 2007) Lake Cahuilla sediments have an extensive record of preserving freshwater invertebrate and freshwater and terrestrial vertebrate taxa (Roeder and Calvano 2014). According to stratigraphic sections of boring walls examined by CRM TECH for the nearby Imperial Solar Energy Center West (ISECW) project, sediments derived from Lake Cahuilla vary in thickness from approximately 5 to 15 feet and indicate shallow water deposition (Quinn and Kerridge 2015). Quinn and Dahdul (2014) reported *Anodonta* sp., *Helisoma newberryi*, *Physa humerosa,* and *Tryonia protea* from geotechnical work on the ISECW project; Quinn and Kerridge (2015) reported *Planorbella tenuis*, *Physa humerosa*, *Physa* like *P. wattsi*, *Physa* sp., *Tryonia protea*, *Tryonia* sp., *Fluminicola* sp., and *Anodonta* sp. from boring in the southern part of the ISEC West Project; and Siren (2017) reported *Pyrgulopsis longinqua, P. californiensis, Tryonia porrecta* (*T. protea*)*, Physa* sp., *Helisoma* sp., *Ferrissia* sp., *Anodonta californiensis,* and *Chionactus* cf. *Chionactus occipitalis* salvaged during paleontological monitoring for the ISECW project. Finally, Stewart (2008) reported *Tryonia protea, Flumnicola* sp., *Physella* cf. *P. humerosa, Valvata* sp.*, Anodonta californiensis,* unidentified ostracods, cyprinid and centrarchid fish, a rodent tibia, and large mammal rib fragment from Lake Cahuilla sediments sampled from a gas turbine plant project in Niland, California.

4.2 Paleontological Records Search

The records search results letter from the SDNHM was received on April 11, 2023. A total of 14 recorded fossil localities were found within a 1-mile radius buffer of the project area (Confidential Appendix A). The localities were discovered as a part of the Sunrise Powerlink, Imperial Valley Substation, and Campo Verde Solar Facility projects, and include fossil specimens from Lake Cahuilla deposits and the Brawley Formation (Confidential Appendix A). Given the record of the Lake Cahuilla deposits and Brawley Formation to produce scientifically significant fossils and resultant high paleontological resource potential of the mapped geological units, the SDNHM recommended the implementation of a full paleontological mitigation program.

PC ORIGINAL PKG

4.3 Field Survey

The approximately 1,849-acre project area in Imperial County consists of existing agricultural fields with ground visibility ranging from 0% to 100% depending on whether the field was recently plowed and what type of produce was being grown (Figures 2 and 3). Areas where there was less than 5% of the ground surface visible or where the area was flooded for crop irrigation were not surveyed (Figure 4). No in situ fossils were observed during the paleontological survey; however, shell material within artificial fill deposits derived from ancient Lake Cahuilla was noted within man-made berms and along improvements for the farming canals (Figure 5).

PC ORIGINAL PKG

5 Summary and Management Recommendations

The project area is underlain by ancient Lake Cahuilla sediments that have high paleontological sensitivity when not disturbed by agricultural activities (Confidential Appendix A; Dibblee and Minch 2008). Surficial sediments that have been disturbed by agricultural activities or other human-made disturbances have low paleontological resource sensitivity and do not require paleontological monitoring. However, deeper excavations, below the disturbance level, that encounter undisturbed Lake Cahuilla sediments would be considered a potentially significant impact. Therefore, a paleontological monitoring program is recommended during grading within previously undisturbed sedimentary deposits within the project area. Dudek recommends implementation the following measure to minimize impacts to subsurface paleontological resources. With implementation of the following measure, impacts of the project are considered less than significant.

Prior to commencement of any grading activity in areas of high paleontological sensitivity, the applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The qualified paleontologist or their representative shall attend the preconstruction meeting and a qualified paleontological monitor shall be present during excavation activities associated with project construction. The depth of excavation that requires paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving. The paleontological monitor will be equipped to salvage fossils as they are unearthed (to help avoid construction delays). Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. Costs for laboratory and museum curation fees are the responsibility of the project applicant/proponent. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

6 References

CGS (California Geological Survey). 2002. California Geomorphic Provinces: Note 36. 4 pp.

Dibblee, T.W. and J.A. Minch. 2008. Geologic map of the Coyote Wells and Hebert 15-Minute Quadrangles, Imperial County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-405, scale 1:62,500.

Li, C.-L., C.F. You, T.-L. Ku, X.-M. Xu, H.P. Buchheim, N.-J. Wau, R.-W. Wang, and M.-L. Shen. 2007. Isotopic and geochemical evidence of palaeoclimate changes in the Salton Basin, California during the past 20 yrk: 2 87SR/86 ratio in lake tufa as an indicator of connection between the Colorado River and Salton Basin. In Lake Systems, Sedimentary archives climate change and tectonics, EGU General Assembly.

Palaeogeography, Palaeoclimatology, Palaeoecology, 259(2-3):198-212.

Quinn, H. M., and M. Dahdul. 2014. Paleontological resources monitoring report, Imperial Solar Energy Center West Geotechnical Boring Project. Prepared for: CSOLAR Development LLC, 1044 N. 115th Street, Suite 400, Omaha, NE 68154, and U. S. Bureau of Land Management, El Centro Field Office, 1661, S. Fourth Street, El. Centro, CA 92243. Prepared by: CRM TECH, 1016 E Cooley Drive, Suite A/B. Colton, CA 92324, and UltraSystems Environmental Inc., 16431 Scientific Way, Irvine, CA 92618.

Quinn, H. M., and B. Kerridge. 2015. Paleontological Resources Monitoring Report: Imperial Solar Energy Center – West Transmission Line BLM Land prepared by CRM TECH and UltraSystems Environmental Inc: 1-60.

Roeder, M. A., and G. Calvano. 2014. Records of freshwater bony fish from the latest Pleistocene to Holocene Lake Cahuilla beds of western Imperial County, California. Pp. 94-99, *in* Not a drop to drink (R. E. Reynolds, ed.), California State University Desert Studies Consortium, Desert Symposium Field Guide and Proceedings.

Siren, S.A. 2017. Paleontological Mitigation Monitoring Report for the Imperial Solar Energy Center West Project, in the County of Imperial, California (Conditional Use Permit No. 10-0012) Early Draft Submittal. Prepared for Tenaska Inc.

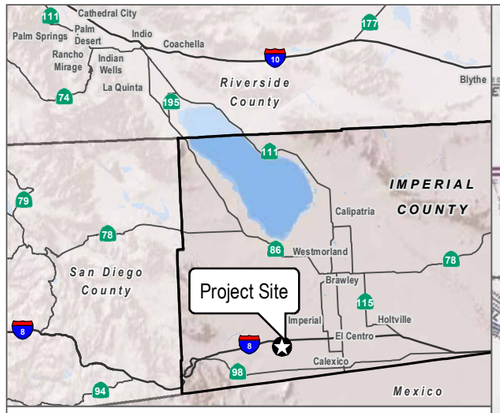
Stewart, J.D. 2008. Paleontological Resource Monitoring and Mitigation Final Report: Niland Gas Turbine Plant Project. Unpublished report prepared for the Imperial Irrigation District.

SVP (Society of Vertebrate Paleontology). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Available; https://vertpaleo.org/wpcontent/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG



- Project Boundary
- Project BESS
- Project Substation
- Switchyard
- Gen-Tie Line
- Alternative Gen-Tie Line

Township 16S Range 12E Section 13
Township 16S Range 12E Section 14
Township 16S Range 12E Section 15
Township 16S Range 12E Section 16
Township 16S Range 12E Section 17
Township 16S Range 12E Section 18
Township 16S Range 12E Section 19
Township 16S Range 12E Section 20
Township 16S Range 12E Section 21
Township 16S Range 12E Section 22
Township 16S Range 12E Section 23
Township 16S Range 12E Section 24
Township 16S Range 12E Section 25
Township 16S Range 12E Section 26
Township 16S Range 12E Section 27
Township 16S Range 12E Section 28
Township 16S Range 12E Section 29
Township 16S Range 12E Section 30
Township 16S Range 12E Section 31
Township 16S Range 12E Section 32
Township 16S Range 12E Section 33
Township 16S Range 12E Section 34
Township 16S Range 12E Section 35
Township 16S Range 12E Section 36

SOURCE: USGS 7.5-Minute Series Seeley, Plaster City, Mount Signal, Yuha Basin Quadrangles

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

P# 15207

PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Figure 2. Overgrown cropland with low visibility. View to the northeast.



PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Figure 3. Plowed field. View to the east.



PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Figure 4. Recently flooded field. View to the north.

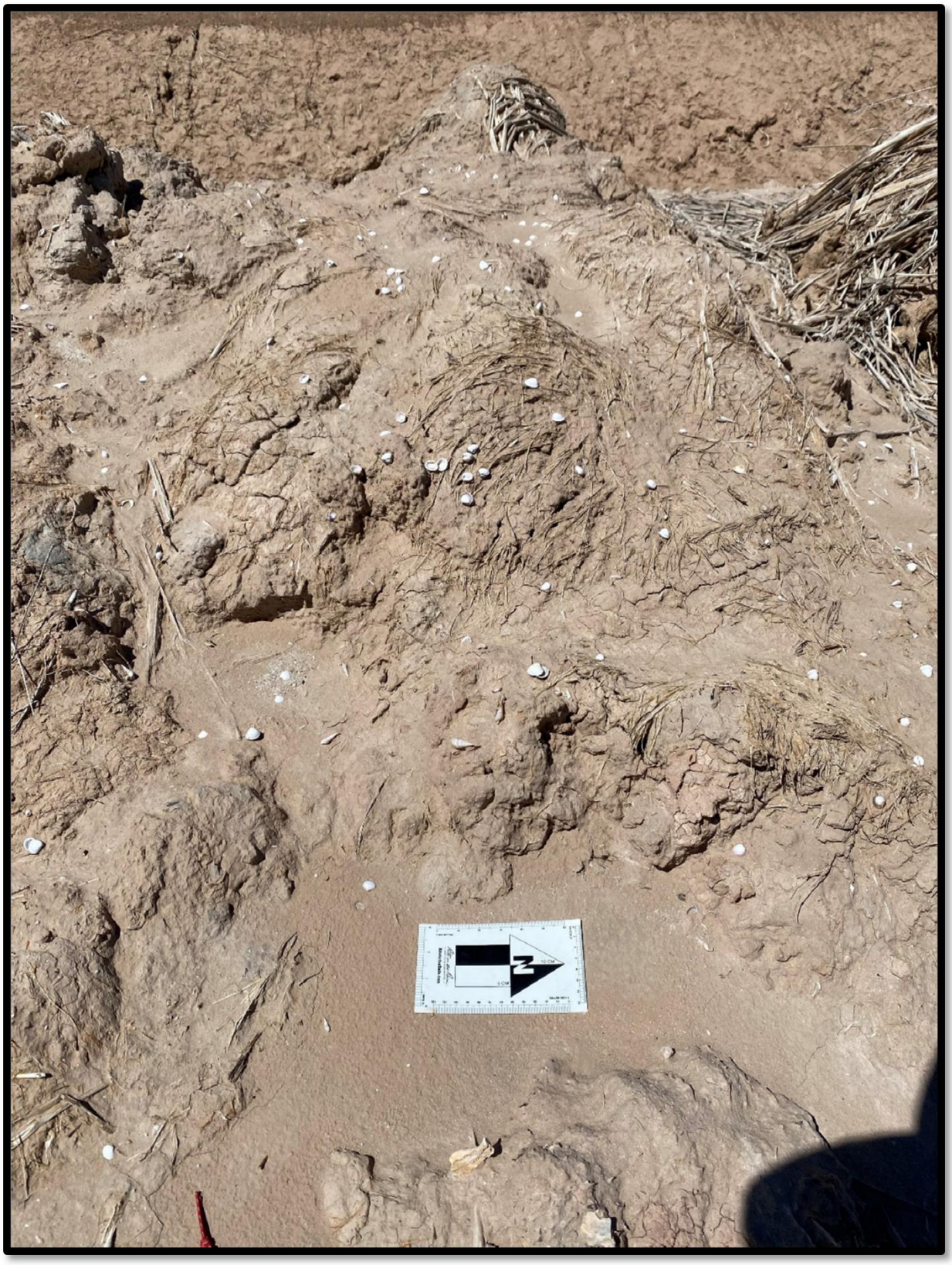


PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Figure 5. Lake Cahuilla shells observed in exposed earthen berm. View to the west.



PC ORIGINAL PKG

INTENTIONALLY LEFT BLANK

PC ORIGINAL PKG

Appendix A

SDNHM Records Search Results (Confidential)

PC ORIGINAL PKG

PC ORIGINAL PKG

PRELIMINARY GEOLOGICAL AND GEOTECHNICAL ASSESSMENT REPORT

Big Rock 2 Cluster Solar and Storage Project

Imperial County, California

November 27, 2024

Prepared for:

Imperial County Planning & Development Services Department

Prepared by:

HDR Engineering, Inc.
3220 El Camino Real, Suite 200
Irvine, CA 92602

PC ORIGINAL PKG

Table of Contents

1.0 Introduction 1-1
1.1 Project Description 1-1
1.2 Purpose and Scope 1-1
1.3 Site Location and Description 1-2
2.0 Geology, Faulting and Seismicity 2-1
2.1 Regional Geologic Setting 2-1
2.2 Subsurface Soil Conditions 2-1
2.3 Groundwater Conditions 2-2
2.4 Faulting 2-2
2.5 Historical Seismicity 2-3
3.0 Assessment of Potential Geologic and Geotechnical Hazards 3-1
3.1 Seismic Shaking 3-1
3.2 Fault-Rupture Hazard 3-1
3.3 Flood Hazard 3-2
3.4 Seiche and Tsunami 3-2
3.5 Earthquake-induced Flooding 3-2
3.6 Landsliding 3-2
3.7 Liquefaction/Seismic Settlement 3-2
3.8 Lateral Spreading 3-3
3.9 Land Subsidence 3-3
3.10 Expansive Soils 3-3
3.11 Collapsible Soils 3-4
3.12 Soil Corrosion 3-4
3.13 Other Geologic Hazards 3-4
4.0 Preliminary Seismic Design Recommendations 4-1
5.0 Conclusions and Limitations 5-1
6.0 References 6-1

List of Tables

Table 2-1. Summary of Contributing Faults 2-3
Table 2-2. List of Selected Historic Earthquakes 2-4
Table 4-1. Preliminary Seismic Design Parameters 4-1

PC ORIGINAL PKG

List of Appendices

Appendix A Figures

Appendix B Historical Boring Logs

Appendix C Site Photographs

PC ORIGINAL PKG

1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

It is our understanding that the proposed Big Rock 2 Cluster Solar and Storage Project (Project) will consist of the design and construction of utility scale photovoltaic solar energy generation facilities and battery energy storage systems with capacity of up to 500-megawatt solar generation and 500-megawatt of storage. The proposed improvements will be located on approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active Conditional Use Permits (CUPs) known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres), totaling 2,436 acres of available land for development. For this report, the parcels have been grouped as CUP #1 (Big Rock 2 Cluster North and Laurel Cluster 2 North, CUP #2 (Big Rock 2 Cluster South), CUP #3 (Big Rock 2 Cluster East/Laurel Cluster South CUP # 21-0013), and CUP # 4 (Big Rock Cluster West). The site location and CUPs are shown on Figure 1, Site Vicinity Map in Appendix A.

1.2 PURPOSE AND SCOPE

The purpose of this preliminary geological and geotechnical study is to review existing geologic/geotechnical data and evaluate preliminary geological and geotechnical hazards for the proposed Project. A subsurface field investigation was not included in the scope for this report. A final design report must be completed prior to construction and after subsurface investigation and laboratory testing has been performed.

Our scope of services for this Project included the following tasks:

Literature Review: HDR reviewed various available published and unpublished geologic and geotechnical documents pertinent to the Project site. Existing geotechnical data including Log of Test Borings (LOTB) and boring logs are presented in Appendix B. A list of references used in preparation of this report is presented in Section 6.0.

Site Reconnaissance: Performed a brief site reconnaissance on November 20, 2024 to observe the existing site conditions including existing on-site surficial soils and potential geologic hazards. Selected photographs from our site reconnaissance are included in Appendix C, Site Photographs.

Preliminary Geologic, Seismic Design, Subsurface Conditions, and Geotechnical Assessment: HDR's preliminary evaluation included location of known and mapped nearby earthquake faults and seismic zones in relation to the Project site, intensity of ground shaking, potential for liquefaction, ground rupture, landslides, and flooding. Other potential hazards such as expansion, collapse, and corrosivity potentials of on-site soils were also evaluated. Our evaluations were performed based on literature review only. Field and laboratory testing program was not included as a part of our services.

Report Preparation: Relevant geotechnical and geological data were compiled in this preliminary report along with our findings and conclusions for the proposed Project.

PC ORIGINAL PKG

1.3 SITE LOCATION AND DESCRIPTION

The proposed Project site is located in unincorporated Imperial County, south of Interstate 8 (I-8), approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. In general, the Project site is considered undeveloped with certain portions of the site used for agricultural purposes. In the vicinity of the Project, improvements include I-8, local roads, bridges, irrigation canals, and nearby solar farms. The Project site includes multiple parcels that have been grouped into four areas (CUP #1 through CUP # 4). A Site Vicinity Map is shown in Appendix A, Figure 1. The reference coordinates used for this preliminary geological and geotechnical study are provided below:

Latitude: 32.76084ºN Longitude: 115.72365ºW

A site reconnaissance was completed on November 20, 2024 to explore the existing conditions at the Project site. Selected photographs from our site reconnaissance are included in Appendix C. A brief description of the explored areas is provided below.

CUP #1 (Big Rock 2 Cluster North): CUP #1 consists of irregular shaped properties bordered to the north by the I-8, south by agricultural fields and existing solar farms, to the west by Westside Road, and east by the New River. Generally, the land surrounding the property is undeveloped and predominately used for agricultural purposes. Based on our site visit, extensive areas of CUP #1 have been planted with alfalfa, bermuda grass, sugar beet, or similar crops. Typically, the top 6 to 12 inches of subgrade soils appear to be in a medium dense condition consisting of silty sands and clays. The Fern Canal, Fig Canal, Wixom Drain and Dixie Drain Three run north to south in the vicinity of CUP #1 with various minor canals running east to west within CUP #1. Surface water was observed within these canals. Additionally, surface water was observed within the New River. Existing paved and unpaved roads along the perimeter of the property were used for access during the site visit. However, construction of new pavement along Derrick Road prevented site reconnaissance east of Derrick Road. Power lines run along a portion of the northern border of the site as well as along Derrick Road. A haybale storage lot is located in the central part of the site just west of Derrick Road as seen in the Photo Location (PL) 25 of Appendix C. The topography within the property is relatively flat with elevations ranging from approximately -41 feet North American Vertical Datum of 1988 (NAVD 88) at the northern limit to -37 feet NAVD 88 at the southern limit. Generally, surface drainage is towards the east into the New River. Localized surface drainage occurs towards the north and middle portion of CUP #1.

CUP #2 and CUP #4 (Big Rock 2 Cluster South and West): CUP #2 and CUP #4 are located on the southern and western portion of the Project, respectively. These CUPs are surrounded by agricultural fields to the north and west, and a solar project to east. The Imperial Irrigation District (IID) Westside Main Canal (Westside Main Canal) is located to the south and west of CUP #4 and south of CUP #2. Additionally, the Foxglove Canal and Dixie Drain Two run north to south along CUP #4 while the Westside Drain and Dixie Lateral One run east to west along CUP #4. Surface water was observed within these canals. Surface water was also observed in the farmed crop area on the southern side of CUP #4 as seen in PL04 in Appendix C. This water flowed into the site from the Westside Main Canal. Although most of the surface soils consisted of dry dense silty sands, the southern portion of CUP #2 had areas of dry soft to stiff lean clays. Generally, the properties are undeveloped with the surface covered with alfalfa, bermuda grass, or similar crops. Access to these CUPs was through unpaved roads, Mandrapa Road, Hyde Road, and W. Vaughn Road. Minor structures at CUP #2 such as an apparent well to the north and a water tank to the south exist as seen in PL09 and PL13 in Appendix C, respectively. Bird activity among various

PC ORIGINAL PKG

species was noted along the eastern side of CUP #2. Power lines run along the local roads. The topography within the property is relatively flat with elevations ranging from approximately -37 feet NAVD 88 on the north to -29 feet NAVD 88 on the south. Generally, surface drainage is towards the east into the New River and with some localized surface drainage towards the north and middle portion of CUP #1. Generally, surface drainage is towards the north and east. Some localized surface drainage occurs within the middle portion of CUP #2 and CUP #4.

CUP #3 (Big Rock 2 Cluster East/Laurel Cluster 2 South): CUP #3 is located on the eastern end of the Project bounded to the north by agricultural fields, west by Jessup Road, and east and south by Derrick Road and W Diehl Road, respectively. The Wixom Drain located west of the site and Fig Canal located east of the site both run north to south. Additionally, minor unnamed canals run east to west to the north and south of the site. Surface water was observed in all the drains and canals as well as in the farmed crop area to the north of the site. The surface soils encountered at the site were generally moist soft clays with apparent high plasticity. Generally, the property is undeveloped with the surface covered with bermuda grass or similar crops. This property was recently plowed, and agricultural machinery was present onsite. Power lines were observed along W. Diehl Road and Derrick Road. The topography within the property is relatively flat with elevations ranging from approximately -37 feet NAVD 88 on the north to -34 feet NAVD 88 on the south. Generally, surface drainage is towards the north and west.

PC ORIGINAL PKG

2.0 GEOLOGY, FAULTING AND SEISMICITY

2.1 REGIONAL GEOLOGIC SETTING

The Project site is located in the Imperial Valley, a part of the Salton Trough, located in the Colorado Desert physiographic province of California. With surface elevations as low as 275 feet below sea level, the Salton Trough formed as a structural depression resulting from tectonic boundary extension between the Pacific and the North American plates. The Salton Trough is bounded on the east and northeast by the San Andreas Fault and on the west by the San Jacinto Fault Zone. The structural trough is filled with more than 15,000 feet of Miocene and younger, marine and non-marine sediments capped by approximately 100 feet of Pleistocene and later lacustrine deposits that have been deposited by intermittent sedimentation derived from periodic flooding from the Colorado River and the filling of Lake Cahuilla (Morton, 1977).

Based on a review of published data by the California Geological Survey (C.W. Jennings, et al, 2010) and the P.K. Morton (1977) geologic map of Imperial County, the Project site sits in a graben valley underlain by lacustrine deposits of ancient Lake Cahuilla comprised of tan and gray fossiliferous clay, silt, sand, and gravel in conjunction with young alluvial deposits of unconsolidated clay, sand, silt, and gravel. West of the Project site are mapped uplands consisting of Pliocene and Pleistocene sandstone, shale, and gravel deposits. A Regional Geologic Map is shown on Figure 2 in Appendix A.

2.2 SUBSURFACE SOIL CONDITIONS

Previous geotechnical investigations have been completed in the vicinity of the Project site along the I-8 and to the south near the Westside Canal. Generally, previous investigations for improvements related to the California Department of Transportation (Caltrans) are located north of CUP #1. According to nearby Caltrans LOTBs (Caltrans, 1962, 1963, 1967a, 1967b, and 1967c), the explored subsurface soils generally consist of fine to coarse sands with interbedded clays and silts to the maximum depth explored of about 110 feet below ground surface (bgs). The granular soils were encountered with relative densities ranging from loose to very dense, increasing in relative density with depth. Generally, soft to stiff clays were encountered in these previous investigations within the upper 10 feet. Additionally, available information from a nearby solar project (NV5, 2018) located southeast of CUP # 2, indicate that the subsurface soils consisted of soft to hard fine-grained soils (lean clay, sandy lean clay, fat clay, and sandy silts) in the upper 25 feet bgs. Below the fine-grained soils, fine to coarse, medium dense to very dense sands with varying amounts of silts were encountered to the maximum depth of 80 feet bgs. The approximate location of the historical borings is shown on Figure 3, Boring Location Map. The selected Log of Test Borings (LOTBs) are provided in Appendix B.

Based on review of the Soil Survey for Imperial County prepared by United States Department of Agriculture Soil Conservation Service (2024) surface soils at the site consist of ten primary groups; 110 Holtville silty clay, 114 Imperial silty clay, 115 Imperial-Glenbar silty clay loam complex, 118 Indo loam, 119 Indo-Vint complex, 122 Meloland very fine sandy loam, 123 Meloland-Holtville, 135 Rositas fine sand, 142 Vint loamy very fine sand, and 144 Vint-Indo very fine sandy loam undifferentiated group. All of the above soil groups are described as wet and are generally limited to a 0 to 2 percent slope. A Soil Survey Map is shown on Figure 4 in Appendix A.

PC ORIGINAL PKG

2.3 GROUNDWATER CONDITIONS

Available groundwater information from existing Caltrans LOTB (1962, 1963, 1967a, 1967b, and 1967c) indicate the presence of shallow groundwater near the Project site along the I-8. Generally, groundwater was encountered during these previous investigations at depths ranging from about 1 to 12 feet bgs, corresponding to groundwater elevations ranging from about -41 and -49 feet NAVD 88.

On the southern end of the Project near CUP # 2, groundwater was encountered at depths ranging from about 9 to 19 feet, corresponding to groundwater elevations ranging from about -30 to -37 feet NAVD 88. A review of the online monitoring well database from the California Department of Water Resources (CDWR, 2024a) indicate that there are not monitoring wells with groundwater data within 2-mile radius of the Project site.

Although there is historical groundwater data that is applicable towards the Project, groundwater information needs to be documented during a future subsurface field investigation as part of the design phase of the Project. Seasonal fluctuations of shallow groundwater should be expected during periods of rainfall, irrigation of adjacent properties, and site grading.

2.4 FAULTING

Southern California straddles the boundary between two tectonic plates known as the North American Plate (on the east) and the Pacific Plate (on the west). The main plate boundary is represented by the San Andreas Fault, which extends northwest from the Gulf of California in Mexico, through the desert region of the Imperial Valley, through the San Bernardino region, and into Northern California, where it eventually trends offshore, north of San Francisco (Jennings and Bryant, 2010).

In Southern California, the plate boundary is a complex system of numerous faults known as the San Andreas Fault System (SAFS) that span a 150-mile-wide zone from the main San Andreas Fault in the Imperial Valley westward to offshore of San Diego (Powell et al., 1993 and Wallace, 1990). The major faults east of San Diego (from east to west) include the San Andreas Fault, the San Jacinto Fault, and the Elsinore Fault. The SAFS is a transform plate boundary dominated by right-lateral fault displacement with the Pacific Plate moving northwest relative to the North American Plate (Wallace, 1990 and Weldon and Sieh, 1985). The significance of this lateral faulting is that transform plate interactions typically generate much smaller maximum magnitude earthquakes than convergent or subduction plate boundaries. Thus, in Southern California the expected maximum moment magnitudes for most faults are typically in the M6.5 to M7.5 range, with only a few faults (San Andreas Fault, possibly some thrust faults of the Transverse Ranges) capable of generating earthquakes in the M8 range, such as the 1906 San Francisco and 1857 Fort Tejon earthquakes, on the San Andreas Fault itself.

Most of the seismic energy and associated fault displacement within the SAFS occurs along the fault structures closest to the plate boundary (i.e., on the Elsinore, San Jacinto, and San Andreas faults) (Powell et al. 1993). Approximately 1.9 inches/year (49 millimeters per year, [mm/yr.]) of overall lateral displacement have been measured geodetically and as fault slip across the plate boundary. Combined, the Elsinore, San Jacinto, and San Andreas faults account for up to 1.6 inches/year (41 mm/yr.), or 84 percent, of the total plate displacement. The remaining 16 percent is accommodated across the faults to the west (Bennett et al., 1996).

PC ORIGINAL PKG

The Project site is located in the seismically active Southern California region, within the influence of several fault systems that are considered to be active or potentially active. Several active or potentially active faults are located in the vicinity of the Project site. The locations of these faults relative to the site are shown on Figure 5, Fault Map (Appendix A).

Table 2-1 lists faults with a risk contribution greater than 1 percent, along with pertinent data such as distance to fault and maximum magnitude performed by the UCERF3 Fault Model 3.1 (USGS, 2024a). As shown on Figure 5, there is a unnamed fault (Unnamed Creep-Active Fault) in the vicinity of the Project site located approximately 3 miles northwest. USGS (2024a) has classified this unnamed fault as "historic-well constrained" with an age of less than 150 years old.

Table 2-1. Summary of Contributing Faults

Fault Name [(1)]	R_{Rup} (mi) [(2)]	Site Location (Latitude and Longitude)	Maximum Magnitude
Imperial [10]	13.8	32.76084 °N 115.72365 °W	7.4
Superstition Hills [5]	8.3		7.3
San Jacinto (Superstition Mountain) [4]	8.7		7.4
Laguna Salada [14]	10.1		6.6
Cerro Prieto [1]	14.3		7.1
San Jacinto (Superstition Mountain) [3]	10.3		7.3

Note:
Listed faults were derived from United States Geologic Survey (USGS, 2024a) Deaggregation online tool and lists faults with a risk contribution greater than 1 percent of the total seismic risk using the UCERF3 Fault Model 3.1. Faults are listed in order of contribution to the probabilistic model. Site Class D was assumed and using the NSHM Conterminous U.S. 2018 dataset with a 2,475-year return period. See USGS (2024a) for details.
(1) Number in parenthesis indicates specific section of specified fault as determined by USGS (2024a).
(2) R_{Rup} is the closest distance from the Site Location to fault rupture plane which is calculated by USGS (2024a) methodology.

2.5 HISTORICAL SEISMICITY

The Project site and vicinity are located in an area characterized by high seismicity. The seismicity of the region surrounding the Project site was evaluated using the earthquake database from USGS website (2024b). Based on the review of the available data, 22 earthquake events with magnitudes equal or greater than 6.0 have occurred within a radius of 60 miles of the site in the last 100 years. Location of the earthquake epicenter, year of occurrence, and earthquake magnitude are summarized in Table 2-2.

PC ORIGINAL PKG

Table 2-2. List of Selected Historic Earthquakes

Earthquake Location	Approximate Distance to Site (1) (miles)	Date of Earthquake	Earthquake Magnitude
19 km S of Progreso, Mexico	26.9	1/1/1927	6.0
49 km SSE of Rumorosa, Mexico	42.3	1/1/1927	6.1
5km S of Alberto Oviedo Mota, B.C., MX	51.5	12/31/1934	6.4
16km WSW of Oasis, CA	53.6	3/25/1937	6.0
Imperial Valley, California Earthquake	20.5	5/19/1940	6.9
Fish Creek Mountains, California Earthquake	14.8	10/21/1942	6.6
14km WNW of Tecolots, B.C., MX	36.4	1/24/1951	6.0
San Jacinto Fault, California Earthquake	42.2	3/19/1954	6.4
Borrego Mountain, California Earthquake	36.1	4/9/1968	6.6
Imperial Valley Earthquake, California-Baja California	22.2	10/15/1979	6.4
5km SE of Alberto Oviedo Mota, B.C., MX	52.5	6/9/1980	6.3
Elmore Ranch, California Earthquake	22.6	11/24/1987	6.2
Superstition Hills, California Earthquake	18.7	11/24/1987	6.6
Sierra El Mayor, B.C., Mexico Earthquake	41.4	4/4/2010	7.2

(1) Distance approximated by measuring in Google Earth from CUP #1 (Latitude: 32.76084 ºN Longitude: 115.72365 ºN) to coordinates given in database.

PC ORIGINAL PKG

3.0 ASSESSMENT OF POTENTIAL GEOLOGIC AND GEOTECHNICAL HAZARDS

3.1 SEISMIC SHAKING

The Project site is located in the highly seismic Southern California region within the influence of several fault systems that are considered to be active or potentially active. A list of known faults considered capable of producing potentially damaging seismic shaking at the site is presented in Table 2-1. It is anticipated that the Project site will periodically experience ground accelerations and shaking as the result of small to large magnitude earthquakes occurring along these faults and other faults within the Southern California region.

The results of our preliminary seismic hazard analyses indicated that the estimated horizontal peak ground acceleration adjusted for site effects (PGA_M) having a 2 percent probability of exceedance in 50 years and corresponding to the statistical return period of approximately 2,475 years, which is defined as the Maximum Considered Earthquake (MCE), is on the order of 0.53g. This horizontal PGA was calculated using the online ASCE Hazard Tool (2024) and in accordance with the 2022 California Building Code and the American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) (2022) 7-22. The PGA provided herein applies to the building. Additional design parameters are required for seismic analysis of equipment and should be evaluated during future design phases.

3.2 FAULT-RUPTURE HAZARD

Surface rupture usually occurs along traces of known active or potentially active faults. However, many historic seismic events, including the 1994 Northridge Earthquake, have occurred on faults without surface expression (blind faults) that were not previously known to exist or to be active.

The California Geologic Survey (CGS) established criteria for faults as active, potentially active, and inactive. Active faults are those that show evidence of surface displacement within the last 11,000 years (Holocene age). Potentially active faults are those that demonstrate displacement within the past 1.6 million years (Quaternary age). Faults showing no evidence of displacement within the last 1.6 million years may be, in general, considered inactive for most structures, except for critical structures. In 1972 the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed, which required fault studies within 500 feet of active or potentially active faults. The Alquist-Priolo Act designates “active” and “potentially active” faults utilizing the same age criteria as that used by the CGS.

The Project site is not located within a currently delineated State of California Alquist-Priolo Earthquake Fault Zone (Bryant and Hart, 2007 and CGS, 2021). The nearest Alquist-Priolo Earthquake Fault Zones are located at approximately 0.7 mile (Route 247 Fault Zone) and 2.5 miles (Yuha Basin Faults) from CUP #2 and CUP #4, respectively. Based on the published maps, the likelihood of fault rupture at the site is considered low. The location of these Alquist-Priolo Earthquake Fault Zones are shown on Figure 6, Seismic Hazards Map in Appendix A.

PC ORIGINAL PKG

3.3 FLOOD HAZARD

Flooding can occur as a result of several factors in developed areas. These factors include: rainfall rates that exceed an area's ability to absorb or control the runoff; impounded water retained behind a flood control structure (upstream-inundation), failure of a flood control structure (downstream-inundation), seiches, and tsunami.

According to Federal Emergency Management Agency (FEMA, 2008) maps, the flood hazard of the Project site varies depending on location. The majority of the project areas fall in Zone X which is designated for areas outside of the 0.2% annual flood chance. The New River bounds the eastern end of Cluster 1 and is designated as Zone A which represents areas of minimal flood hazard, 0.2% annual chance flood hazard, where no base flood elevations are determined. Therefore, natural flooding risks potentially exist at the site and should be further evaluated during the design phase of this Project.

3.4 SEICHE AND TSUNAMI

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault vertical displacement or major ground movement.

The Project site is located outside a Tsunami Hazard Area (CGS, 2024). Additionally, the closest enclosed body of water, the Salton Sea, is located at about 23 miles to the north of the Project site. Considering that the Project site is located outside a Tsunami Hazard Area, Project site elevations, and absence of enclosed bodies of water in the immediate vicinity, seiche and tsunami risks at the site are considered negligible.

3.5 EARTHQUAKE-INDUCED FLOODING

Based on review of the California Department of Water Resources (CDWR, 2024b) online Dam Inundation Map GIS database, the site is not located within an identified dam inundation zone.

3.6 LANDSLIDING

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. Because the Project site is located in a relatively flat area, we do not consider landslides or other forms of natural slope instability to represent a significant hazard to the Project.

3.7 LIQUEFACTION/SEISMIC SETTLEMENT

The term liquefaction describes a phenomenon in which saturated, cohesionless soils temporarily lose shear strength (liquefy) when subjected to cyclic ground motions. Cyclic loading of saturated soils leads to the build-up of pore water pressure as a result of soil particles being rearranged with a tendency toward closer packing. Under undrained conditions, shaking of loose non-cohesive soils may result in loads being transferred from the soil skeleton to the pore water with consequent reduction in the soil strength and stiffness. Structures founded on or above potentially liquefiable soils may experience bearing capacity failures due to the temporary loss of foundation support, vertical settlements (both total and differential), and/or undergo lateral spreading. The

PC ORIGINAL PKG

factors known to influence liquefaction potential include soil type, relative density, grain size distribution, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking. Liquefaction is most prevalent in loose- to medium-dense, silty, sandy, and gravelly soils below the groundwater table.

The Project site has not been mapped for liquefaction potential by the California Geological Survey (CGS, 2021). Based on historical explorations, there is a possibility of encountering relatively shallow groundwater (in the upper 50 feet bgs) in zones of loose sands with variable fines content. Therefore, the potential for liquefaction exists at the site and the liquefaction potential should be evaluated during the design phase of the Project, using site-specific information collected from future site-specific exploratory boreholes.

3.8 LATERAL SPREADING

Liquefaction-induced lateral spreading is defined as the lateral displacement of ground as a result of pore pressure build-up or liquefaction in shallow underlying soils during an earthquake. Lateral spreading can occur on sloping ground or where nearby slopes are present. The factors known to influence the magnitude of lateral spreading include earthquake magnitude, peak ground acceleration, distance between the Project site and the seismic event, the slope height and gradient, thickness of the liquefied layer, fines content, soil particle gradation, and residual strength of the liquefied soil.

Based on a preliminary evaluation on site subsurface conditions and based on the general site topography, lateral spreading is not a considered a design consideration. However, in areas where Project elements are planned adjacent to existing channels, there could be potential lateral spreading issues that may require further evaluation in future design phases. A site-specific geotechnical investigation should be performed during future design phases to confirm these assumptions.

3.9 LAND SUBSIDENCE

Subsidence is the sinking of the ground surface caused by the compression of earth materials or the loss of subsurface soil due to underground mining, tunneling, or erosion. The major causes of subsidence include fluid withdrawal from the ground, decomposing organics, underground mining or tunneling, and placing large fills over compressible earth materials. The effective stress on underlying soils is increased resulting in consolidation and settlement. Subsidence may also be caused by tectonic processes. The Project site is not located in an area of known ground subsidence or within any delineated zones of subsidence due to groundwater pumping or oil extraction (USGS, 2024d). However, according to the City of Calipatria 2035 General Plan (2013), natural subsidence occurs in the Salton Trough, averaging two inches per year in the Salton Sea and decreasing outward until it reaches zero near the Mexican border. Therefore, the potential for subsidence exists at the site.

3.10 EXPANSIVE SOILS

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures. Based on available data, the onsite near-surface soil deposits primarily consist of granular soils (clayey

PC ORIGINAL PKG

sand and silty sands) and fine-grained soils (fat clay, lean clay, and silts). Generally, clays may exhibit moderate to high expansion potential due to variation in moisture content and sands are considered not expansive soils. Clays are expected to be found at the Project site and as such, expansive soils should be anticipated. In future design phases, a site-specific geotechnical investigation should be performed to evaluate soil expansiveness and potential impact, if any, of expansive soil on the Project.

3.11 COLLAPSIBLE SOILS

Collapsible soil is generally defined as soil that will undergo a sudden decrease in volume and its internal support is lost under applied loads when water is introduced into the soil. The internal support is considered to be a temporary strength and is derived from a number of sources including capillary tension, cementing agents, e.g. iron oxide and calcium carbonate, clay-welding of grains, silt bonds, clay bonds and clay bridges. Soils found to be most susceptible to collapse include loess (fine grained wind-deposited soils), valley alluvium deposited within a semi-arid to arid climate, and residual soil deposits. At this time, it is unknown whether collapsible soils are present at the Project site. However, since the area is within an arid region with high winds, the presence of windblown loess materials at the site is possible. As such, the potential for collapsible soils exists at the site. A site-specific geotechnical investigation should be performed to assess the presence of collapsible soils and evaluate potential impact, if any, of collapsible soils on the proposed improvements.

3.12 SOIL CORROSION

A site-specific corrosion study should be performed and mitigation measures should be recommended if the soils are found to be corrosive to concrete or steel. Generally, fine grained soils like clay are more likely to be corrosive. Typical remediation for the corrosive soil conditions consists of using concrete mix with higher cement contents (Type V Portland Cement) and appropriate steel corrosion protection. Because fine grained soils are expected to be encountered at the subject site, corrosion potential should be further evaluated during the design phase of this Project.

3.13 OTHER GEOLOGIC HAZARDS

Volcanic Eruption: The Project site is not located in an area of a recent volcanism. Therefore, the potential for volcanic activity is very low.

Radon Gas: Radon gas is a radioactive product of uranium which can reach high levels depending on the local geology and building construction. According to Environmental Protection Agency (EPA) Map of Radon Zones (EPA, 1993), the Project site, as the entire Imperial County, is located in Zone 3 with predicted average indoor radon screening levels less than 2 picocuries per liter (pCi/L). Since the site is not located within an area of high potential for indoor radon levels (above 4 pCi/L), the potential for radon gas accumulation is considered low.

Naturally Occurring Asbestos: The Project site is not located in an area of known naturally occurring asbestos (CGS, 2011). Therefore, the potential for occurring asbestos is considered low.

PC ORIGINAL PKG

Hazardous Materials: The Project site is not located in proximity to any known hazardous materials (methane gas, hydrogen sulfide gas) and the risk of hazardous materials is considered low.

Lithium: A portion of Imperial County has been labeled as "Lithium Valley" as the southern portion of the Salton Sea is believed to be rich in lithium deposits. The county is currently developing a Lithium Valley Specific Plan and Programmatic Environmental Impact Report and have preliminarily developed a Valley Lithium Map. The Project site lies outside the delineated Specific Plan Study Area (Imperial County, 2024). The potential impacts to the Project should be evaluated once more information is known on the lithium deposits and intended mining developments.

Geothermal: The Project site is not located within an area mapped as a Geothermal field by the California Department of Conservation (2000) and the County of Riverside (2024). Therefore, geothermal impacts on the Project site may be considered negligible.

PC ORIGINAL PKG

4.0 PRELIMINARY SEISMIC DESIGN RECOMMENDATIONS

To reduce the effects of ground shaking produced by regional seismic events, seismic design should be performed in accordance with the applicable building codes. Preliminary seismic design parameters were calculated using the online ASCE Hazard Tool (2024) and in accordance with the 2022 California Building Code and the American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) (2021) 7-22. The Default Site Class was assumed for preliminary design and must be confirmed prior to final design. Seismic design parameters for Site Class D are provided in Table 4-1.

Table 4-1. Preliminary Seismic Design Parameters

Category	Recommended Value
Risk Category	II (1)
Site Class	D
Latitude	32.76084ºN
Longitude	115.72365ºW
Mapped (5% damped) spectral response acceleration parameter at short period (0.2 sec), S_S	1.5
Mapped (5% damped) spectral response acceleration parameter at long period (1.0 sec), S_1	0.58
Spectral response acceleration parameter at short period (0.2 sec), S_{MS}	1.62
Spectral response acceleration parameter at long period (1.0 sec), S_{M1}	1.39
Design (5% damped) spectral response acceleration parameter at short period (0.2 sec), S_{DS}	1.08
Design (5% damped) spectral response acceleration parameter at long period (1.0 sec) S_{D1}	0.93
Site-adjusted PGA (PGA_M) (g)	0.53
Design Magnitude(2) Mw	6.7

Notes:

(1) Risk category was assumed and should be verified by designer during final design.

(2) Design magnitude based on USGS Probabilistic Disaggregation NSHM Conterminous U.S. 2018 for 2% chance of exceedance in 50 years (2,475 year return interval) (USGS, 2024a).

PC ORIGINAL PKG

5.0 CONCLUSIONS AND LIMITATIONS

Our review of available geological and geotechnical literature did not reveal conditions that would preclude development of the proposed Project provided, as mentioned above, a site-specific geotechnical investigation is conducted prior to the Project site development. The proposed Project is considered feasible for development from a geotechnical perspective.

This preliminary geological and geotechnical hazard evaluation report has been prepared for the use of HDR and the Imperial County Planning & Development Services Department for the proposed Big Rock 2 Cluster Solar and Storage Project. The report may not be used by others without the written consent of our client and our firm. The findings, conclusions, and preliminary recommendations presented in this report were prepared in a manner consistent with the standard of care and skill ordinarily exercised by members of its profession, practicing under similar conditions in the geographic vicinity, and at the time the services were performed. No other warranty is either expressed or implied.

Our findings, conclusions and preliminary recommendations presented in this report may be used for preliminary consideration of the feasibility and cost of site development purposes only. They are not intended for the design of the Project. Additionally, a site-specific geotechnical investigation should be performed during the planning process for the proposed Project, in order to develop recommendations for the specific foundation designs and earthwork construction being considered for this Project.

We appreciate the opportunity to provide our services on this Project. Please do not hesitate to contact undersigned if you have questions, comments, or need additional information.

Respectfully submitted,

HDR Engineering, Inc.

Prepared by: Ben Andrews, EIT
Staff Civil – Engineer in Training

Prepared by: Mario Flores, PE
Engineer - Geotechnical

Review by: Manuel Guzman, PE
Engineer – Geotechnical

Review by: Gary Goldman, PE, GE
Senior Project Manager - Geotechnical

PC ORIGINAL PKG

6.0 REFERENCES

The following references were used in preparation of this report:

American Society of Civil Engineers (ASCE), 2022, “Minimum Design Loads for Buildings and Other Structures” (ASCE/SEI 7-22).

ASCE, 2024, ASCE Hazard Tool, https://ascehazardtool.org/.

Bennett et al, 1996, Global Positioning System Constraints on Fault Slip Rates in Southern California and Northern Baja, Mexico, Journal of Geophysical Research, Volume 101, Issue B10, October 10.

Bryant, W.A. and Hart, E.W., 2007, Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps: California Geological Survey Special Publication 42, 42p.

California Building Code (CBC), 2022, July 1, effective January 1, 2023.

California Department of Conservation, 2000, Energy Map of California, Third Edition, Map S-2, Division of Oil, Gas, and Geothermal Resources.

California Department of Conservation, 2002, Energy Map of California, Map S-11, Division of Oil, Gas, and Geothermal Resources.

California Department of Water Resources (CDWR), 2024a, Water Data Library, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels, accessed November 2024.

California Department of Water Resources (CDWR), 2024b, Inundation Maps, https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Inundation-Maps, accessed November 2024.

Caltrans, 1962, Log of Test Borings, New River Bridge, Bridge No. 58-20.

Caltrans, 1963, Log of Test Borings, Derrick Road Overcrossing, Bridge No. 58-244.

Caltrans, 1967a, Log of Test Borings, Jeffry Road Overcrossing, Bridge No. 58-241.

Caltrans, 1967b, Log of Test Borings, Westside Road Overcrossing, Bridge No. 58-243.

Caltrans, 1967c, Log of Test Borings, Westside Main Canal Bridge, Bridge No. 58-240.

California Geological Survey (CGS), 2010, Geologic Map of California.

CGS, 2011, Reported Historic Asbestos Mines, Historic Asbestos Prospects, and other Natural Occurrences of Asbestos in California, Open File Report 2011-1188, California Geological Survey Map Sheet 59.

CGS, 2021, California Earthquake Hazards Zone Application (EQ Zapp, updated September 23), from <https://www.conservation.ca.gov/cgs/geohazards/eq-zapp> website, accessed November 2024.

PC ORIGINAL PKG

CGS, 2024, Tsunami Hazard Area Map. https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/#data_s=id%3AdataSource_3-1918f9f263a-layer-15%3A27. Accessed on November 25, 2024.

City of Calipatria, 2013, City of Calipatria 2035 General Plan. September 2013.

County of Riverside, 2024, Riverside & Imperial County Joint Renewable Energy Map, available at https://countyofriverside.maps.arcgis.com/apps/webappviewer/index.html?id=0e16ae306f914b65b22c82cc31faf05e, accessed on November 2024.

Environmental Protection Agency (EPA, 1993), EPA 1993 National Radon Zone Map at: https://www.cdph.ca.gov/Programs/CEH/DRSEM/Pages/EMB/Radon/Radon-in-California.aspx#

Federal Emergency Management Agency (FEMA), 2008, Flood Insurance Rate Maps, available at: https://msc.fema.gov/portal/search

Imperial County, 2024, Lithium Valley, available at: https://lithiumvalley.imperialcounty.org/.

Jennings, C.W., and Bryant, W.A., 2010, Fault Activity Map of California, California Geologic Data Map No. 6.

Morton, P. (1977), Geology and Mineral Resources of Imperial County, California, County Report 7.

NV5, 2018, Preliminary Geotechnical Investigation. Westside Canal Energy Center, Imperial Valley, CA. October 29.

Powell, R.E., Weldon, R.J., and Matti, J.C., 1993. The San Andreas Fault System: Displacement, Palinspastic Reconstruction, and Geologic Evolution, Geological Society of America, Memoir 178, 376 p.

Wallace, R.E. 1990, The San Andreas Fault System, California, U.S. Geological Survey Professional Paper 1515, pp. 3-12.

Weldon, R.J., and Sieh, K.E., 1985, Holocene Rate of Slip and tentative Recurrence Interval for Large Earthquakes on the San Andreas Fault, Cajon Pass, Southern California, Geological Society of America Bulletin 96.

United States Department of Agriculture Soil Conservation Service (2024); available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USGS, 2006, U.S. Quaternary Fault and Fold Database, https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf.

USGS, 2024a, USGS Earthquake Hazard Toolbox, available at: https://earthquake.usgs.gov/nshmp/

USGS, 2024b, Search Earthquake Catalog, https://earthquake.usgs.gov/earthquakes/search/.

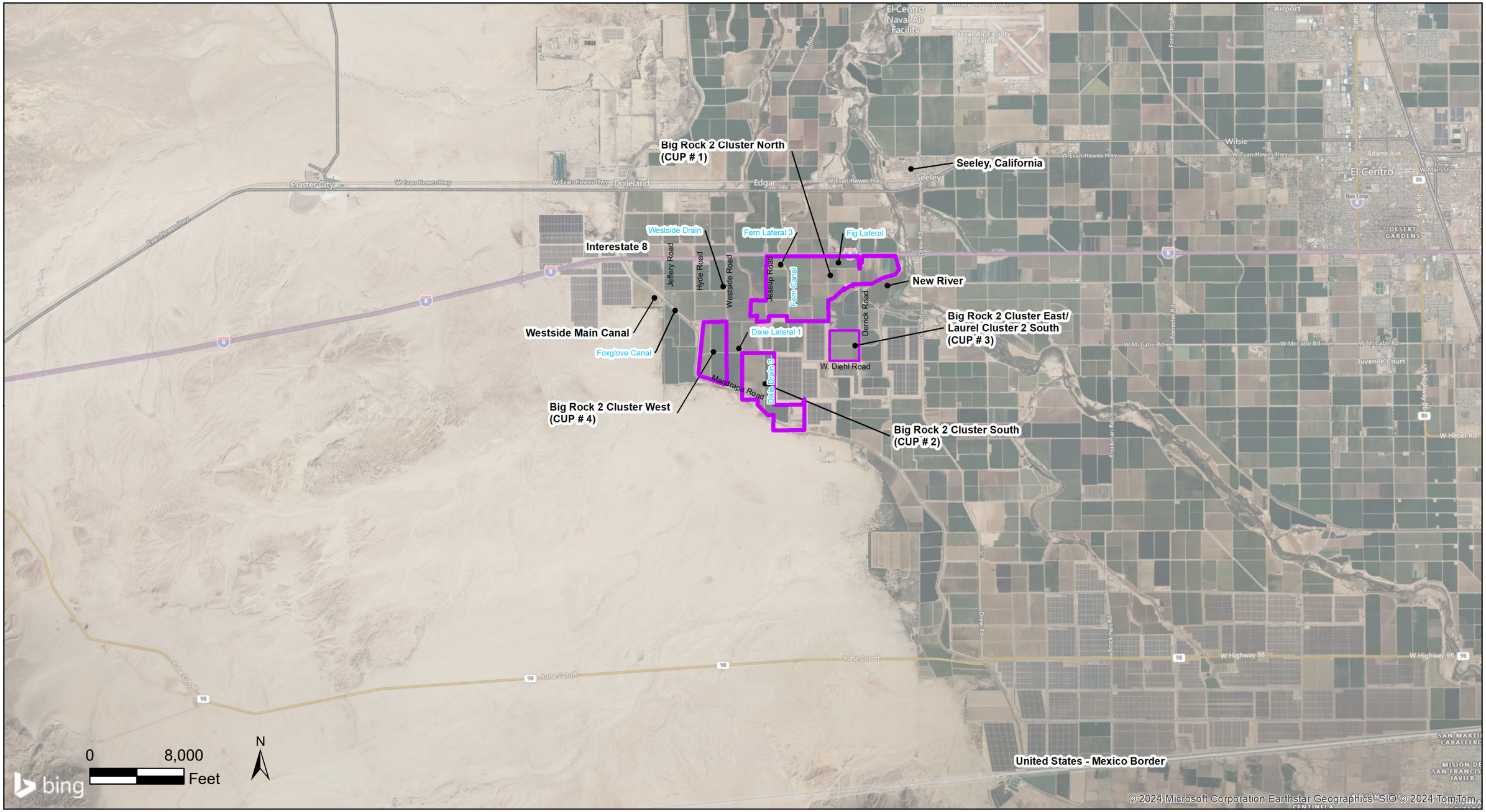
PC ORIGINAL PKG

USGS, 2024d, Areas of Land Subsidence in California, https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.

PC ORIGINAL PKG

Appendix A
Figures

PC ORIGINAL PKG

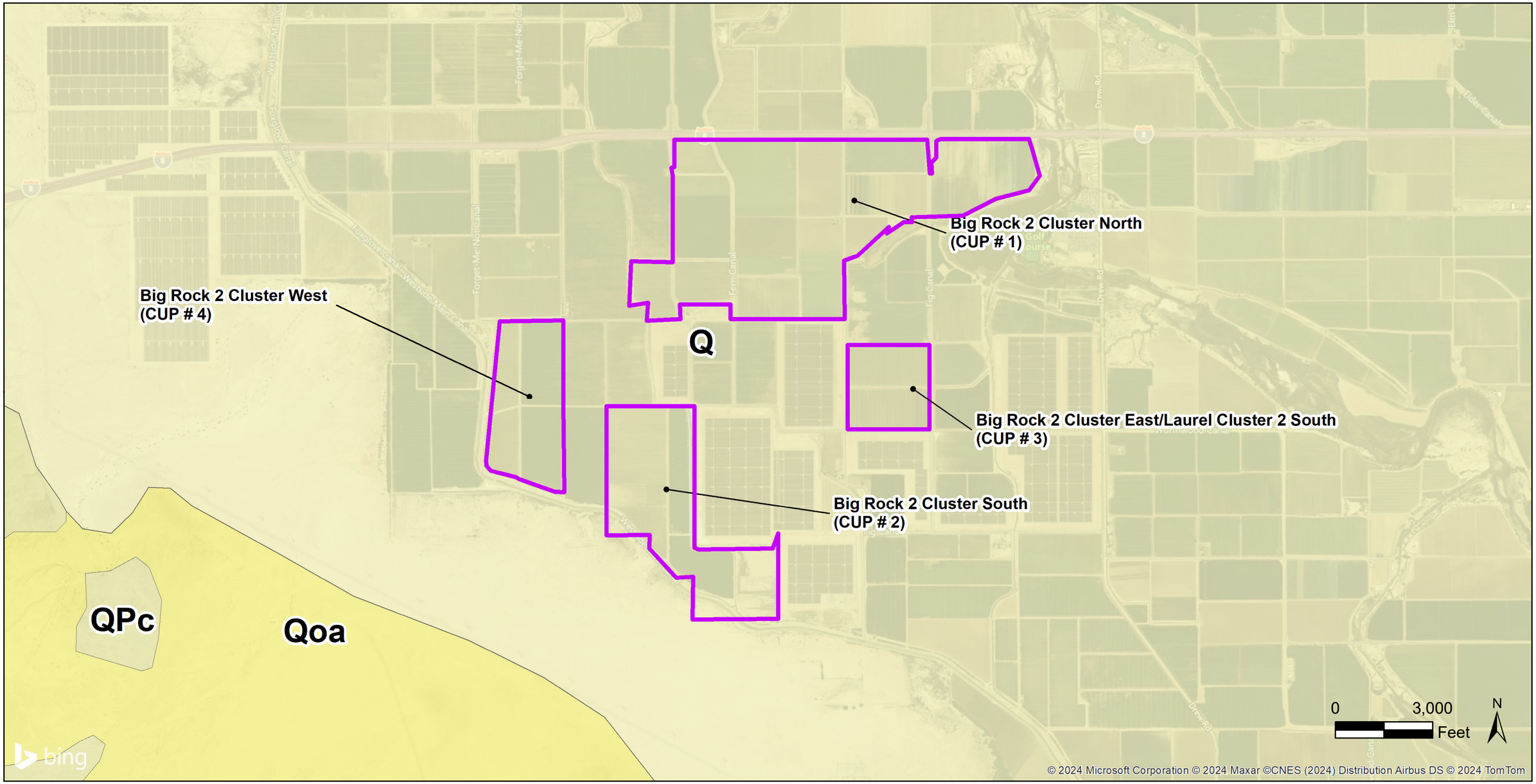


Project Limits (Approximate) - CUP # 1, 2, 3, 4

SITE VICINITY MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure 1



Reference: C. W. Jennings, with modifications by C. Gutierrez, W. Bryant, G. Saucedo and C. Wills, 2010.

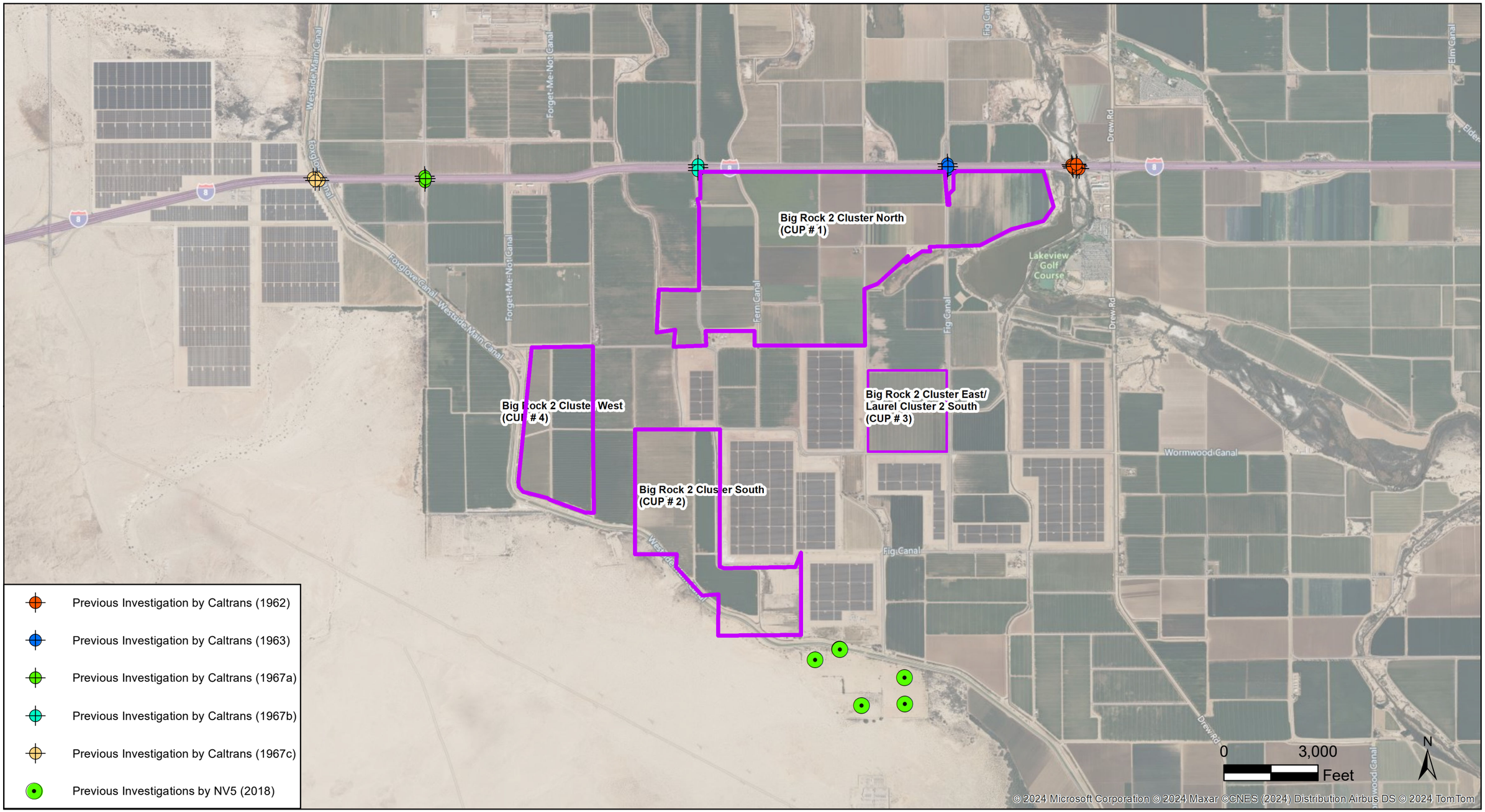
Q - Alluvium, lake, laya, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.
Qoa - Older alluvium, lake, playa, and terrace deposits.
QPc - Pliocene and Pleistocene sandstone, shale, and grabel deposits; mostly loosely consolidated.

Project Limits (Approximate) - CUP # 1, 2, 3, 4

GEOLOGIC MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure 2



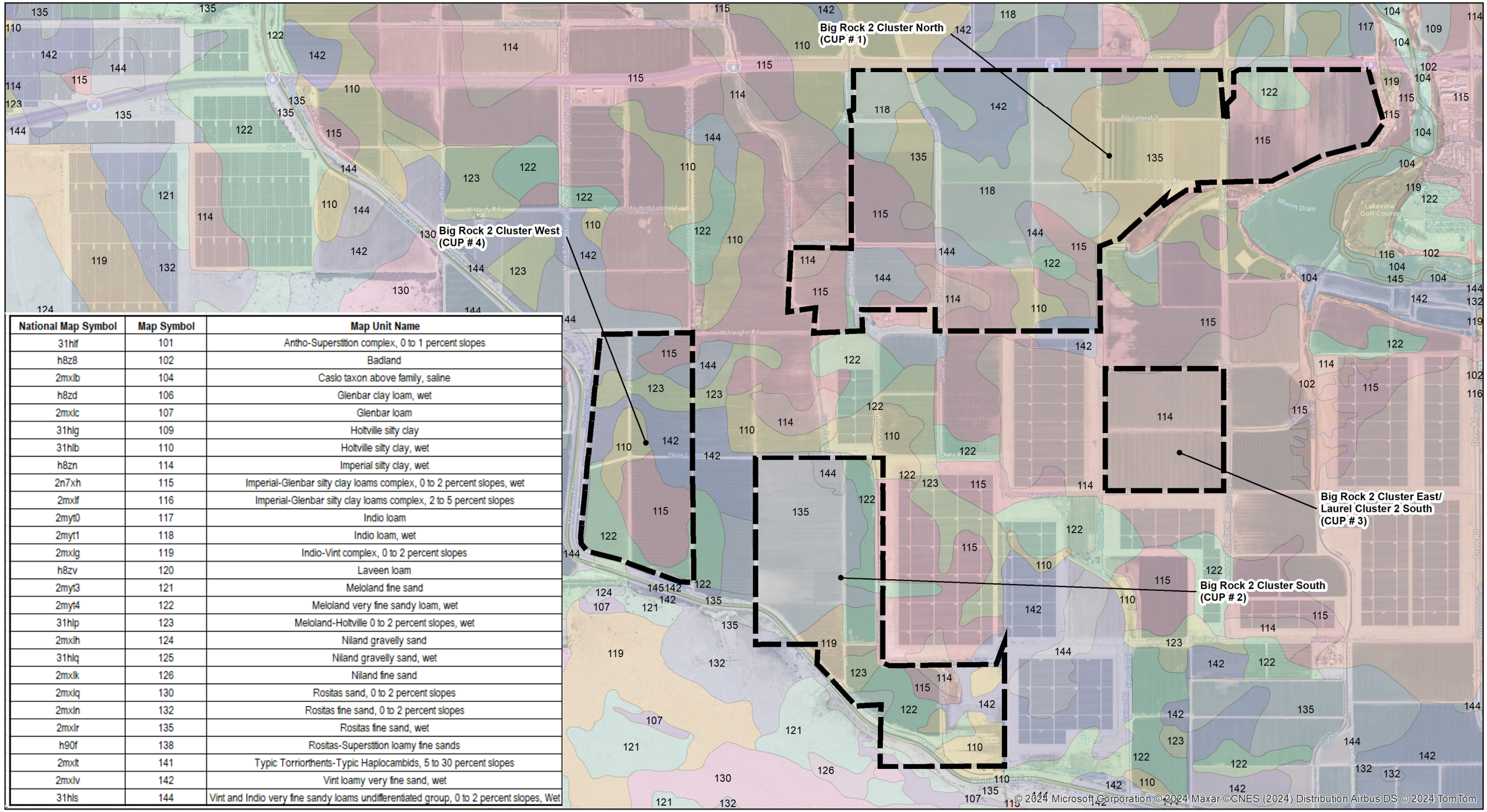
For specific boring names and approximate location of previous investigations refer to Appendix B in report.

Project Limits (Approximate) - CUP # 1, 2, 3, 4

BORING LOCATION MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure 3



National Map Symbol	Map Symbol	Map Unit Name
31hlf	101	Antho-Superstition complex, 0 to 1 percent slopes
h8z8	102	Badland
2mxlb	104	Caslo taxon above family, saline
h8zd	106	Glenbar clay loam, wet
2mxlc	107	Glenbar loam
31hlg	109	Holtville silty clay
31hlb	110	Holtville silty clay, wet
h8zn	114	Imperial silty clay, wet
2n7xh	115	Imperial-Glenbar silty clay loams complex, 0 to 2 percent slopes, wet
2mxlf	116	Imperial-Glenbar silty clay loams complex, 2 to 5 percent slopes
2myt0	117	Indio loam
2myt1	118	Indio loam, wet
2mxlg	119	Indio-Vint complex, 0 to 2 percent slopes
h8zv	120	Laveen loam
2myt3	121	Meloland fine sand
2myt4	122	Meloland very fine sandy loam, wet
31hlp	123	Meloland-Holtville 0 to 2 percent slopes, wet
2mxlh	124	Niland gravelly sand
31hlq	125	Niland gravelly sand, wet
2mxlk	126	Niland fine sand
2mxlq	130	Rositas sand, 0 to 2 percent slopes
2mxln	132	Rositas fine sand, 0 to 2 percent slopes
2mxlr	135	Rositas fine sand, wet
h90f	138	Rositas-Superstition loamy fine sands
2mxlt	141	Typic Torriorthents-Typic Haplocambids, 5 to 30 percent slopes
2mxlv	142	Vint loamy very fine sand, wet
31hls	144	Vint and Indio very fine sandy loams undifferentiated group, 0 to 2 percent slopes, Wet

Project Limits (Approximate) - CUP # 1, 2, 3, 4

0 2,000 Feet

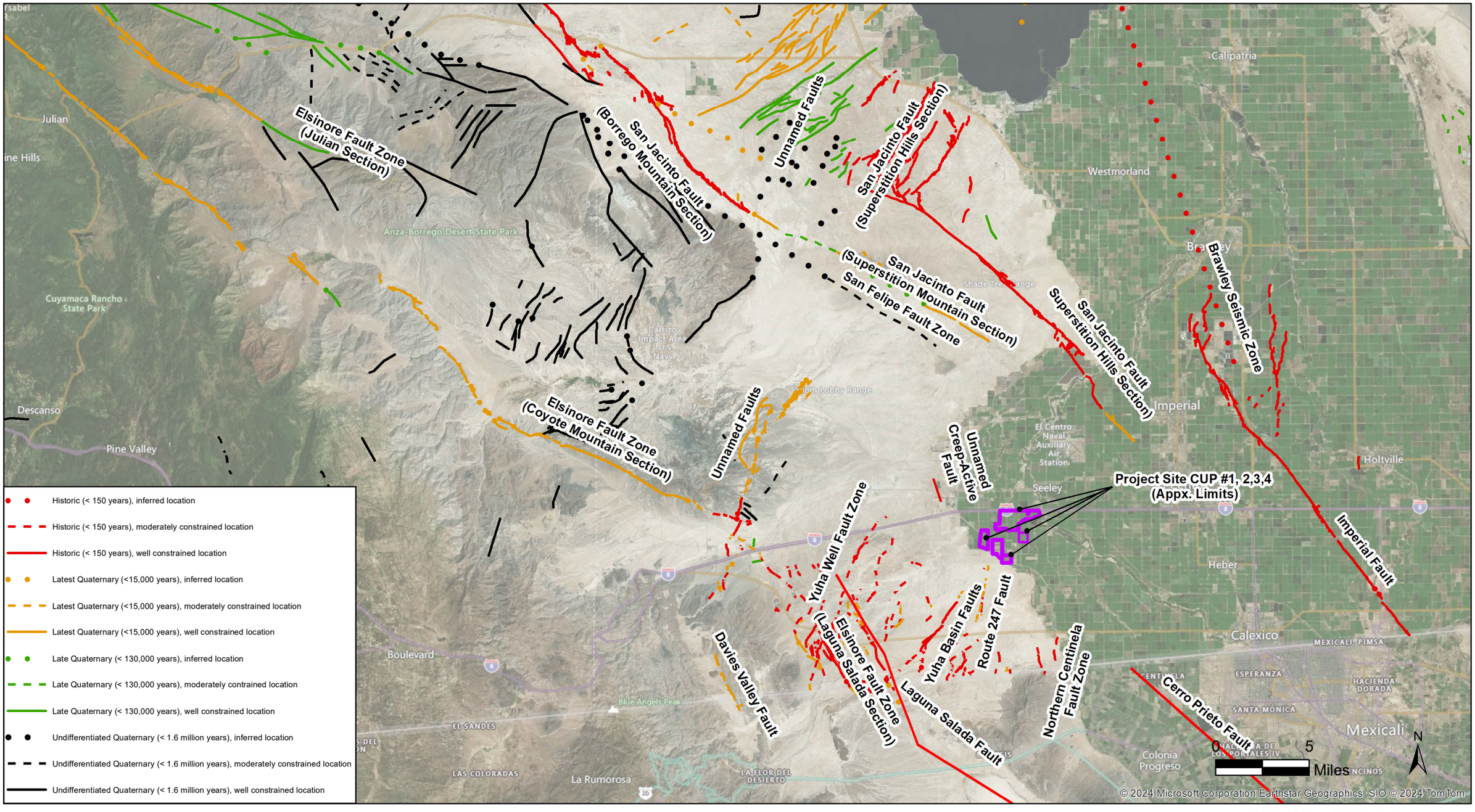
N

Reference: USDA Soil Survey, 2024

SOIL SURVEY MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure 4



* Fault Age classifications are based on geologic evidence to determine the youngest faulted unit and the oldest unfaulted unit along each fault or fault section (Jennings, C.W., and Bryant, W.A., 2010)

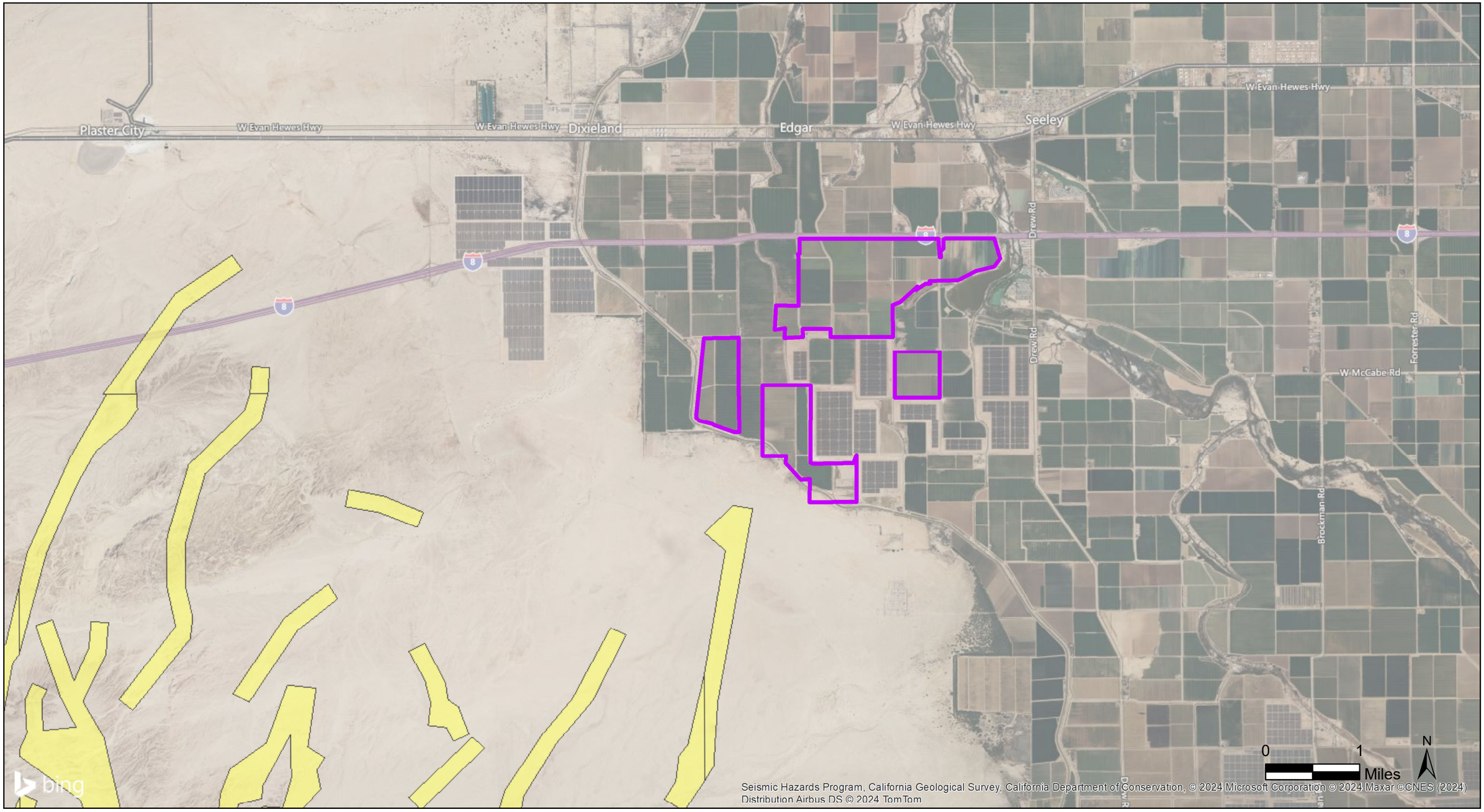
Reference: USGS, 2023, ARCGIS Online Database

Project Limits (Approximate) - CUP # 1, 2, 3, 4

FAULT MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure 5



Reference: CGS, 2024

Project Limits (Approximate) - CUP # 1, 2, 3, 4

Alquist-Priolo Fault Hazard Zone

SEISMIC HAZARDS MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure 6

Appendix B
Historical Boring Logs

PC ORIGINAL PKG

FED. ROAD DIV. NO.	STATE	F. A. PROJECT NO.	SHEET NO.	TOTAL SHEETS
7	CALIF.			

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS
XI	Imp	12	C		

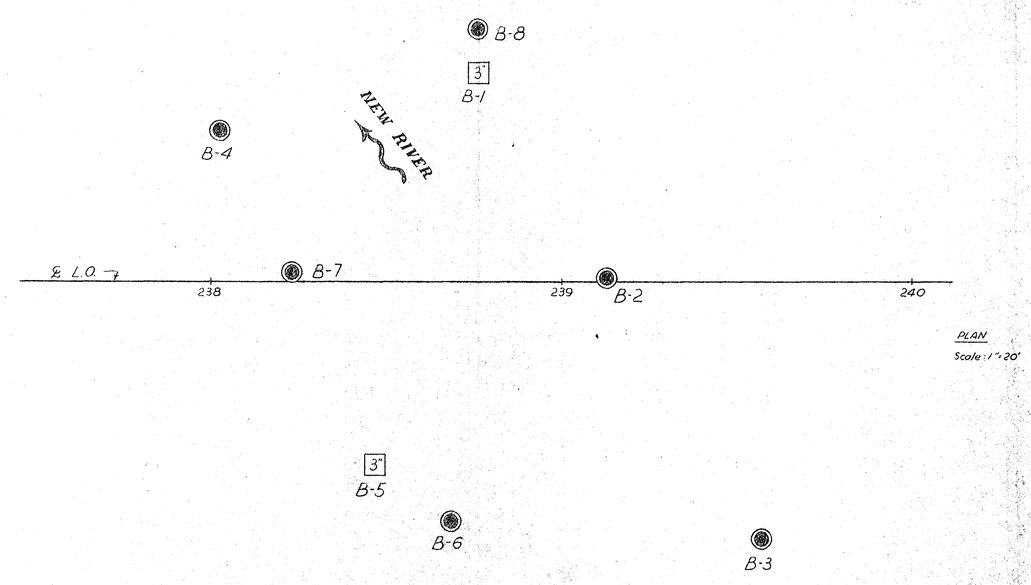
BRIDGE ENGINEER — CIVIL ENGINEER — LICENSE 5987

DATE APPROVED

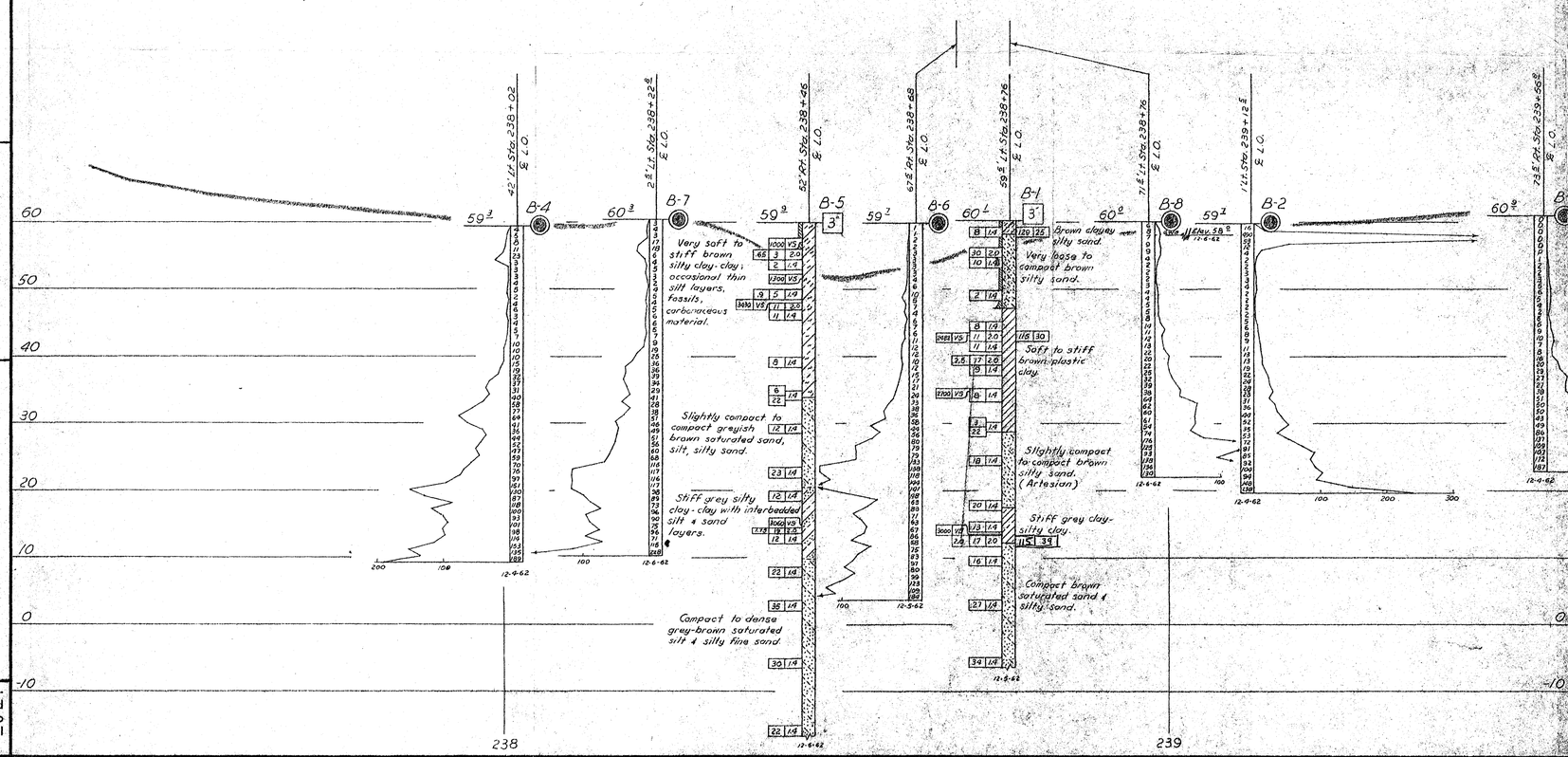
BENCH MARK #20-B

Set chiseled "□" NE corner R/W access mon. 80' Rt. of 241+00.

ELEV. 81.66

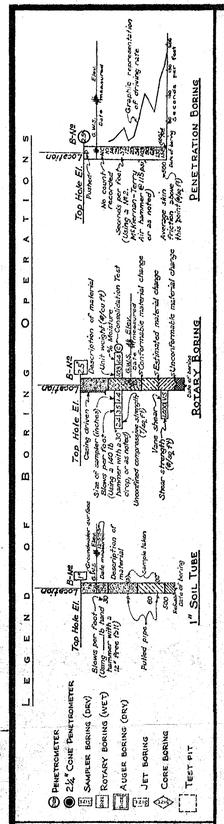


PLAN
Scale: 1" = 20'

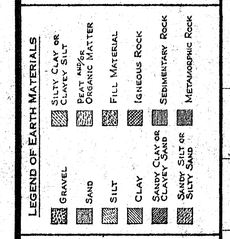


PROFILE
Scale: 1" = 10'

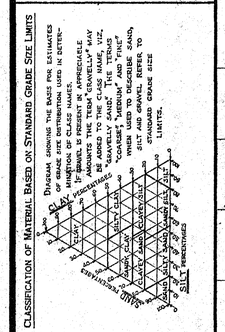
LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS



CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS



NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By J. Eagen	12-6-62
DRAWN	By K. Tachino	12-10-62
CHECKED	By J. T. Eagen	12-21-62

Approval Recommended by [signature] Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

NEW RIVER BRIDGE

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 58-20 | FILE | DRAWING

Disregard prints bearing earlier numbers → PREL. DRAWING NO. PR-

PC ORIGINAL PKG

FED. ROAD DIV. NO.	STATE	PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
7	CAL.				

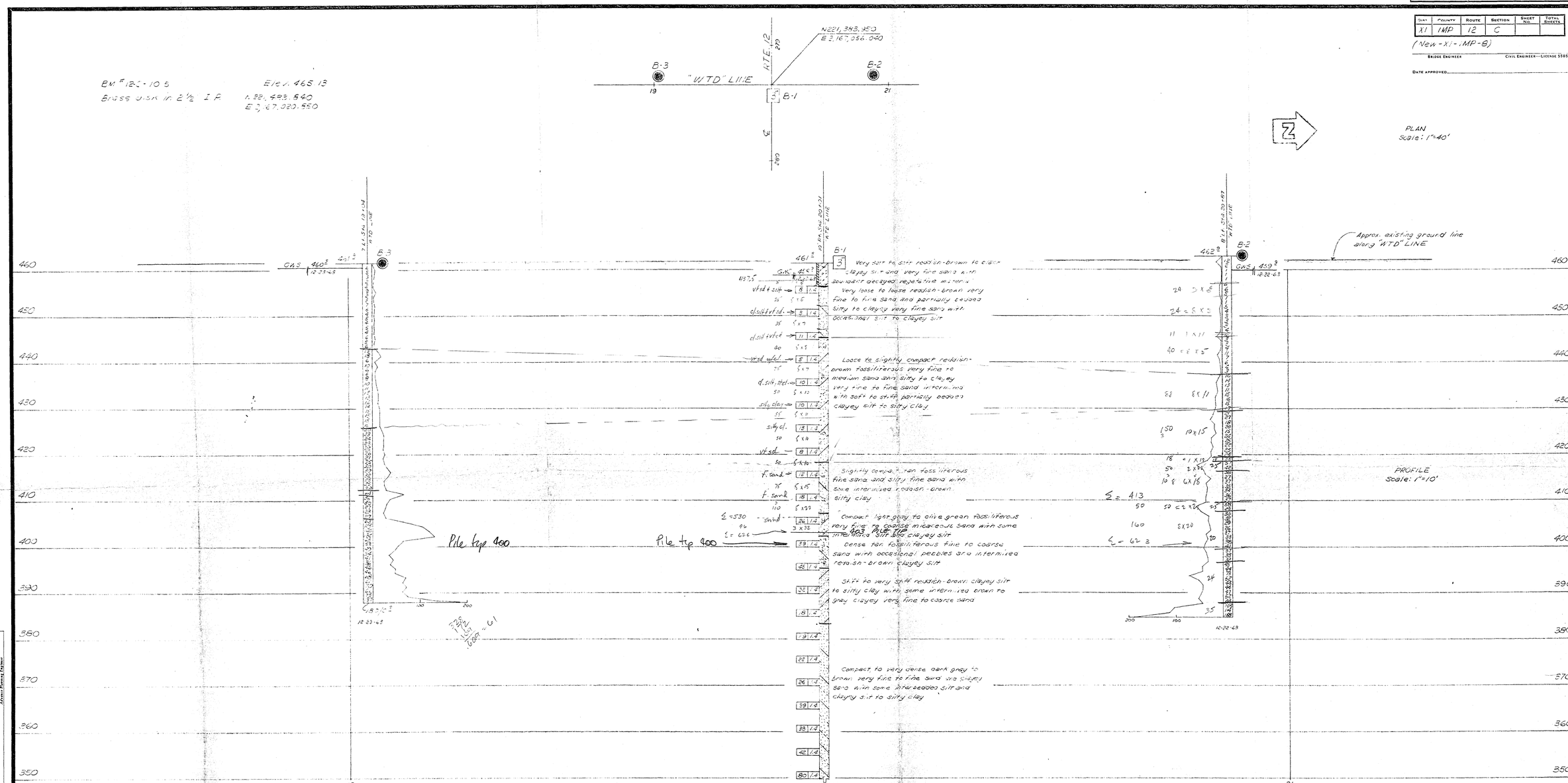
DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
XI	IMP	12	C		

(New - XI - IMP - 8)

BRIDGE ENGINEER — CIVIL ENGINEER—LICENSE 5585

DATE APPROVED

BRIDGE DEPARTMENT



FIELD STUDY by D.B. Crawford 12-23-63
DRAWN by V.J. Ryan 1-3-64
CHECKED by [illegible]
Approval Recommended by [illegible] Engineering Geologist
Assoc. Planning Engineer

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

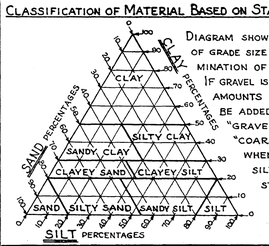


DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES.

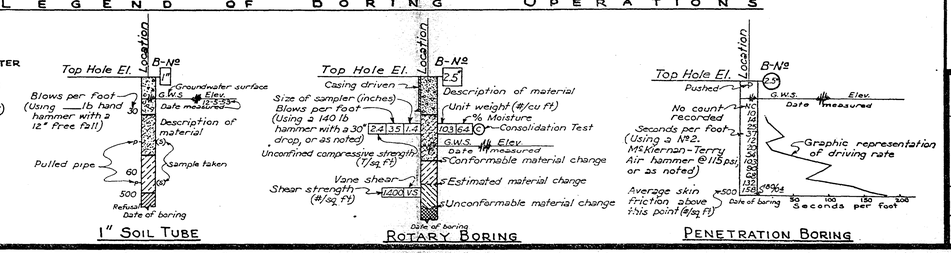
IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ. "GRAVELLY SAND." THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.

LEGEND OF EARTH MATERIALS

- GRAVEL
- SAND
- SILT
- CLAY
- SANDY CLAY OR CLAYEY SAND
- SANDY SILT OR SILTY SAND
- SILTY CLAY OR CLAYEY SILT
- PEAT AND/OR ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

LEGEND OF BORING OPERATIONS

- PENETROMETER
- 2¼" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT



NOTE

Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

AS BUILT

DERRICK ~~WILLIAM~~ ROAD OVERCROSSING

LOG OF TEST BORINGS

SCALE AS Noted	BRIDGE 58-244	FILE	DRAWING

PC ORIGINAL PKG

PRINTED ON CLEARPRINT 1000-H

FED. ROAD DIV. NO.	STATE	PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	CAL.				

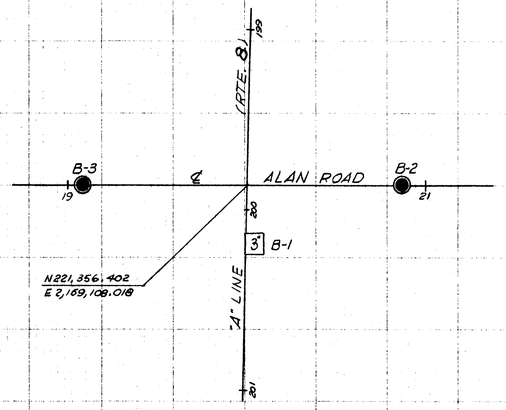
DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS
11	IMP	8	23B 23B-1/2	245	268

BRIDGE ENGINEER — CIVIL ENGINEER—LICENSE 5585

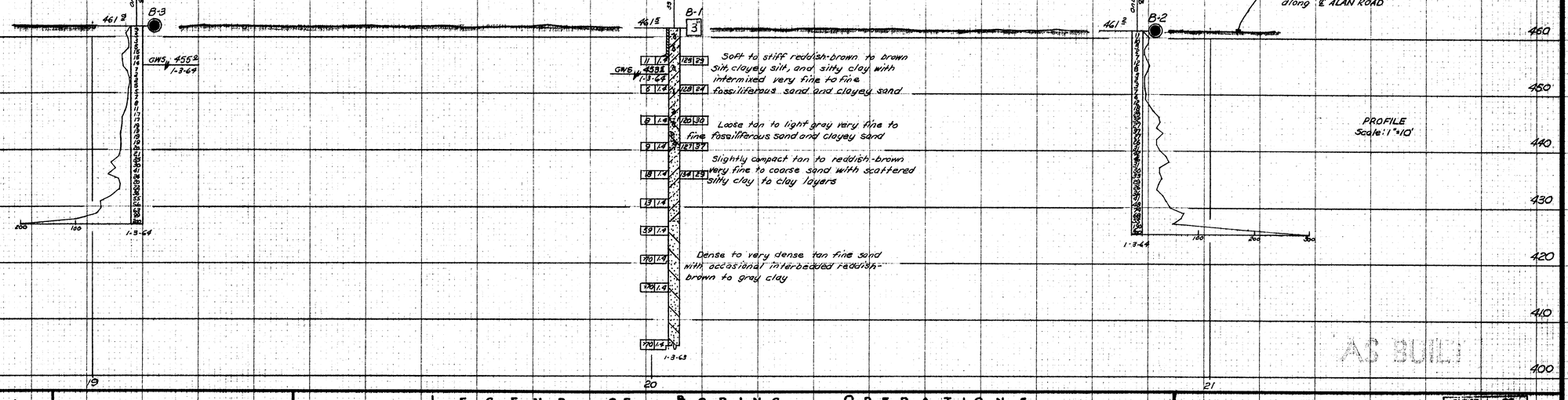
DATE APPROVED May 29, 1967

BM 12C-7.5 Elev. 461.73

From the intersection of US. 80 and Old Rte 202 in Seeley, go W 1.5 mi on US. 80 to gravel road on left. Turn left (South) and go 1.1 mi to AS Line. Turn right (West) on dirt road and go 1.0 mi to Mon 12C-7.5, located in center of P.M.S road Set "Survey Mon" Paddle 28' W of Mon. is flush with P.M.S. surface



PLAN
Scale: 1"=40'



NO CHANGES
AS BUILT
CORRECTIONS BY
CONTRACT NO.
DATE

AS BUILT

BRIDGE DEPARTMENT

FIELD STUDY	by S.E. Clough	1-5-64
DRAWN	by H.F. Rojas	1-7-64
CHECKED	by E. Molina	2-14-64
Approval Recommended by	Bridge Engineer	Bridge Design Engineer

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

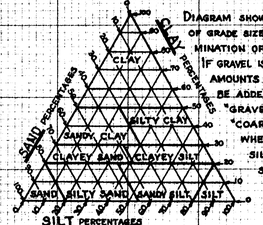


DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES.

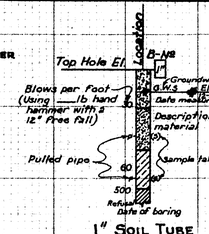
IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ, "GRAVELLY SAND." THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.

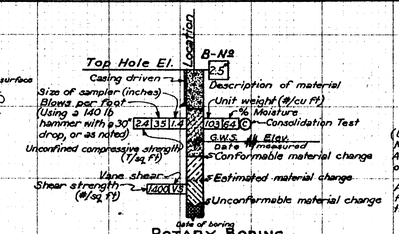
LEGEND OF EARTH MATERIALS

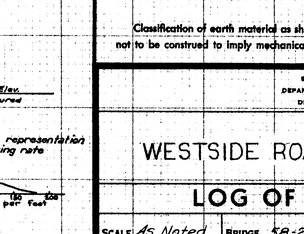
- GRAVEL
- SAND
- SILT
- CLAY
- SANDY CLAY OR CLAYEY SAND
- SANDY SILT OR SILTY SAND
- SILTY CLAY OR CLAYEY SILT
- PEAT AND/OR ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

LEGEND OF BORING OPERATIONS

- PENETROMETER
- 2½" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT







NOTE

Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

SHEET	OF
13	13

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

WESTSIDE ROAD OVERCROSSING

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 58-243 | Post MILE 27.4 | DRAWING 58243-8

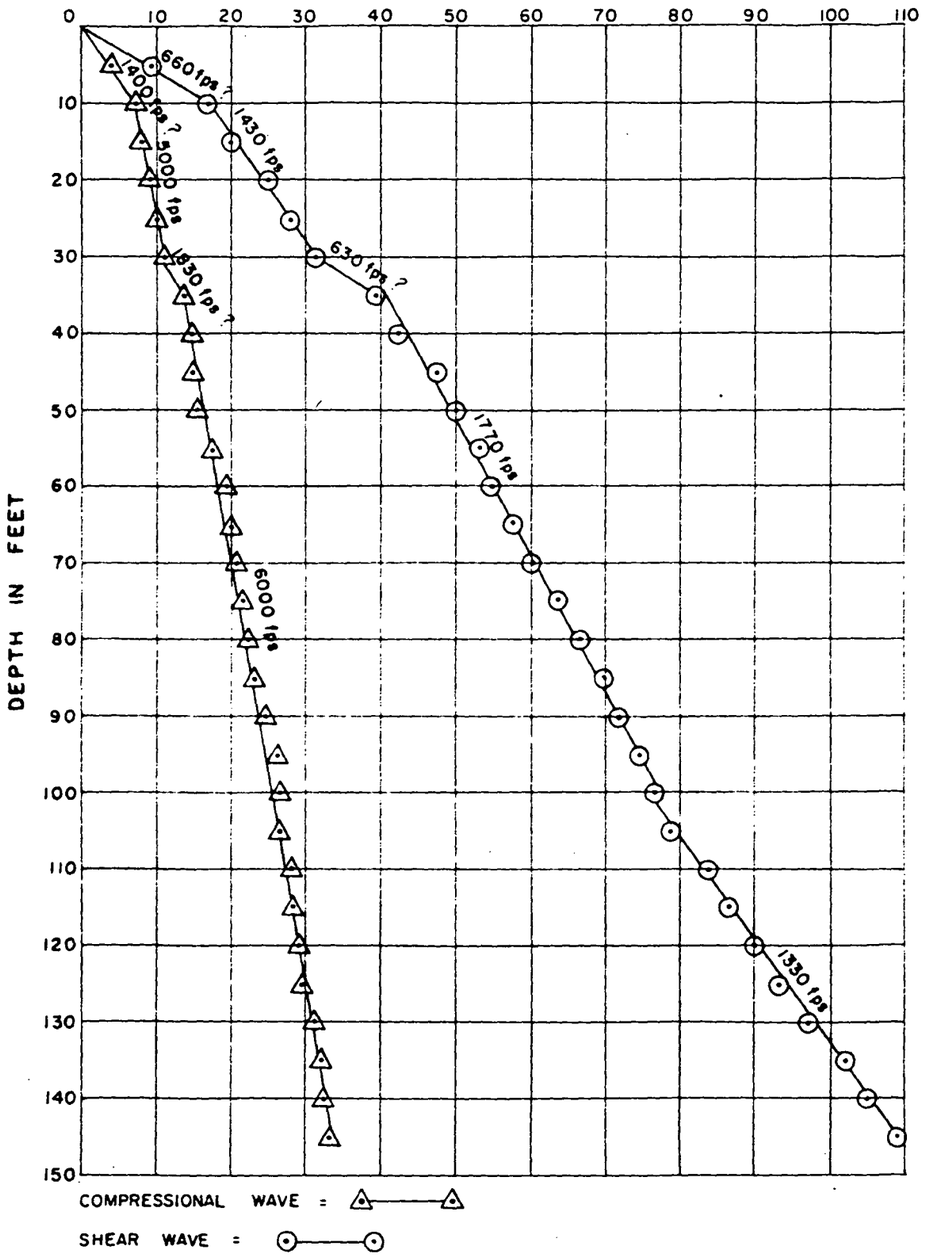
PREL. DRAWING NO. P-

245

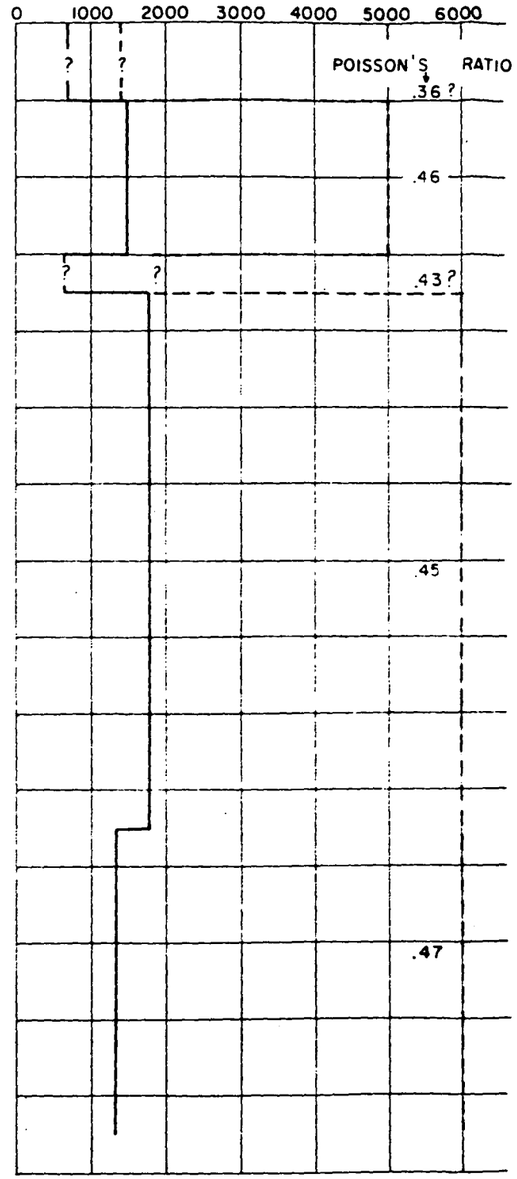
PC ORIGINAL PKG

DIST.	COUNTY	ROUTE	POST MI
04	CC	242	

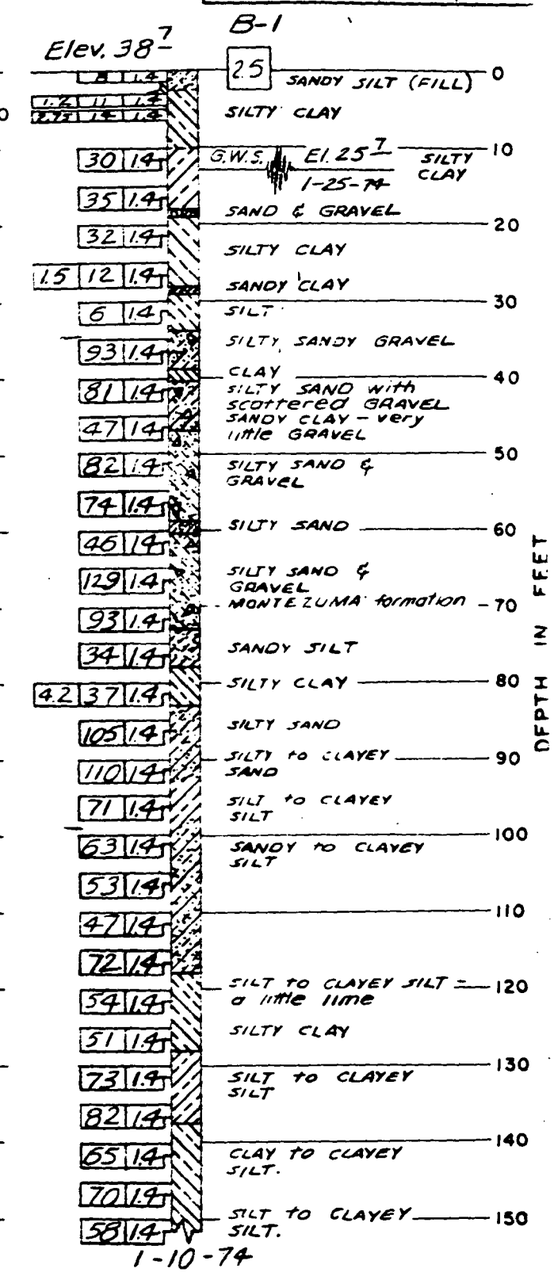
STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION — OFFICE OF STRUCTURES



TIME — DISTANCE GRAPH



VELOCITY — DEPTH GRAPH



LOG OF TEST BORING

DESIGNED BY [signature]	DATE 2-28-74	ENGINEERING	ROUTE 4/242 INTERCHANGE
DRAWN BY S. T. KAWAMURA	DATE 2-28-74	GEOLOGY	DOWNHOLE VELOCITY SURVEY
CHECKED BY [signature]	DATE 2-28-74	SECTION	BRIDGE NO. 28-243 — CU 04205
APPROVED [signature]	DATE 2-28-74		SCALE: — WO 110401

PC ORIGINAL PKG

DH-OS-0132 REV. 10/73

PRINTED ON CLEARPRINT 1000-H

BRIDGE DEPARTMENT

FED. ROAD DIV. NO.	STATE	PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	CAL.				

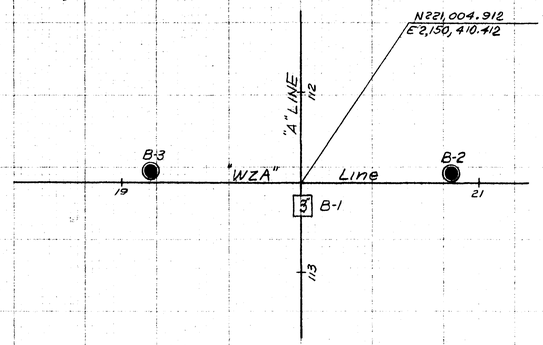
DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS
11	IMP	8	2nd 25.1	232	258

BRIDGE ENGINEER — CIVIL ENGINEER — CALIFORNIA REG. NO. 8969

DATE APPROVED May 29, 1967

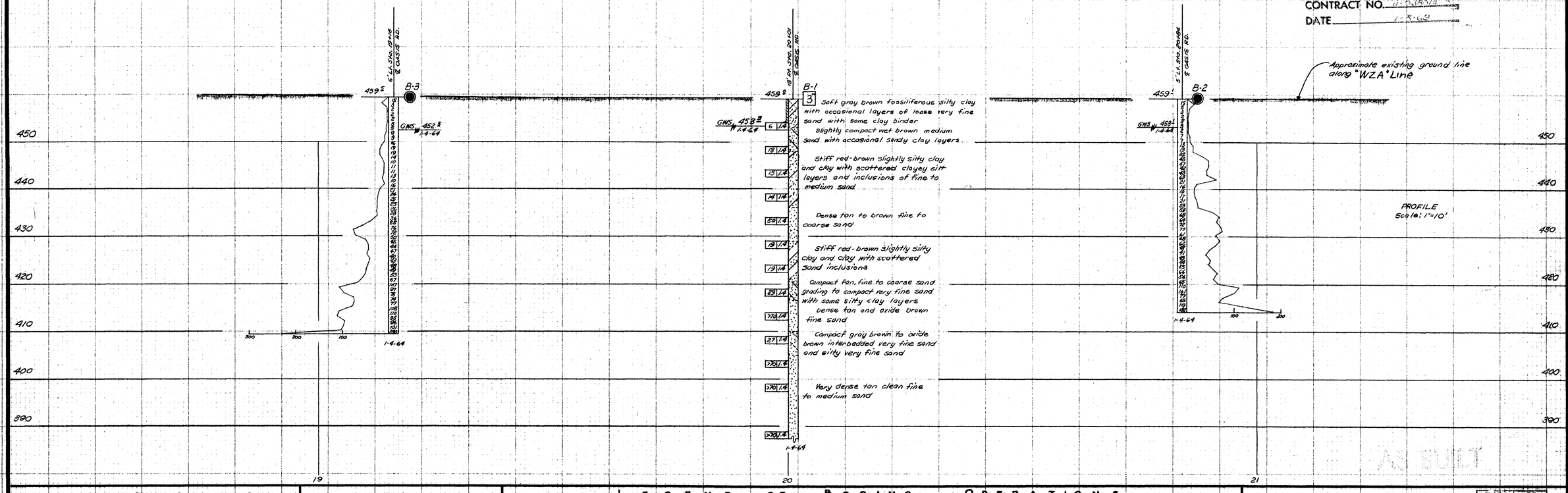
BM. 12C 4. Elev. 459.06

From the intersection of US 80 & Old Rte 202 in Seeley, go W 1.5 Mi. on US 80 to gravel road, Turn left (South) 1.1 mi and go 1.1 mi to A.S. Line. Turn right (West) and go 1.8 Mi to end of road, turn right (North) and go 0.1 mi, turn left (West) and go 1.8 mi, then South 0.1 mi, to Mon. in center of dirt road (Mon. buried 6").



PLAN
Scale: 1"=40'

NO CHANGES AS BUILT
CORRECTIONS BY [illegible]
CONTRACT NO. 11-238014
DATE 1-8-69



FIELD STUDY	Jr.	S.L. Champion 1-4-64
DRAWN	Sr.	V.F. Ryan 1-24-64
CHECKED	Sr.	K. Fechnio 2-14-64
		Engineering Geologist
		Materials Engineering Technician

Approved Recommended by

232

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

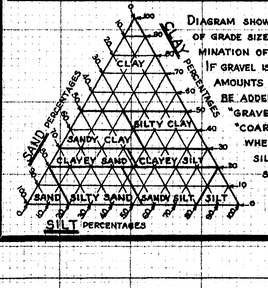


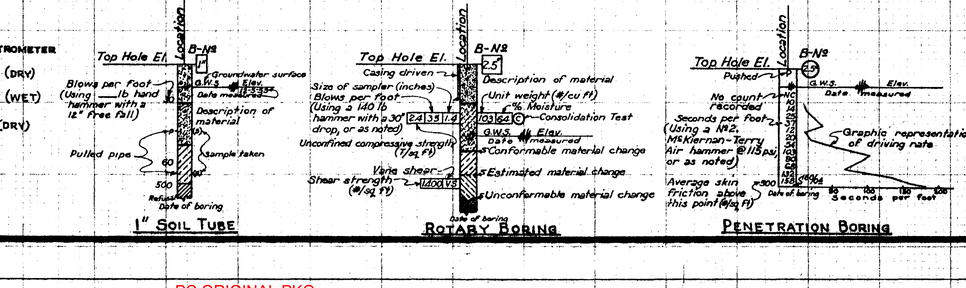
DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES. IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ. "GRAVELLY SAND." THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.

LEGEND OF EARTH MATERIALS

- GRAVEL
- SAND
- SILT
- CLAY
- SANDY CLAY OR CLAYEY SAND
- SANDY SILT OR SILTY SAND
- SILTY CLAY OR CLAYEY SILT
- PEAT AND/OR ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

LEGEND OF BORING OPERATIONS

- PENETROMETER
- 2½" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT



NOTE

Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

SHEET	OF
13	13

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

JEFFREY ROAD OVERCROSSING

LOG OF TEST BORINGS

SCALE	As Noted	BRIDGE	58-241	POST MILE	25.1	DRAWING	58241-B

PREL. DRAWING NO. P-

1/64	1/32	1/16	1/8	1/4	1/2	1

PC ORIGINAL PKG

FED. ROAD DIV. NO.	STATE	PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	CAL.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS
XI	IMP	12	C		

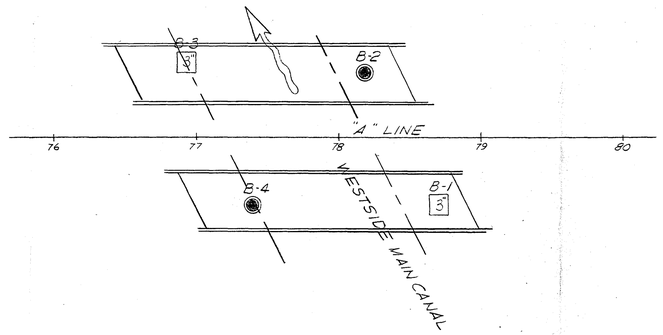
(New - XI - Imp - 8)

BRIDGE ENGINEER — CIVIL ENGINEER—LICENSE 5585

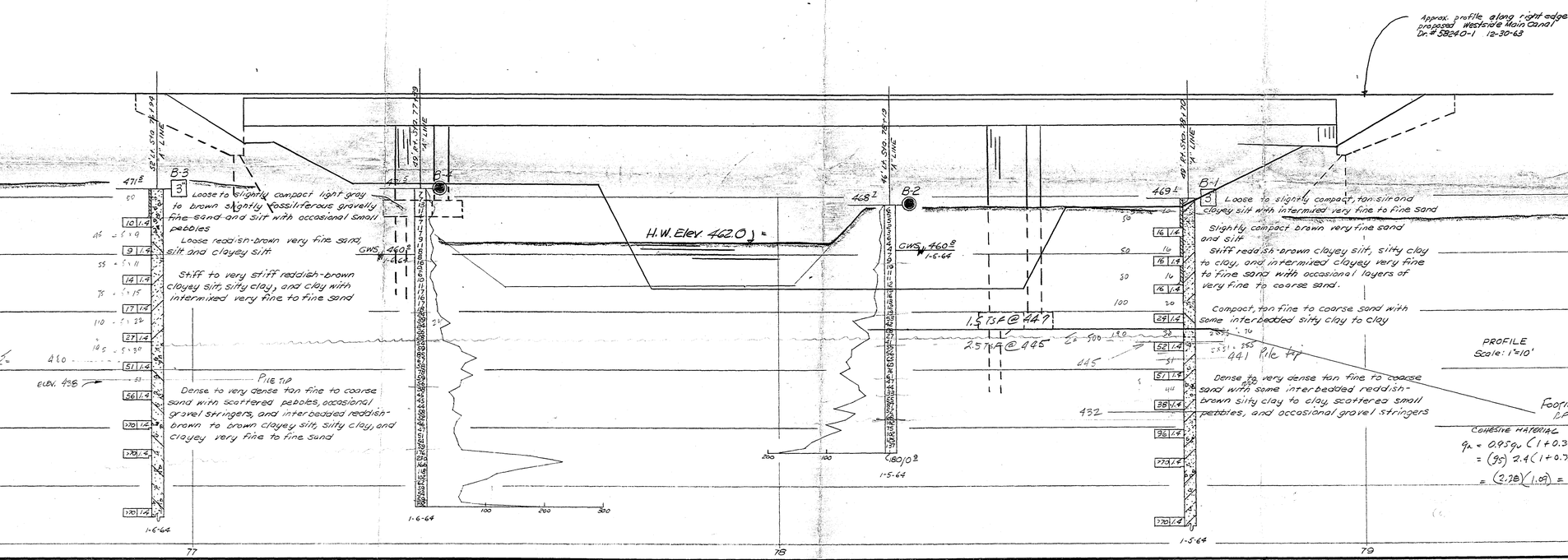
DATE APPROVED

BM 12C-1 Elev. 469.39

From the intersection of US 80 and Old Rte. 202 in Seeley, go West on US 80 4.9 Mi to Westside Main Canal. Turn left/South and follow dirt road thru yard then along West bank of canal for 1.2 Mi to AS. line Turn left (West) and go 0.1 Mi to Mon.



PLAN
Scale: 1"=50'



FIELD STUDY by S.L. Crampton 1-6-64
DESIGN by J.F. Egan 1-7-64
CHECKED by J.F. Egan 2-2-64

Approval Recommended by [signature] Materials Planning Engineer

BRIDGE DEPARTMENT

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

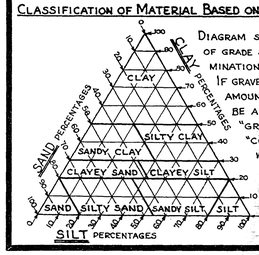


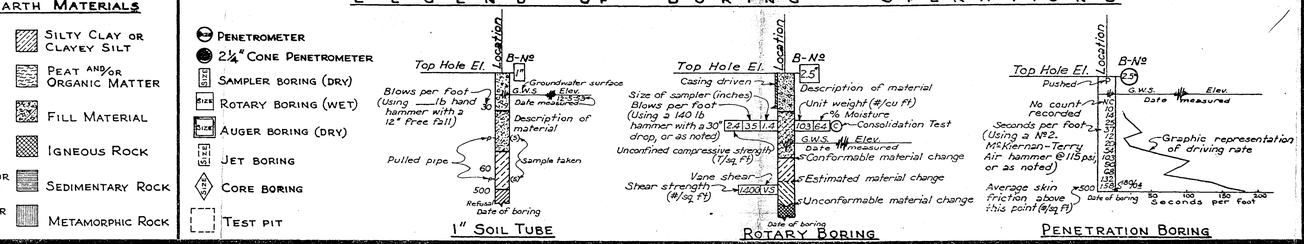
DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES. IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ. "GRAVELLY SAND." THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.

LEGEND OF EARTH MATERIALS

- GRAVEL
- SAND
- SILT
- CLAY
- SANDY CLAY OR CLAYEY SAND
- SANDY SILT OR SILTY SAND
- SILTY CLAY OR CLAYEY SILT
- PEAT AND/OR ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

LEGEND OF BORING OPERATIONS

- PENETROMETER
- 2½" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT



NOTE

Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

AS BUILT

WESTSIDE MAIN CANAL

LOG OF TEST BORINGS

SCALE	BRIDGE	FILE	DRAWING
As Noted	58-240 R/L		

PC ORIGINAL PKG

SAMPLE/SAMPLER TYPE GRAPHICS



AUGER SAMPLE

STANDARD PENETRATION SPLIT SPOON SAMPLER

BULK / GRAB SAMPLE

MODIFIED CALIFORNIA SAMPLER

SHELBY TUBE SAMPLER

HQ ROCK CORE SAMPLE

NQ ROCK CORE SAMPLE

GROUNDWATER LEVEL GRAPHICS



WATER LEVEL (during drilling operations)

WATER LEVEL (immediately after drilling completion)

WATER LEVEL (additional levels after drilling completion)

OBSERVED SEEPAGE

NOTES

- The report and graphics key are an intergral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.
- Lines separating strata on the logs represent approximate boundaries only. Actual transitions my be gradual or differ from those shown.
- No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.
- Logs represent general soil or rock conditions observed at the point of exploration on the date indicated.
- In general, Unified Soil Classification System (USCS) designationspresented on the logs were based on visual classification in thefield and were modified where appropriate based on gradation andindex property testing.
- Fine grained soils that plot within the hatched area on the Plasticity Chart, and coarse grained soils with between 5 and 12% passing the No. 200 sieve require dual USCS symbols, ie., GW-GM, GP-GM, GW-GC, GP-GC, GC-GM, SW-SM, SP-SM, SW-SC, SP-SC, SC-SM.
- If sampler is not able to be driven at least 6 inches then Y/X indicates Y number of blows required to drive the identified sampler X inches with a 140 pound hammer falling 30 inches.

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)

COARSE GRAINED SOILS (More than half of materials is larger than the #200 sieve)	**GRAVELS** (More than half of coarse fraction is larger than the #4 sieve)	CLEAN GRAVEL WITH <5% FINES	Cu≥4 and 1≤Cc≤3		**GW**	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
			Cu<4 and/or 1>Cc>3		**GP**	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
		GRAVELS WITH 5 TO 12% FINES	Cu≥4 and 1≤Cc≤3		**GW-GM**	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES
			Cu<4 and/or 1>Cc>3		**GW-GC**	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES
			Cu<4 and/or 1>Cc>3		**GP-GM**	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES
					GP-GC	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES
		GRAVELS WITH >12% FINES			**GM**	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES
					GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
					GC-GM	CLAYEY GRAVELS, GRAVEL-SAND-CLAY-SILT MIXTURES
	SANDS (More than half of coarse fraction is smaller than the #4 sieve)	CLEAN SANDS WITH <5% FINES	Cu≥6 and 1≤Cc≤3		**SW**	WELL GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
			Cu<6 and/or 1>Cc>3		**SP**	POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
		SAND WITH 5 TO 12% FINES	Cu≥6 and 1≤Cc≤3		**SW-SM**	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES
					SW-SC	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES
			Cu>6 and/or 1<Cc>3		**SP-SM**	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES
					SP-SC	POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES
		SANDS WITH >12% FINES			**SM**	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES
					SC	CLAYEY SANDS, SAND-GRAVEL-CLAY MIXTURES
					SC-SM	CLAYEY SANDS, SAND-SILT-CLAY MIXTURES

FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve)	SILTS AND CLAYS (Liquid Limit less than 50)	**ML**	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		CL-ML	INORGANIC CLAYS-SILTS OF LOW PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SITLY CLAYS, LEAN CLAYS
		OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (Liquid Limit greater than 50)	**MH**	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT
		CH	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS
		OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY

NV5
An NV5 West, Inc. Company – Offices Nationwide
15092 Avenue of Science, Suite 200
San Diego, CA 92128
Tel: (858) 385-0500, Fax: (858) 385-0400

PC ORIGINAL PKG

Project No: **1076**
Drawn: **SB**
Date: **September 2018**

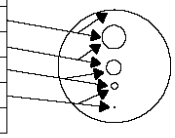
Title:
Project:

Boring Log Legend
Sempra Renewables
Westside Canal Energy Center
Imperial Valley, California

Chart 1

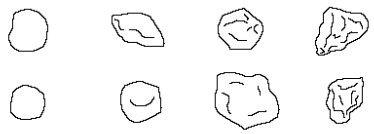
GRAIN SIZE

DESCRIPTION		SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders		>12 in.	>12 in. (304.8 mm.)	Larger than basketball-sized
Cobbles		3 - 12 in.	3 - 12 in. (76.2 - 304.8 mm.)	Fist-sized to basketball-sized
Gravel	coarse	3/4 - 3 in.	3/4 - 3 in. (19 - 76.2 mm.)	Thumb-sized to fist-sized
	fine	#4 - 3/4 in.	0.19 - 0.75 in. (4.75 - 19 mm.)	Pea-sized to thumb-sized
Sand	coarse	#10 - #4	0.079 - 0.19 in. (2 - 4.75 mm.)	Rock salt-sized to pea-sized
	medium	#40 - #10	0.017 - 0.079 in. (0.43 - 2 mm.)	Sugar-sized to rock salt-sized
	fine	#200 - #40	0.0029 - 0.017 in. (0.074 - 0.43 mm.)	Four-sized to sugar-sized
Fines		Passing #200	<0.0029 in. (0.074 mm.)	Flour-sized and smaller



ANGULARITY

DESCRIPTION	CRITERIA
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular	Particles are similar to angular description but have rounded edges
Subrounded	Particles have nearly plane sides but have well-rounded edges
Rounded	Particles have smoothly curved sides and no edges



MUNSELL COLOR

NAME	ABBR
Red	R
Yellow Red	YR
Yellow	Y
Green Yellow	GY
Green	G
Blue Green	BG
Blue	B
Purple Blue	PB
Purple	P
Red Purple	RP
Black	N

PLASTICITY

DESCRIPTION	CRITERIA
Non-plastic	A 1/8-in. (3 mm.) thread cannot be rolled at any water content.
Low (L)	The thread can barely be rolled and the lump or thread cannot be formed when drier than the plastic limit.
Medium (M)	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump or thread crumbles when drier than the plastic limit.
High (H)	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump or thread can be formed without crumbling when drier than the plastic limit.

MOISTURE CONTENT

DESCRIPTION	CRITERIA
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below groundwater table

REACTION WITH HYDROCHLORIC ACID

DESCRIPTION	CRITERIA
None	No visible reaction
Weak	Some reaction, with bubbles forming slowly
Strong	Violet reaction, with bubbles forming immediately

APPARENT/RELATIVE DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPT-N_{60} (#blows/ft)	MODIFIED CALIFORNIA SAMPLER (#blows/ft)	RELATIVE DENSITY (%)
Very Loose	<4	<5	0 - 15
Loose	4 - 10	6 - 15	15 - 35
Medium Dense	11 - 30	16 - 40	35 - 65
Dense	31 - 50	41 - 70	65 - 85
Very Dense	>50	>71	85 - 100

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	SPT-N_{60} (#blows/0.3m)	CRITERIA
Very Soft	<2	Thumb will penetrate soil more than 1 in. (25 mm.)
Soft	2 - 4	Thumb will penetrate soil about 1 in. (25 mm.)
Medium Stiff	5 - 8	Thumb will indent soil about 1/4-in. (6 mm.)
Stiff	8 - 15	Can be imprinted with considerable thumbnail pres.
Very Stiff	15 - 30	Thumb will not indent soil but readily indented with thumbnail
Hard	>30	Thumbnail will not indent soil

STRUCTURE

DESCRIPTION	CRITERIA
Stratified	Alternating layers of varying material or color with layers at least 1/4-in. (6 mm.) thick, note thickness
Laminated	Alternating layers of varying material or color with layers less than 1/4-in. (6 mm.) thick, note thickness
Fissured	Breaks along definite planes of fracture with little resistance to fracturing
Slickensided	Fracture planes appear polished or glossy, sometimes striated
Blocky	Cohesive soil that can be broken down into smaller angular lumps which resist further breakdown
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness
Homogeneous	Same color and appearance throughout

CEMENTATION

DESCRIPTION	CRITERIA
Weakly	Crumbles or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

NV5
An NV5 West, Inc. Company – Offices Nationwide
15092 Avenue of Science, Suite 200
San Diego, CA 92128
Tel: (858) 385-0500, Fax: (858) 385-0400

PC ORIGINAL PKG

Project No: **1076**
Drawn: **SB**
Date: **September 2018**

Title: **Soil Classification**
Project: **Sempra Renewables**
Westside Canal Energy Center
Imperial Valley, California

Boring Log

Date	Project Number	Project	Boring No.
Started: 9/17/18 Completed: 9/18/18	1076	Westside Canal Energy Center	B-1
Hammer Efficiency: 93 %	Rig Type: Unimog M-5 (Pacific)	Surface Elevation: -21.0'	Logged By: S. Burford
Latitude: 32.731764	Longitude: -115.718873	Location: Near canal	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
9.5	8:40am	9/17/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
0									[ALLUVIUM (Qa-Qc)] Lean CLAY with Sand (CL): Tan, dry to moist, stiff
			G- 1		20 1		Moisture Content Sieve Analysis Expansion Index		
5			MC- 1	3 8 10	26 1	97 7	Moisture / Density	CL	Stiff, Pocket Penetrometer: 1.75 ton/ft^2
			G- 2						
10 ▼			SPT- 1	3 11 14	25 8		Moisture Content		Very stiff
									13.0' El. -34.0'
			G- 2				Sieve Analysis		Sandy Lean CLAY (CL): moist, hard
15			SPT- 2	6 13 23	22 1		Moisture Content	CL	
									18.0' El. -39.0'
									Silty SAND (SM): Tan, moist, medium dense
20			SPT- 3	2 5 8	21 8		Moisture Content	SM	
									21.5' El. -42.5'

Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (21.5'). Backfilled with neat cement. Groundwater measured at 9.5' bgs.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Date	Project Number	Project	Boring No.
Started: 10/2/18 Completed: 10/2/18	1076	Westside Canal Energy Center	B-1a
Hammer Efficiency: 80 %	Rig Type: Diedrich D50 (Pacific)	Surface Elevation: -21.0'	Logged By: S. Burford
Latitude: 32.731760	Longitude: -115.718833	Location: Near canal	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
9	8:20am	10/2/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
0									[ALLUVIUM (Qa-Qc)] Lean CLAY with Sand and Sandy Lean CLAY (CL): Tan, dry to moist
5									Free drilled down to 15' BGS for first sample
▼ 9								CL	
10									
15			SPT- 1	3 5 7	24 3		Moisture Content		Stiff
18.0'									El. -39.0'
									Silty SAND (SM): Tan, moist
20			SPT- 2	3 7 11	24 8		Moisture Content Sieve (20-26.5)		Medium dense. Switched from Hollow Stem to Mud-Rotary at 20' BGS
								SM	
25			SPT- 3	16 17 20	22 5		Moisture Content		Dense
30									
30.0'									El. -51.0'

PC ORIGINAL PKG

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

Boring Log

Date	Project Number	Project	Boring No.
Started: 10/2/18 Completed: 10/2/18	1076	Westside Canal Energy Center	B-1a
Hammer Efficiency: 80 %	Rig Type: Diedrich D50 (Pacific)	Surface Elevation: -21.0'	Logged By: S. Burford
Latitude: 32.731760	Longitude: -115.718833	Location: Near canal	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
9	8:20am	10/2/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
30			SPT- 4	15 21 23	22 1		Moisture Content Sieve (30-51 5)		Poorly-graded SAND with Silt (SP-SM): Tan, moist to wet, dense to very dense
35			SPT- 5	13 16 22	22 7		Moisture Content		
40			SPT- 6	13 19 28	22 4		Moisture Content		
45			SPT- 7	18 33 50/5 5	21 4		Moisture Content	SP-SM	
50			SPT- 8	16 21 25	22 4		Moisture Content		
55			SPT- 9	20 33 50/6"	22 0		Moisture Content Sieve (55-76 5)		
60									

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Date	Project Number	Project	Boring No.
Started: 10/2/18 Completed: 10/2/18	1076	Westside Canal Energy Center	B-1a
Hammer Efficiency: 80 %	Rig Type: Diedrich D50 (Pacific)	Surface Elevation: -21.0'	Logged By: S. Burford
Latitude: 32.731760	Longitude: -115.718833	Location: Near canal	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
9	8:20am	10/2/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
60			SPT- 10	13 20 26	23 1		Moisture Content		Poorly-graded SAND with Silt (SP-SM): Tan, moist to wet, dense to very dense
65			SPT- 11	17 30 38	22 0		Moisture Content		
								SP-SM	
70			SPT- 12	18 30 46	21 3		Moisture Content		Traces of gravel encountered from 72-75' BGS
75			SPT- 13	22 32 39	21 2		Moisture Content		
			SPT- 14	16 20 22				CL	79.0' El. -100.0' Lean CLAY (CL): Brown, moist, hard 80.0' El. -101.0'
80									

Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (80.0'). Switched to Mud-Rotary drilling at 20' BGS. Backfilled with neat cement. Groundwater measured at 9.0' bgs.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Date	Project Number	Project	Boring No.
Started: 9/17/18	1076	Westside Canal Energy Center	B-2
Completed: 9/17/18			
Hammer Efficiency: 93 %	Rig Type: Unimog M-5 (Pacific)	Surface Elevation: -21.0'	Logged By: S. Burford
Latitude: 32.730861	Longitude: -115.721389	Location: Northwest corner	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
12	2:00pm	9/17/2018

Depth (ft)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
0								CL	[ALLUVIUM (Qa-Qc)] Sandy Lean CLAY (CL) to Clayey Sand (SC): Tan, dry to moist
3.0'									El. -24.0'
			G- 1				Expansion Index Thermal Resistivity		Fat CLAY (CH): Brown, dry to moist, very stiff
5			MC- 1	11 19 32	5 1	102 1	Moisture / Density	CH	
8.0'									El. -29.0'
			G- 2						Lean CLAY (CL): Brown, moist to wet, orange-brown laminations, thinly bedded, stiff
10			SPT- 1	4 5 7	27 2		Moisture Content	CL	
			G- 3						
15.0'									El. -36.0'
15			SPT- 2	5 6 8	27 0		Moisture Content	ML	Sandy SILT (ML): Tan, moist to wet, stiff to hard
			SPT- 3	11 21 28	21 5		Moisture Content		
20.0'									El. -41.0'
20									

Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (20.0'). Backfilled with neat cement. Groundwater measured at 12.0' bgs.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Date	Project Number	Project	Boring No.
Started: 9/18/18	1076	Westside Canal Energy Center	B-3
Completed: 9/18/18			
Hammer Efficiency: 93 %	Rig Type: Unimog M-5 (Pacific)	Surface Elevation: -18.0'	Logged By: S. Burford
Latitude: 32.729953	Longitude: -115.717017	Location: North center	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
19 1	1:30pm	9/18/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
0									[ALLUVIUM (Qa-Qc)] Silty SAND (SM): Tan, dry to moist
			G- 1				Expansion Index No 200 Sieve R Value Thermal Resistivity Corrosivity	SM	
4.5'									El. -22.5'
5			SPT- 1	15 9 11	8 4		Moisture Content	CL	Lean CLAY (CL): Brown, dry to moist, very stiff
7.0'									El. -25.0'
			G- 2					ML	Clayey SILT (ML): Tan, moist
10			MC- 1	19 8 12	20 8	104 2	Moisture / Density		Stiff, Pocket Penetrometer: 1.75 ton/ft^2
12.0'									El. -30.0'
			G- 3						Lean CLAY (CL): Brown, moist, stiff
15			SPT- 2	3 5 8	28 8		Moisture Content	CL	
▼			SPT- 3	3 3 6	26 0		Moisture Content		
20									
20.0'									El. -38.0'

Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (20.0'). Backfilled with neat cement. Groundwater measured at 19.1' bgs.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Date	Project Number	Project	Boring No.
Started: 9/18/18 Completed: 9/18/18	1076	Westside Canal Energy Center	B-4
Hammer Efficiency: 93 %	Rig Type: Unimog M-5 (Pacific)	Surface Elevation: -9.0'	Logged By: S. Burford
Latitude: 32.726831	Longitude: -115.716616	Location: South center	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
0									[ALLUVIUM (Qa-Qc)] Clayey SAND (SC): Tan, moist
			G- 1				Expansion Index Thermal Resistivity	SC	
5			MC- 1	8 13 20	22 3	96 4	Moisture / Density		
									6.5' El. -15.5'
									Lean CLAY (CL): Brown, moist
			G- 2						
10			SPT- 1	5 7 9	26 3		Moisture Content		Stiff
			G- 3					CL	
15			MC- 2	15 15 16	16 6	104 8	Moisture / Density		Very stiff, Pocket Penetrometer: 3.25 ton/ft^2
			SPT- 2	4 4 7	22 9		Moisture Content		Stiff
20									20.0' El. -29.0'

Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (20.0'). Backfilled with neat cement. Groundwater not encountered.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Sheet 1 of 1

Date	Project Number	Project	Boring No.
Started: 10/1/18	1076	Westside Canal Energy Center	B-5
Completed: 10/1/18			
Hammer Efficiency: 80 %	Rig Type: Diedrich D50 (Pacific)	Surface Elevation: -20.0'	Logged By: S. Burford
Latitude: 32.729244	Longitude: -115.712156	Location: Northeast corner	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
14	12:40pm	10/1/2018

Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
	0									[ALLUVIUM (Qa-Qc)] Silty SAND (SM): Tan, dry
				G- 1		4 6		Moisture Content Expansion Index No 200 Sieve	SM	
	5			MC- 1	1 8 15	11 2	107 9	Moisture / Density		5.0' El. -25.0'
										Lean CLAY (CL): Brown, moist
				G- 2					CL	
	10			SPT- 1	4 5 8	22 2		Moisture Content		Stiff
▼										14.0' El. -34.0'
	15									Sandy SILT (ML): Tan, wet
				MC- 2	3 5 7			No Recovery		
				G- 3					ML	
										Hard
				SPT- 2	11 16 25	22 6		Moisture Content		
	20									20.0' El. -40.0'

Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (20.0'). Backfilled with neat cement. Groundwater measured at 14.0' bgs.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Boring Log

Date	Project Number	Project	Boring No.
Started: 10/1/18	1076	Westside Canal Energy Center	B-6
Completed: 10/1/18			
Hammer Efficiency: 80 %	Rig Type: Diedrich D50 (Pacific)	Surface Elevation: -17.0'	Logged By: S. Burford
Latitude: 32.726936	Longitude: -115.712139	Location: Southeast corner	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
18	9:55am	10/1/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
0			G- 1		8 8		Expansion Index Thermal Resistivity R-Value Corrosivity Moisture Content	CL	[ALLUVIUM (Qa-Qc)] Sandy Lean CLAY (CL): Tan, dry
									2.0' El. -19.0'
									Fat CLAY (CH): Brown, moist to wet
5			MC- 1	7 11 17	24 1	99 5	Moisture / Density Direct Shear		
			G- 2						
10			SPT- 1	3 6 8	25 4		Moisture Content Atterberg Limit		Stiff
			G- 3						
15			MC- 2	2 4 12	29 1	94 3	Moisture / Density	CH	
▼									
20			SPT- 2	6 8 9	29 3		Moisture Content Atterberg Limit		Very stiff
			G- 4						
25			MC- 3	2 2 6	28 1		CAL-3 Disturbed Moisture Content		
			G- 5						
30								SM	29.5' El. -46.5'

PC ORIGINAL PKG

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

Boring Log

Date	Project Number	Project	Boring No.
Started: 10/1/18 Completed: 10/1/18	1076	Westside Canal Energy Center	B-6
Hammer Efficiency: 80 %	Rig Type: Diedrich D50 (Pacific)	Surface Elevation: -17.0'	Logged By: S. Burford
Latitude: 32.726936	Longitude: -115.712139	Location: Southeast corner	

Sample Type
G - Bulk / Grab Sample
SPT - 2" O.D. 1.5" I.D. Tube Sample
MC - 3 " O.D. 2.4" I.D. Ring Sample
NR - No Recovery
* - Uncorrected Blow Counts

Groundwater

Depth (ft)	Hour	Date
18	9:55am	10/1/2018

Groundwater Depth (ft.) / Depth (ft.)	Graphical Log	Sample Taken	Sample ID	Penetration Resistance (Blows per 6 in.)	Moisture Content (%)	Dry Weight (pcf)	Other Tests and Remarks	USCS Class.	Visual Classification
30			SPT- 3	8 14 24	16 8		Moisture Content	SM	Silty SAND (SM): Tan, moist, dense. Water added to borehole at 30' to maintain stability
35			SPT- 4	3 6 7	24 7		Moisture Content Atterberg Limit		36.0' El. -53.0'
								CL	Lean CLAY with Sand (CL): Brown, moist to wet, stiff
									39.0' El. -56.0'
40			SPT- 5	5 9 9	33 1		Moisture Content	ML	Sandy SILT (ML): Tan, wet, very stiff
									41.0' El. -58.0'
								CL	Lean CLAY (CL): Brown, moist to wet
									43.0' El. -60.0'
45			SPT- 6	6 10 11	26 7		Moisture Content Atterberg Limit		Sandy Lean CLAY (CL): Brown, moist to wet Very stiff
								CL	
50			SPT- 7	9 18 31	25 2		Moisture Content		Hard 51.5' El. -68.5'

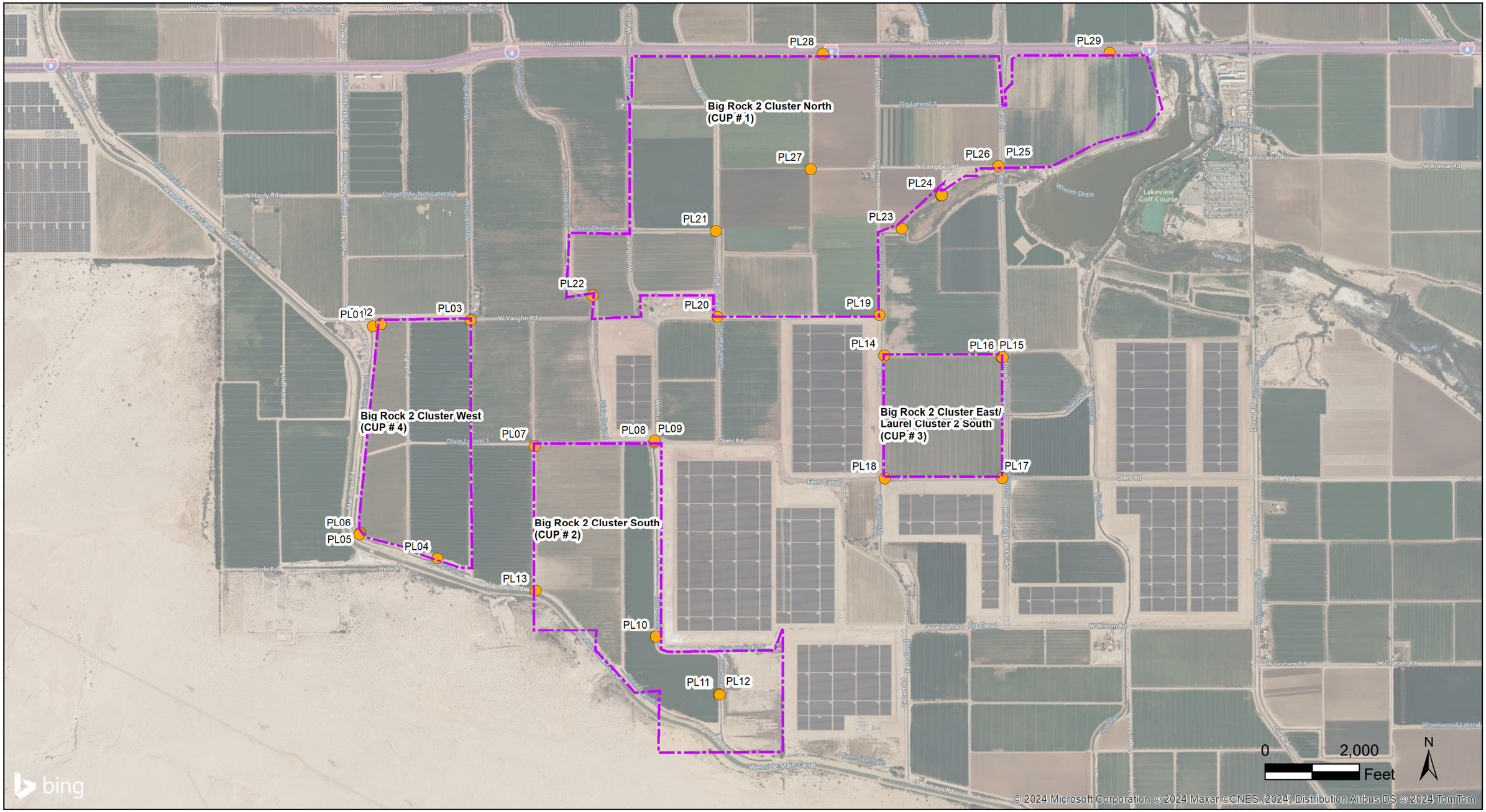
Notes: Drilled using 6" O.D. Hollow Stem Auger. Boring terminated at depth of (51.5'). Backfilled with neat cement. Groundwater measured at 18.0' bgs.

NV5 GEOTECH (SD CQA) \ NV5 LIBRARY_SAN DIEGO.GLB \ WESTSIDE CANAL LOGS.GPJ

PC ORIGINAL PKG

Appendix C
Site Photographs

PC ORIGINAL PKG



Legend

- Photo Location
- Project Limits (Approximate) - CUP # 1, 2, 3, 4

PHOTO LOCATION MAP
BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
IMPERIAL COUNTY, CALIFORNIA

PC ORIGINAL PKG

Figure C-1



PL01



PL02

PC ORIGINAL PKG



PL03



PL04

PC ORIGINAL PKG



PL05



PL06

PC ORIGINAL PKG



PL07



PL08

PC ORIGINAL PKG



PL09



PL10

PC ORIGINAL PKG



PL11



PL12

PC ORIGINAL PKG



PL13



PL14

PC ORIGINAL PKG



PL15



PL16

PC ORIGINAL PKG



PL17



PL18

PC ORIGINAL PKG



PL19



PL20

PC ORIGINAL PKG



PL21



PL22

PC ORIGINAL PKG



PL23



PL24

PC ORIGINAL PKG



PL25



PL26

PC ORIGINAL PKG



PL27



PL28

PC ORIGINAL PKG



PL29

PC ORIGINAL PKG





Phase I Environmental Site Assessment

Big Rock 2 Cluster Solar & Storage Project

El Centro, Imperial County, California

Prepared for
Imperial County California
Planning & Development Services Department

November 8, 2024
DRAFT

PC ORIGINAL PKG

This page left intentionally blank

PC ORIGINAL PKG

Table of Contents

Executive Summary **4**

1.0 Introduction **7**

1.1 Purpose 7

1.2 Report Users 8

1.3 Scope of Services, Significant Assumptions, and Limitations 8

2.0 Site Description **10**

2.1 Legal Description and Location 10

2.2 Site and Vicinity Characteristics 11

2.3 Description of Structures, Roads, and Other Site Improvements 11

2.4 Area Geology and Hydrogeology 11

3.0 User-Provided Information **15**

4.0 Records Review **16**

4.1 Environmental Records Review 16

4.2 Additional Regulatory Information 20

4.3 Historical Use Information 20

4.4 Environmental Liens, Activity Use Limitations (AULs) and Additional Information 22

4.5 Summary of Previous Environmental Investigations 23

4.6 Landowner Interviews 23

4.7 Site Reconnaissance 23

4.8 Utilities and PCBs 24

4.9 Vapor Intrusion 24

4.10 PFAS 24

5.0 Data Gap Analysis **25**

6.0 Findings, Opinions, and Conclusions **26**

6.1 Findings 26

7.0 Qualifications of Environmental Professionals **29**

7.1 Signatures and Qualifications 29

8.0 References **30**

PC ORIGINAL PKG

Figures

Figure 1. Project Location 13
Figure 2. Project Detail 14
Figure 3. Environmental Database Search Results 19

Tables

Table 1. Property Ownership 10
Table 2. Summary of Environmental Database Search Results 16
Table 3. Historical Aerial Photographs 21

Appendices

Appendix A – Governmental Database Search Results
Appendix B – Supplemental Review Information
Appendix C – Historical Aerial Photographs
Appendix D – Historical Topographic Maps
Appendix E – Landowner Interviews
Appendix E – Site Photographs

PC ORIGINAL PKG

List of Acronyms

AMSL	Above Mean Sea Level
AST	Aboveground Storage Tank
ASTM	ASTM International
AUL	Activity and Use Limitation
BESS	Battery Energy Storage System
BGS	Below Ground Surface
BLM	Bureau of Land Management
BMSL	Below Mean Sea Level
BOR	Bureau of Reclamation
EL	Environmental Lien
ESA	Environmental Site Assessment
FUDS	Formerly Used Defense Sites
DEQ	Department of Environmental Quality
FOIA	Freedom of Information Act
REC	Recognized Environmental Condition
SSTB	Salton Sea Test Base
SWRCB	State Water Resources Control Board
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UXO	Unexploded Ordnance

Note: A more complete acronym list is located in the Governmental Database Report, Appendix A.

PC ORIGINAL PKG

Executive Summary

HDR Engineering, Inc. (HDR) conducted a Phase I Environmental Site Assessment (Phase I ESA) of the proposed Big Rock 2 Cluster Solar and Storage Project (Project) located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. This Phase I ESA has been prepared at the request of Imperial County California Planning and Development Services Department, in support of project development, environmental documentation, and due diligence.

The Project Area is defined in this report as an irregularly shaped Project Area totaling approximately 1,849 acres. The proposed project consists of a 500-megawatt (MW) solar photovoltaic facility and a 500 MW battery energy storage system (BESS). The property is currently privately owned cropland, orchards and pastureland that is surrounded by agricultural use to the north, east, west, and south. The area is adjacent to or near the Laurel Cluster Solar facility, VEGA SES solar facility, and Campo Verde solar facility. The New River is adjacent to the northeast corner of the Project Area and the Imperial Irrigation District (IID) Westside Main Canal is located along the west and southern edges of the Project Area. Figures 1 and 2 provide further details regarding project limits and location.

The purpose of this Phase I ESA is to identify Recognized Environmental Conditions (RECs) that may adversely affect the Project Area. This Phase I ESA was conducted in accordance with the scope and limitations of ASTM International (ASTM) Standard Practice E1527-21, which currently meets the United States Environmental Protection Agency (USEPA) definition of All Appropriate Inquiry (AAI). This report includes a summary of the site reconnaissance conducted on October 22, 2024, landowner interviews, a review of environmental databases, and a review of historical data sources. Any exceptions to or deletions from these ASTM practices are described later in this report.

Findings

General findings of this assessment include the following:

- The Project Area is located within the Colorado Desert. The Project Area lies below mean sea level (bmsl), with elevations generally ranging from -30 ft bmsl in the southwest corner to -50 ft bmsl in the northeast corner. The Project Area vicinity slopes to the northeast and there are numerous irrigation canals and drains within proximity of the Project.
- The general lithology at the Project Area consists of Pleistocene aged marine and nonmarine sedimentary rocks in older alluvium, lake, playa, and terrace deposits.
- The groundwater flow direction within the Project Area vicinity is estimated to the northeast based on existing topography and surface waters. The nearest measured static water level was collected from a well located approximately 4 miles west of the Project Area and was reported at 52 ft below top of casing (btoc). However, this well is installed at a higher elevation; therefore, groundwater within the Project Area is likely shallower. There weren't any wells mapped within the Project Area.
- The environmental database search identified thirteen (13) mapped listings (for 8 sites) within the Project Area, and 11 listings within the 1-mile search buffer. The listings within the Project Area and many of the listings within the search buffer were determined to be mismapped outside the Project Area vicinity based on further review. The majority of these database listings were for the generation of regulated and/or hazardous wastes. Only one site, Jerry Preece Jr. Farms, located adjacent west of the Project Area had any reported violations associated with waste/chemical storage and disposal, including violations for open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. Five violations remain open for this site, which is located adjacent to the northeast corner of CUP #4.
- Historical sources for the Project Area indicate it has been used for agriculture with irrigation canals since at least 1915. Construction of Interstate 8 adjacent north and additional

PC ORIGINAL PKG

channelization throughout and adjacent to the Project Area occurred sometime between 1953 and 1976.

- Interviews were conducted with 8 out of 9 landowners (missing JR Preece Inc.) in the Project Area. The responding landowners indicated that the properties have only been used for agricultural purposes under their ownership and there were no environmental concerns identified in the surveys completed. However, Mrs. Susan Downs indicated that there was a homestead that burned down 20 years ago on their property, site cleanup details were not provided. Based on historical aerials, it appears the homestead was located on the northwest corner of parcel 051-290-019 (CUP #4). The site is currently graded; however, associated debris may have been buried in place.
- The site reconnaissance noted that the Project Area was a mix of fallow and agriculturally-developed parcels. Irrigation canals were noted throughout the Project Area vicinity. Two plastic above ground storage tanks (ASTs) and a tote associated with agricultural activity was present onsite. No indications of releases or spills was noted during the site reconnaissance. The only permanent structures within the Project Area were a residence and a metal shed with a concrete foundation located on the west side of the intersection of Jessup Road and Campbell Road (CUP #1).

Opinions

HDR has reviewed the stated data sources, which are part of the ASTM E 1527-21 assessment protocol. Based upon the review of the data, HDR has developed the following professional opinions:

- The footprint of a burned down structure was identified on the northeast corner of parcel 051-290-019. Burned debris may have been buried in-place, which may contain asbestos containing materials (ACM) or other hazardous building materials. The risk of encountering this debris does not meet the definition of a REC but is considered a Business Environmental Risk (BER) and should be considered during planning and construction of the solar and battery storage facility.
- Pesticides and herbicides have been applied to the agricultural fields in the Project Area for decades. However, normal application rates are not subject to CERCLA liability (Appendix X1.1.4.3 [4] ASTM 1527-21). Previous incident records of spills or potential over application within the Project Area or adjacent properties have all been closed. The use of pesticides and herbicides in the Project Area is not considered a REC.
- Per- and Polyfluoroalkyl Substances (PFAS) have been linked to insecticides, herbicides and biosolids. Two PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), are now listed as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The presence of PFAS in soil and/or groundwater in the Project Area is possible given the historical application of agricultural chemicals, but no reportable releases of insecticides or herbicides, or application of biosolids have been documented for the Project Area. The potential presence of PFAS is not currently a REC. It is a BER as PFAS regulations are rapidly evolving.
- Several open violations were reported on an adjacent property to the Project Area, owned by one of the participating landowners. A review of the violations indicates that conditions noted are generally localized to this property and are unlikely to impact the Project Area. Therefore, this is not considered a REC.

Conclusions

Based upon the above-detailed Findings and Opinions, HDR concludes that no RECs have been identified for the Project Area. The following statement is required by ASTM E 1527-21:

HDR has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-21 of Big Rock 2 Cluster Solar & Storage Project, located in Imperial County, California. Any exceptions to

PC ORIGINAL PKG

or deletions from ASTM E 1527-21 are described in this Report. This report has revealed no evidence of recognized environmental conditions in connection with the Property.

Recommendations

Recommendations included in this Report were developed through the investigative procedures described in the Scope of Services, Significant Assumptions, and Limitations sections of this Report. These findings should be reviewed within the context of the limitations provided in the Limitations section.

HDR makes following recommendations:

Recommendation 1

If construction occurs within the footprint of the burned structure than HDR recommends onsite personnel be made aware of the risk of encountering burned debris during construction. Safety protocols can include worker awareness training, an outlined plan in the event that potential ACM/burned debris is discovered, and an environmental technician on standby to respond if suspected ACM is encountered during fieldwork.

Recommendation 2

HDR recommends that the User consider the "shelf life" of Phase I documents in determining risk. ASTM E 1527-21 states that a conforming "Phase I" report is valid for a period of 180 days and may be updated during the 180 days to 1-year timeframe. The report is valid for use in any of the CERCLA defenses ONLY if it is updated within this time frame. If greater than one year passes from the final report date, the Phase I effort would need to be repeated to remain in compliance with ASTM and the "All Appropriate Inquiry" protections.

Report Viability Dates

PHASE I ESA COMPONENT	DATE COLLECTED
Database Search	September 30, 2024
Interview(s)	August 29, 2024 to September 6, 2024
Site Reconnaissance	October 22, 2024
AUL and Environmental Lien Search	User Provided
Environmental Professional Declaration	Report Date
Report Expiration	**February 25, 2025**

PC ORIGINAL PKG

1.0 Introduction

1.1 Purpose

The purpose of this Phase I ESA is to document the evaluation of the Project Area for indications of "recognized environmental conditions."

ASTM Practice E 1527-21 defines the following categories of recognized environmental condition (REC):

REC:

The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions (see definition below).

ASTM E 1527-21 defines release as a release of any hazardous substance or petroleum product shall have the same meaning as the definition of "release" in CERCLA 42 U.S.C. § 9601(22)).

Historical REC (HREC):

A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority. The property is not subject to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Controlled REC (CREC):

A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as documented by the issuance of a No Further Action [NFA] letter or equivalent, or meeting risk-based criteria established by the regulatory authority). Hazardous substances or petroleum products are allowed to remain in place, subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Additional conditions that are not included under the definitions of a REC, but are defined by ASTM Practice E 1527-21 include:

De minimis:

A condition that generally does not present a threat to human health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not RECs, historical RECs nor CRECs.

Business Environmental Risk:

A risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

Consideration of business environmental risk issues may involve addressing one or more non-scope considerations.

PC ORIGINAL PKG

1.2 Report Users

HDR received authorization from 90FI 8me, LLC (User), to conduct a Phase I ESA of the Project Area defined as an irregularly shaped area totaling 1,849-acres located near Seeley, Imperial County, California. This Phase I ESA has been prepared for the Imperial County California Planning and Development Services Department and only the Imperial County California Planning and Development Services Department has the right to rely on the contents of this Phase I ESA without written authorization.

1.3 Scope of Services, Significant Assumptions, and Limitations

The services provided for this Project consisted of the following:

- Provide a description of the Project Area including current land uses (Section 2.2)
- Provide a general description of the topography, soils, geology, and groundwater flow direction (Section 2.4)
- Review reasonably ascertainable and reviewable regulatory information published by federal, state, local, tribal, health, and/or environmental agencies pertaining to the Project Area (Sections 4.1 and 4.2)
- Review historical data sources for the Project Area, including aerial photographs, topographic maps, fire insurance maps, city directories, and other readily available development data (Section 4.3)
- Interviews with persons with knowledge of the development history of the Project Area (Section 4.6)
- Site reconnaissance and review of areas of environmental interest—including a visual review of adjoining properties—with a focus on indications of hazardous substances, petroleum products, polychlorinated biphenyls (PCBs), wells, storage tanks, solid waste disposal pits and sumps, and utilities (Section 4.7)
- Determine data gaps in the information obtained and comment on their significance in identifying RECs for the Project Area (Section 5.0)
- Prepare a written report of methods, findings, opinions, and conclusions (Section 6.0).

The goal of this scope of services is to assist the user in identifying conditions in the Project Area that may indicate risks regarding hazardous materials storage, disposal, or other impacts. The resulting report may qualify the user for relief from liabilities as one of three "defenses" identified in the 2002 Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 9607 (All Appropriate Inquiry subsections). These three defenses include:

1. The "innocent landowner" defense to potential liabilities under 42 United States Code [U.S.C.] § 9601
2. The "contiguous property owner" defense pursuant to 42 U.S.C. § 9607q
3. The "bona fide prospective purchaser" defense pursuant to 42 U.S.C. § 9607r

Federal regulations at (42 U.S.C § 9601(35)(A) & (B) § 9607(b)(3), § 9607(q); and § 9607(r)), promulgated by the United States (U.S.) Environmental Protection Agency (EPA), require that liability release be based (in part) on completion of All Appropriate Inquiries (AAI) prior to purchase of a property. Those inquiries are documented by Phase I reports, or Environmental Site Assessments (ESAs). EPA has agreed that the ASTM E 1527-21 specifies and interprets AAI requirements.

A user is defined by ASTM E 1527-21: as the party seeking to use ASTM E 2247 to complete an ESA of the Project Area and may include a potential purchaser of land in the Project Area, a potential tenant of the Project Area, an owner of land in the Project Area, a lender, or a Project Area manager. Investigative areas

PC ORIGINAL PKG

not included in the standard ASTM ESA scope include asbestos, lead-based paint, lead in drinking water, radon or urea formaldehyde, wetland issues, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, and high voltage power lines.

Indoor air quality from sources such as mold and asbestos are not included in the ASTM standard except to the extent that indoor air impacts are caused by releases of hazardous substances into subsurface soil or groundwater (vapor intrusion).

The potential for vapor encroachment or intrusion into structures in the Project Area are considered and identified from onsite or offsite sources based on the experience of the Environmental Professional.

The scope of services for ESA projects also does not include the completion of soil borings, the installation of groundwater monitoring wells, or the collection of soil or groundwater samples. State and national policies and standards relevant to vapor intrusion are in flux and subject to change.

HDR has made certain assumptions in preparing the scope of this assessment:

- Data gathered from public information sources (i.e., libraries or public regulatory agencies) are accurate and reliable.
- Site operations reflect site conditions relative to potential releases and no intentional concealment of environmental conditions or releases has occurred.
- Interview information is directly reported as gathered by the assessor and is limited by the accuracy of the interviewee's recollection and experience.
- Published geologic information and site observations made by the environmental professional are used to estimate likely contaminant migration pathways in the subsurface. These estimates by the environmental professional are limited in accuracy and are generally cross-referenced with existing information about similar sites and environmental releases in the area.
- Regulatory information is limited to sites identified after the late 1980s because reliable records were not kept by regulatory agencies prior to that time frame.

The findings and conclusions presented in this Report are based on the procedures described in ASTM E 1527-21, informal discussions with various agencies, a review of the available literature cited in this report, conditions noted at the time of this Phase I ESA, and HDR's interpretation of the information obtained as part of this Phase I ESA. The findings and conclusions are limited to this Project and properties described in this Report, and by the accuracy and completeness of the information provided by others.

A Phase I ESA cannot entirely eliminate uncertainty regarding the potential for RECs. Conducting this assessment is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the Project Area within reasonable limits of time and cost. In conducting its services, HDR used a degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. This Phase I ESA conforms to the level of documentation required in ASTM E 1527-21. However, HDR may omit discussion of certain records, i.e., sources deemed in HDR's professional opinion to be inapplicable or of limited value, to meet the specific needs of this client. In accordance with ASTM E 1527-21, however, if the lack of available documentation results in a data gap, this data gap is identified herein, and its significance is discussed.

PC ORIGINAL PKG

2.0 Site Description

2.1 Legal Description and Location

The Project Area lies in the southern portion of the state of California. It is located in unincorporated Imperial County, south of Interstate 8, approximately one mile southwest of the town of Seeley, and approximately six miles north of the United States International Border with Mexico. The Project Area is irregularly shaped and encompasses an area of approximately 1,849 acres. It is comprised of 25 parcels as described in Table 1 below.

Table 1. Property Ownership

Parcel	CUP	Assessor's Parcel Number (APN)	Acres	Property Owner
1	#1- Big Rock Cluster North (No. 24-0006) and Laurel 2 North (No. 21-0014)	051-270-020	101.8	William II Tomlinson
2		051-270-028	52.3	Frank N Tomlinson
3		051-270-036	67.4	JR Preece Inc.
4		051-270-041	279.0	John R Kuhn
5		051-280-054	149.5	
6		051-300-011	79.6	F.C. & M.K. Tomlinson LLC
7		051-300-016	10.8	
8		051-300-026	13.4	
9		051-300-035	40.3	John R Kuhn
10		051-300-037	28.9	
11		051-300-032	85.5	
12		051-300-032	80.0	
13		051-300-036	40.3	
14	#2- No. 24-0007 Big Rock Cluster South	051-330-003	246.5	La Valle Sabbia Inc.
15		051-350-004	57.4	
16		051-350-006	26.3	Randall R Whitmer & Soknin
17		051-350-007	40.0	La Valle Sabbia Inc.
18		051-350-008	40.0	Randall R Whitmer & Soknin
19	#3- No. 24-0008 Big Rock Cluster East/Laurel Cluster South	051-310-027	120.0	John R Kuhn
20		051-310-028	39.9	
21	#4-	051-290-018	79.8	Thomas D Brundy & JT D Karen
22		051-290-019	48.7	Susan L Downs & Timothy O Derrick

PC ORIGINAL PKG

23	No. 24-0009 Big Rock Cluster West	051-320-005	45.0	
24		051-320-006	39.9	Thomas D Brundy & JT D Karen
25		051-320-007	35.3	

The Project Area is located in all or portions of Sections 14, 15, 16, 20, 21, 22, 23, 26, 27, 28 29, 33, and 34, Township 16 South, Range 12 East, San Bernardino Meridian, in the County of Imperial, State of California. Please refer to Figures 1 and 2 for further details regarding the project location and details.

2.2 Site and Vicinity Characteristics

The property is currently privately owned cropland, orchards and pastureland that is surrounded by agricultural use to the north, east, west, and south. The area is adjacent to or near the Laurel Cluster Solar facility, VEGA SES solar facility, and Campo Verde solar facility. The New River is adjacent to the northeast corner of the Project Area and the Imperial Irrigation District (IID) Westside Main Canal is located along the west and southern edges of the Project Area.

According to the United States Geological Survey (USGS) 7.5-minute series topographic map for Seeley, Mount Signal, Yuha Basin, and Plaster City, California (2021), the Project Area ranges in elevation from approximately -30 ft below mean sea level (bmsl) in the southwest corner to -50 ft bmsl in the northeast. The entire Project Area lies below sea level and the topography slopes to the northeast toward the New River.

2.3 Description of Structures, Roads, and Other Site Improvements

Major roadways in the Project Area include Interstate 8 (CA-86) (oriented east-west), which borders the Project Area to the north; several asphalt paved and unimproved roads are present throughout the Project Area. Due to the extensive irrigated farming history within the Project Area, as well as locally high-water table, many irrigation canals and drains occur within proximity of the Project Area. These include a segment of the New River adjacent to the northeast corner of the Project Area, and the Imperial Irrigation District (IID) Westside Main Canal which is located along the west and southern edges of the Project Area. In addition, multiple named irrigation canals and drains are located adjacent to the unimproved roadways in the Project Area, including Fern Canal and Sidemain, Foxglove Canal, Wixom and Fig Drains, and Dixie Drains Two, Three, Three A and Three B.

2.4 Area Geology and Hydrogeology

2.4.1 Geology

The Project Area is located within the Colorado Desert. The Colorado Desert is located between the Mojave and Sonoran Deserts to the north and east, respectively, and the Peninsular Ranges to the west. The landscape is mostly below sea level and is dominated by the Salton Sea. The Colorado Desert is a depressed block between active branches of alluvium-covered San Andreas Faults. The geology is characterized by silt deposits of extinct Lake Cahuilla (California Department of Conservation, 2002).

The general lithology at the Project Area consists of Pleistocene aged marine and nonmarine sedimentary rocks in older alluvium, lake, playa, and terrace deposits. The Project Area is located in the seismically-active Imperial Valley in Southern California and considered likely to be subjected to moderate to strong ground motion from earthquakes in the region. The closest mapped earthquake fault zone is an unnamed fault located approximately 2.1 miles west of the Project Area.

2.4.2 Hydrogeology

The Project Area is located within the Imperial Valley Groundwater Basin (7-30) which covers approximately 1,870 square miles in Imperial County, California. The Imperial Valley Groundwater Basin

PC ORIGINAL PKG

lies within the southern part of the Colorado Desert Hydrologic Region, south of the Salton Sea. The basin is bounded on the east by the Sand Hills and on the west by the impermeable rocks of the Fish Creek and Coyote Mountains. To the north the basin is bounded by the Salton Sea, which is the discharge point for groundwater in the basin (DWR, 2004). Water levels vary widely within the basin due to differing hydraulic heads and the localized confining clay beds in the area (Brown, 1923). The Project Area is within the Colorado River hydrologic region and the Imperial Irrigation District is the local water agency.

2.4.3 Groundwater and Well Information

Groundwater flow direction in the general vicinity of the Project Area is presumed to be to the northeast based on existing topography and surface waters and the nearest measured static water level was collected from a well located approximately 4 miles west of the Project Area and was reported at 52 ft below top of casing (btoc). However, this well is installed at a higher elevation; therefore, groundwater within the Project Area is likely shallower. Local groundwater levels and flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, seasonality and nearby wells.

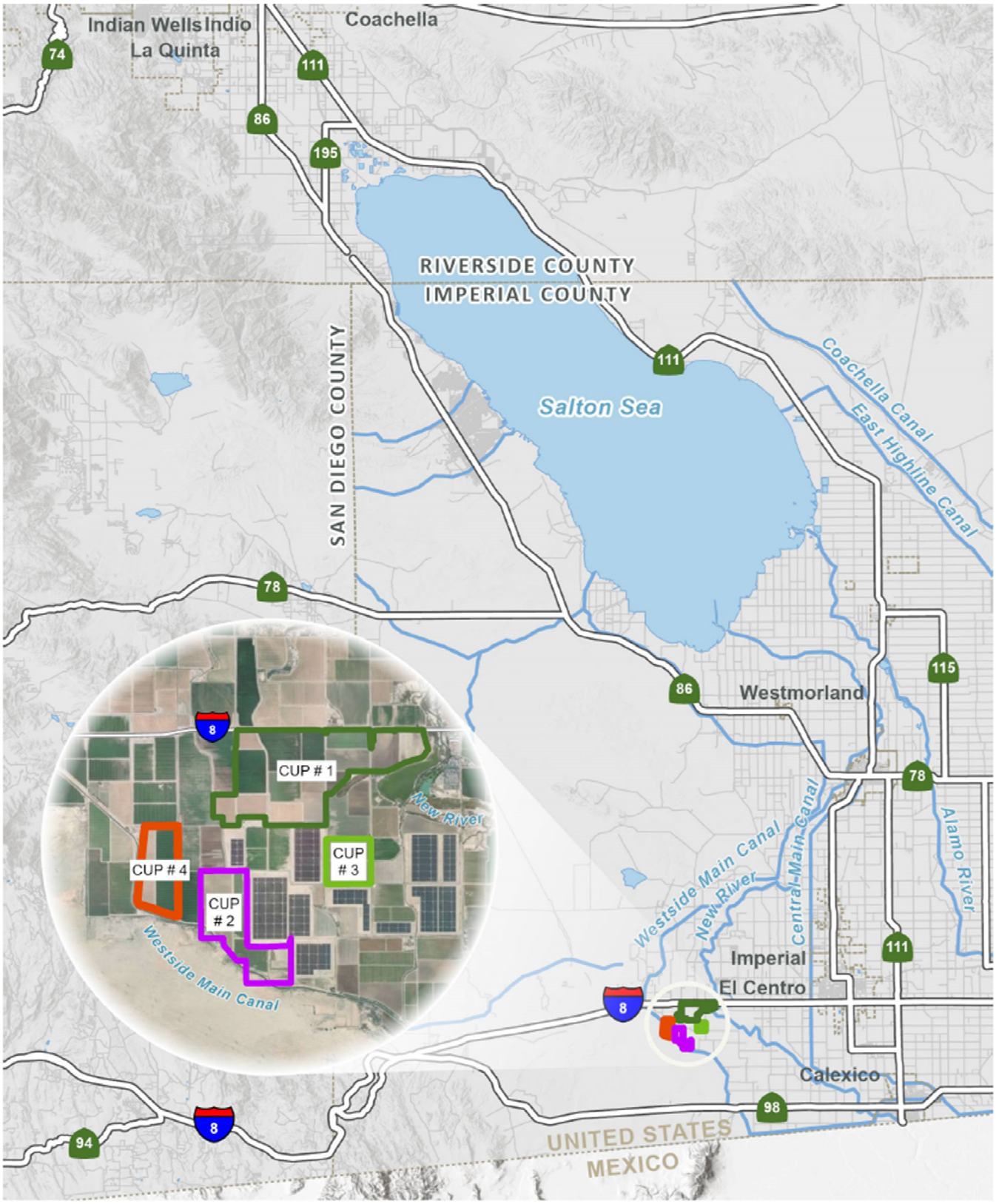
A search for water wells in the Project Area was conducted. The search identified no water wells within the Project Area sections and the nearest wells were located 1.25 miles southeast and 4 miles west of the Project Area.

Table 1. Water Wells

Well ID	Location (Latitude, Longitude)	Date Drilled	Well Depth (ft)	Water Level (ft bgs)	Notes
16S12E36E001S	32.7368, -115.692	7/9/62	Unk	Unk	Water Supply
16S11E23B001S	32.7675, -115.801	3/19/64	114.7	52	USGS Observation

Notes: Unk = unknown; ft = feet; bgs = below ground surface

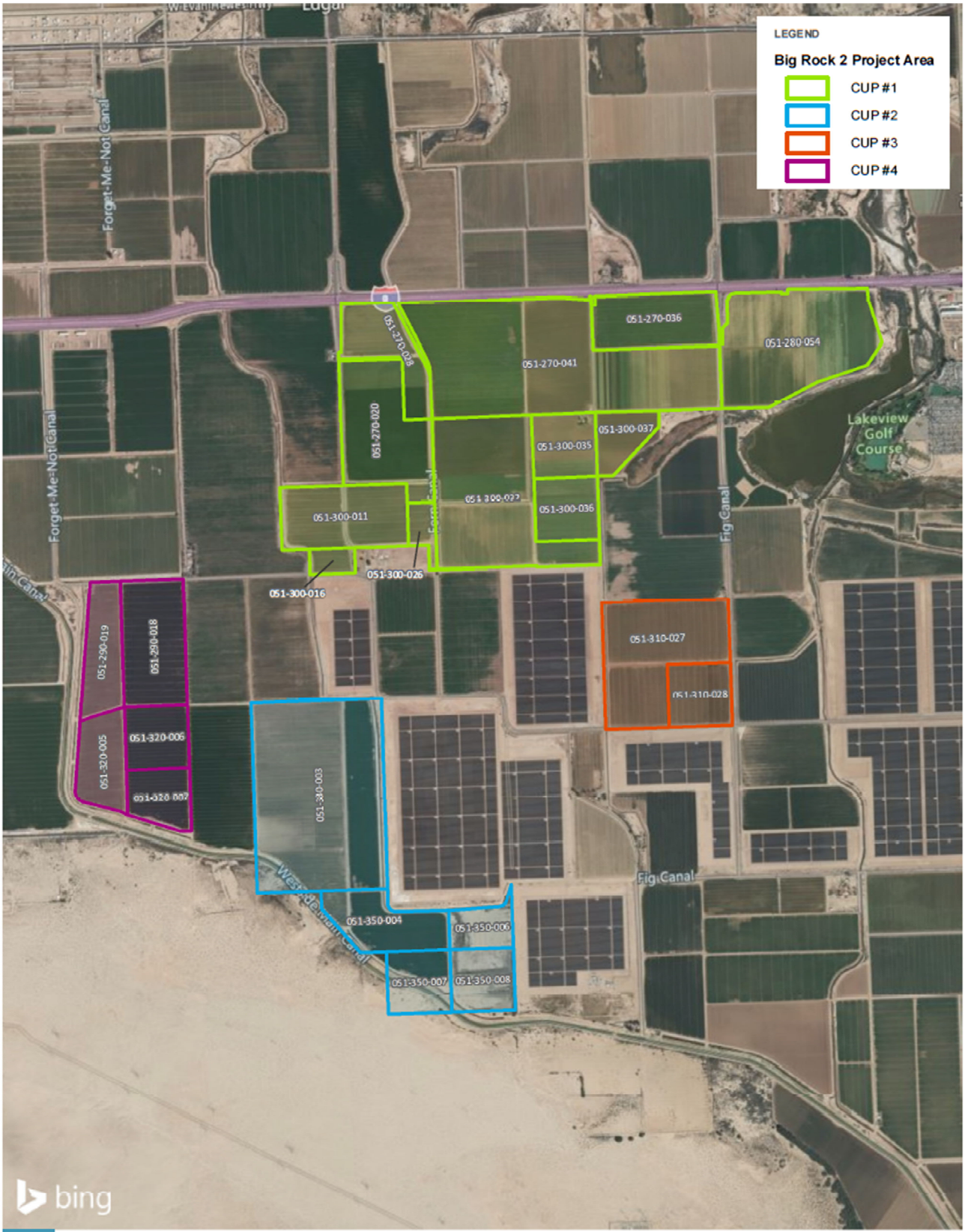
PC ORIGINAL PKG



0 Miles 8

PROJECT OVERVIEW
BIG ROCK 2 SOLAR PROJECT
FIGURE 1
PHASE I ENVIRONMENTAL ASSESSMENT

PC ORIGINAL PKG



PROJECT DETAIL
BIG ROCK 2 SOLAR PROJECT
FIGURE 2

PATH: \\MSPE-GIS-FILE\GIS\PROJ\IMPERIAL_COUNTY\160392307.2_WIP\APRX\BIGROCK2_PROJECTDETAIL_VERTICAL.MXD - USER: NPAHL - DATE: 10/23/2024

PC ORIGINAL PKG

3.0 User-Provided Information

A questionnaire was completed by Mr. Bill Metcalfe, Senior Director-Land Acquisition, on behalf of the User, to collect pre-existing information regarding the Project Area that might aid in the Phase I ESA investigation. Mr. Metcalfe provided the following responses to the questionnaire on October 18, 2024.

- No identification of any environmental liens or activity and use limitations (AUL) against the Project Area;
- No specialized knowledge related to the property;
- The Project Area purchase price reflects fair market value;
- No known past uses of the property;
- Farming/agricultural chemicals are present on the property;
- No knowledge of any spills or chemical releases on the property;
- No knowledge of any environmental cleanups that may have taken place on the property; and
- No obvious indicators that point to the presence of contamination on the property.

PC ORIGINAL PKG

4.0 Records Review

4.1 Environmental Records Review

EDR was contracted by HDR to complete a database search of federal, state, local, and tribal environmental records for the Project Area. The database search was performed for the Project Area by EDR on September 30, 2024. The databases searched included federal, state, local, tribal, and EDR proprietary databases for listings located within the Project Area, and an additional 1-mile search buffer zone. A complete copy of the EDR environmental database report and detailed maps are included in Appendix A. The database search area and buffer are shown in Figure 3.

Table 2. Summary of Environmental Database Search Results

Database	Description	Listings in the Project Area	Listings within the Search Distances
Standard Environmental Databases			
RCRA -SQG	Resource, Conservation, and Recovery Act (RCRA) Small Quantity Generator	0	0
ENVIROSTOR	EnviroStor Database	0	0
SWF/LF	Solid Waste Facility/Landfill – Solid Waste Information System	0	0
LUST	Geotracker's Leaking Underground Fuel Tank Report	0	0
UST	Underground Storage Tank Database – Active UST database	0	0
AST	Aboveground Petroleum Storage Tank Facilities	0	2
Additional Environmental Records			
HAULERS	Registered Waste Tire Haulers Listing	0	0
CERS HAZ WASTE	California Environmental Reporting System Hazardous Waste	0	1
CERS TANKS	California Environmental Reporting System (CERS) Tanks	0	1
HIST UST	Historical Underground Storage Tank Database	0	1
CHIMS	California Hazardous Material Incident Report System	0	0
LDS	Land Disposal Sites Listing	0	0
RCRA NonGen/NLR	RCRA - Non Generators / No Longer Regulated	0	1
MINES MRDS	Mineral Resources Data System	0	0
FINDS	Facility Index System/Facility Registry System	0	0
ECHO	Enforcement & Compliance History Information	0	0
UXO	Unexploded Ordnance Sites	0	0
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing	0	0
CORTESE	"Cortese" Hazardous Waste & Substances Sites List	0	0
CUPA Listing	CUPA Resources List	0	1
ICE	Inspection, Compliance and Enforcement	0	0
Hist Cortese	Hazardous Waste & Substance Site List. Cortese sites are no longer updated by the state agency.	0	0
HWTS	Hazardous Waste Tracking System	10	3
HAZNET	Facility and Manifest Data	3	0
MINES	Mines Site Location Listing	0	0
NPDES	NPDES Permits Listing	0	0
PEST LIC	Pesticide Regulation Licenses Listing	0	0

PC ORIGINAL PKG

CIWQS	California Integrated Water Quality System	0	0
UST Finder Release	UST Finder Releases Database	0	0
E MANIFEST	Hazardous Waste Electronic Manifest System	0	1
UST FINDER	UST Finder Database	0	0
EDR PROPRIETARY RECORDS			
EDR HIST AUTO	EDR Exclusive Historical Auto Stations	0	0
Total Listings		**13**	**11**
Orphan Listings		22	

The results of the database search identified thirteen (13) mapped listings (for 8 sites) within the Project Area, and 11 listings within the 1-mile search buffer.

Project Area Listings

- *Imperial Solar Energy/First Solar ISECW* (Map ID A) – Imperial Solar Energy (3020 W. County Rd 16) is listed in the HWTS database and First Solar ISECW (3020 W. County Rd 16) is listed in the HWTS and HAZNET databases. Based on the mapped location, these sites are likely associated with the solar development adjacent south of the Project Area. The First Solar ISECW site was listed as a generator of multiple regulated and hazardous waste streams including oil-containing waste, waste solvents, asbestos containing waste, organic and inorganic solid wastes, chromium waste (D007), and ignitable waste (D001). No violations were reported for these listings.
- *Pioneer Harvesting South* (Map ID A) – Pioneer Harvesting (2004 Evans Hewes Hwy) is listed in the HWTS database. The listing appears to be mismapped and the address provided is located outside the Project Area boundary. No violations were reported for this listing.
- *Mike Cameron* (Map ID A) – This site (1750 Drew Rd) is listed in the HWTS and HAZNET databases. The listing appears to be mismapped and the address provided is located outside the Project Area boundary. This site was listed as a generator of asbestos containing wastes. No violations were reported for this listing.
- *Therma Source Inc* (Map ID A) - This site is listed in the HWTS and HAZNET databases. The listing appears to be mismapped and the latitude and longitude provided is located outside the Project Area boundary. This site was listed as a generator of organic solid wastes. No violations were reported for this listing.
- *Seeley Food Market* (Map ID A) - This site was listed in the HWTS database. No specific location information was provided but the listing appears to be mismapped. The address for this business (1805 W Evan Hewes Hwy, Seeley, CA) indicates that it is over 1 mile northeast of the Project Area.
- *Seeley Union School* (Map ID A) - This site was listed in the HWTS database. No specific location information was provided but the listing appears to be mismapped. The address for this school is (1812 West Rio Vista **Seeley**, **CA**) located over 1 mile northeast of the Project Area.
- *Joe Datson* (Map ID A) – This site (1722 West Evans Hewes Hwy) is listed in the HWTS database. The listing appears to be mismapped and the address provided is located outside the Project Area boundary. No violations were reported for this listing.
- *Wells Fargo Bank* (Map ID A) - This site (2630 West Evans Hewes Hwy) is listed in the HWTS database. The listing appears to be mismapped and the address provided is located outside the Project Area boundary. No violations were reported for this listing.

Search Area Listings

The following listings were identified adjacent to the Project Area.

- *Miles Preservation LLC* (Map ID 11) – This site (1651 Westside Rd) is listed in the HWTS and HAZNET database and located adjacent to the northwest corner of the Project Area. The HAZNET

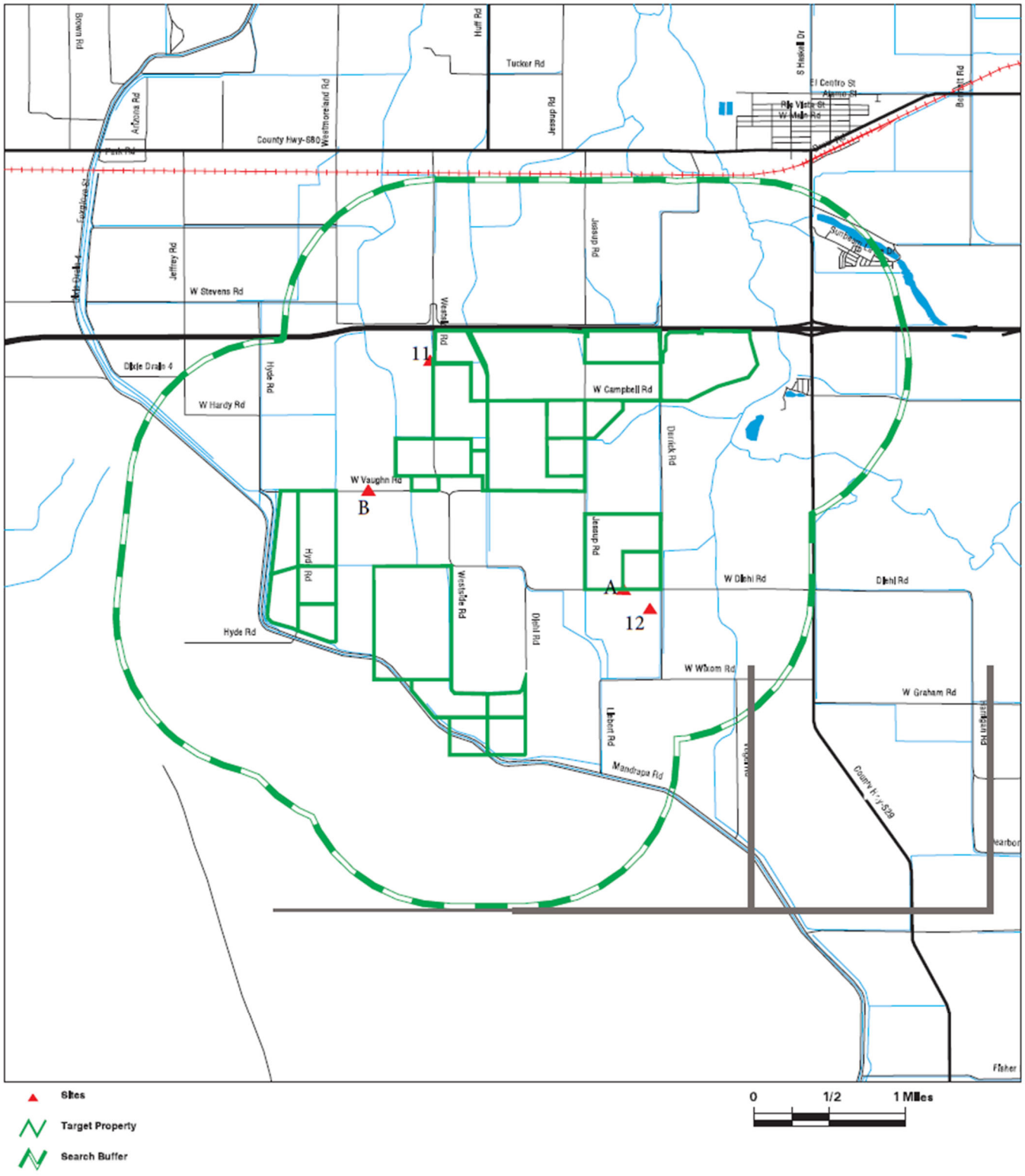
PC ORIGINAL PKG

listing indicated that household waste was generated and disposed of from this site. No violations were reported for this listing.

- *Campo Verde Solar LLC* (Map ID 12) – Campo Verde Solar (2007 West Diehl Rd) is listed in the HWTS and HAZNET database and located adjacent south of the Project Area. This site was listed as a generator of multiple regulated and hazardous waste streams including waste oil, inorganic and organic solid waste, and hexachloroethane waste (D035). No violations were reported for these listings.
- *Jerry Preece Jr. Farms* (Map ID B) – This site (2396 West Vaughn Road) is listed in the AST, RCRA NonGen/NLR, E Manifest, CERS Haz Waste, Hist UST, CERS Tanks, CUPA Listings, HWTS, HAZNET, and CERS databases and is located adjacent west of the Project Area. The AST and CERS Tanks databases indicate at least one 1,320 – gallon AST is registered to the site; however, no additional details on contents or location were provided. The RCRA NonGen/NLR, E Manifest, HWTS, and HAZNET databases indicate that the facility is not a federally regulated hazardous waste generator but does manage universal and other regulated wastes including used oil filters and other organic solids. The CERS database is associated with the site being a chemical storage facility and California regulated hazardous waste generator and there were multiple violations reported including open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. The Hist UST database is for a site at the same address but under the name *John H Borchard Ranches* and is associated with a 2,000-gallon fiberglass storage tank that contains gasoline and was installed in 1974. There was no indication if tank was ever removed; however, no violations or releases were reported in association with the tank.

Twenty-two orphan listings were identified in the Project zip codes. Orphan listings are sites that could not be mapped by EDR, based on limited or incomplete location information provided for a given listing. Based on the information provided, none of the sites are likely located in the Project Area or search buffer.

PC ORIGINAL PKG



ENVIRONMENTAL DATABASE SEARCH RESULTS

BIG ROCK 2 CLUSTER SOLAR & STORAGE PROJECT
FIGURE 3

PHASE I ENVIRONMENTAL SITE

PC ORIGINAL PKG

4.2 Additional Regulatory Information

4.2.1 Online Sources

Relevant information collected and review from the following supplemental online sources is provided in Appendix B.

Cal EPA

A search of the California EPA Regulated Site Portal was conducted to locate any additional sites/listings not found in the EDR database search. A cluster of 6 sites were identified on the east side of the Wixom Drain, approximately 1/2- to 1/3-mile away from the eastern boundary of CUP #1. A review of the listings did not find any sites of concern based on the type of listing, severity of violations, and distance from the Project Area.

The listing for Jerry Preece Jr. Farms (identified in Section 4.1 as Map ID B) was the only duplicate listing identified in the vicinity of the Project Area. This listing was associated with a farm operation located diagonal to the northeast corner of CUP #4. Listings for ASTs, chemical storage, and hazardous waste generation were found in association with the site. Chemicals listed onsite included: used oil filters, used oil, motor oil, hydraulic oil, diesel, diesel exhaust fluid, argon gas, and acetylene gas. Five open violations and one resolved violation was reported. The violations were under the hazardous waste generator program and the following violations from March 3, 2020, are still reported as open:

- Used oil spill. Requested corrective action: submit photos to CUPA demonstrating the spill had been properly removed and managed.
- Open used oil and oil filter containers. Requested corrective action: submit photo showing the containers were closed.
- Eye wash station has not been tested. Requested corrective action: Submit photo/documentation.
- Failure to send hazardous waste offsite for treatment or disposal within 180 days or has stored hazardous waste over 90 days. Requested corrective action: dispose of hazardous waste stored over the applicable time limit.
- Failure to meet spent lead acid battery management requirements. Requested corrective action: Owner/operator shall immediately begin to handle, store, and/or transport lead acid batteries in accordance with Title 22 regulations.

Formerly Used Defense Sites (FUDS) Viewer

An online GIS search of FUDS sites near the Project Area was conducted. Multiple FUDS sites associated with Camp Seeley and Ordinance Training Centers were located 2 to 3 miles north, west, and south of the property; however, these sites boundaries are all over a mile away from the Project Area and from review of the files have limited to no risk of unexploded ordinances or contamination.

4.2.2 Agency File Reviews

No formal Freedom of Information Act (FOIA) requests were made to government agencies due to the readily available documents available for download from relevant database websites.

4.3 Historical Use Information

The objective of reviewing historical use information is to develop a history of previous land uses at, and in the vicinity of, the Project Area, and to assess these uses for potential hazardous materials impacts that may affect the Project Area. HDR reviewed those historical sources that were reasonably ascertainable and likely to provide useful information, as defined by ASTM E 1527-21.

PC ORIGINAL PKG

4.3.1 Fire Insurance Maps

Fire insurance maps are produced by private fire insurance companies to indicate uses of properties within the Project Area, originally to develop fire ratings for insurance companies. Sanborn fire insurance map coverage for the Project Area was not available.

4.3.2 City Directory

Due to the undeveloped nature and lack of roads within the Project Area, City Directory coverage was not available.

4.3.3 Historical Aerial Photographs

Historical aerial photographs are valuable for the environmental assessor to review features of the Project Area over a long period of time. Copies of the historical aerial photographs for the Project Area (discussed below) are provided in Appendix C.

Historical aerial photographs were reviewed from the EDR Aerial Photo Decade Package for the following years: 1937, 1949, 1953, 1976, 1985, 1996, 2002, 2006, 2009, 2012, 2016, and 2020. Information relating to observed features for the Project Area and adjacent properties is presented below.

Table 3. Historical Aerial Photographs

Year	Source	Project Area*	Adjacent Area*	Notable Feature or Change
1937	EDR	NA	NA	The Project Area and Adjacent Properties were used for agricultural practices or were undeveloped floodplains/sloughs, alluvial fans/terraces, and arid shrublands. A portion of the north-central Project Area was located within the floodplain/slough and alluvial fan/terrace deposit areas of the New River. Multiple irrigation canals and ditches were located in alignment with the irrigation features within and adjacent to the Project Area today. Farmsteads adjacent to the Project Area were visible in alignment with many of the farmsteads existing today; however a farmstead on the central portion of the Project Area (parcel 051-300-032) was visible that isn't present today.
1949	EDR	NC	NC	No substantial changes.
1953	EDR	C	C	The floodplain/slough areas located in the north-central portion of the Project Area and on adjacent properties were starting to be converted to agricultural land. Some of the undeveloped arid shrubland in the southwest portion of the Project Area was being converted to agricultural land.
1976	EDR	C	C	The Project Area and surrounding properties appeared similar to the current agricultural use. The irrigation canals in the north-central and eastern portions of the Project Area had been modified and the floodplain/slough deposits had been modified to agricultural use. The arid shrubland in the southwest portion of the Project Area had been converted to agricultural use. The farmstead that was located on the central portion of the Project Area was no longer visible. A 2-lane roadway was now visible in alignment with the existing Interstate 8.

PC ORIGINAL PKG

1984	EDR	NC	NC	No substantial changes.
1996	EDR	NC	NC	No substantial changes.
2002	EDR	C	NC	It appeared that the property located on the western boundary of the Project Area that burned down (see Section 3) was no longer visible.
2006	EDR	NC	NC	No substantial changes.
2009	EDR	NC	NC	No substantial changes.
2012	EDR	NC	NC	No substantial changes.
2016	EDR	NC	C	Solar developments in alignment with the existing solar farms were visible.
2020	EDR	NC	NC	No substantial changes.
*	"C" Indicates that a change since the previous year was noted. "NC" Indicates no change was noted from the previous year.			

4.3.4 Historical Topographic Maps

Historical topographic maps provide an overview of the area relative to potential previous land uses. HDR reviewed USGS 7.5-minute historical topographic maps of the Project Area. The USGS 7.5-minute series topographic maps were reviewed for Seeley, Mount Signal, Yuha Basin, and Plaster City, California for 1957, 2012, 2015, and 2021. Additional larger scale topographic maps for El Centro (1:125,000, 1915), El Centro (1:250,000, 1942 and 1955), and El Centro (1:100,000, 1989), California were also included in the review.

These maps served to augment information that was gathered in the historical aerial photograph review. Copies of the historical topographic maps are included in Appendix D.

A review of the topographic maps concluded that the Project Area had historically been ditched by irrigation canals likely for agricultural use back to 1915. Canaled agricultural land is depicted adjacent north of the Project Area, the New River is depicted adjacent east, and the west side canal and undeveloped vacant land is depicted adjacent south and west. No other relevant features were shown on these maps. Interstate 8 was first depicted on the 1989 map.

4.4 Environmental Liens, Activity Use Limitations (AULs) and Additional Information

A search for Environmental Liens and AULs associated with leased parcels within the Project Area back to at least 1980 is designated by ASTM as a User-responsibility. The User has not provided HDR with a copy of the search at the time of this report.

The government database search conducted for the Project Area included a search of the following databases:

- NPL Lien and Lien 2 - Federal superfund liens.
- Liens - Environmental liens for California where the Department of Toxic Substance Control (DTSC) is the lien holder.
- DEED - Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction.

No listings were identified within the Project Area or search buffer in these databases.

PC ORIGINAL PKG

4.5 Summary of Previous Environmental Investigations

HDR was unaware of previous environmental investigations for the Project Area at the time of this report.

4.6 Landowner Interviews

The Project Area is currently owned by nine (9) separate landowners or entities as detailed previously in Table 1. A landowner questionnaire was given to all the landowners to provide information regarding their participating parcels. Responses from all but one party (JR Preece Inc.) was received between August 29 to September 6, 2024.

The landowner questionnaires indicated “no” or “unknown” to all the questions regarding the site history and current conditions with the exception of a fire that occurred on Mrs. Downs’ Property. Mrs. Downs indicated that there was a homestead that burned down 20 years ago on the property, site cleanup details were not provided. Based on historical aerials, it appeared the homestead was located on the northwest corner of parcel 051-290-019. The site is currently graded; however, debris may have been buried in place. Burn debris associated with residential structures may contain asbestos containing materials and/or other hazardous building materials.

Additional details regarding the questionnaires can be found in Appendix E.

4.7 Site Reconnaissance

On October 22, 2024, HDR conducted a site reconnaissance of the Project Area and surrounding properties. The Project Area consisted of various plots of agricultural land. Small portions of undeveloped land associated with the Project Area were also located on the southwest side of the Westside Main Canal, which borders the southwest side of the Project Area. The Project Area was mostly flat, with little changes in elevation throughout.

All the plots observed appeared to be fallow or actively cultivated. Features observed throughout the plots included unlined or concrete-lined canals with water control gates, sprinklers, unpaved roads, an electrical pump, two approximately 1,600-gallon ASTs labelled “Green Touch” (likely an agrichemical), a 275-gallon tote, and piles of hay. The electrical pump and storage containers were noted on the southeastern portion of the Project Area. Although the exact contents of the ASTs and storage tote could not be specified, due to the lack of spills or leakage observed in the vicinity of the containers and the use of the Project Area for agricultural purposes, the presence of the ASTs did not represent an environmental concern.

Other features observed within the Project Area included asphalt-paved roads, creeks, and a few structures. A residence was noted on the southwest side of the intersection of Jessup Road and Campbell Road, and a metal shed was present on the northwest side of the intersection. Nothing was stored along the exterior areas of the shed. Access to the interior of the shed or residence was not provided. It was noted that the metal shed was built above a concrete foundation.

Properties surrounding the Project Area consist of agricultural land, solar farms, and undeveloped land. The Interstate 8 Highway bordered the Project Area to the north. A golf resort, RV Park, and an industrial farm were located approximately 0.25 miles to the west.

Due to the size of the property, HDR was unable to inspect the entirety of the property. However, due to the agricultural and undeveloped nature of the property, this limitation does not represent a significant data gap.

Photographs taken during the site reconnaissance are located in Appendix F.

PC ORIGINAL PKG

4.8 Utilities and PCBs

HDR noted transmission lines, pole-mounted transformers, and signs indicating the presence of underground utilities owned by AT&T. The pole-mounted transformers were located near the metal shed and the electrical pump. The installation date of the transformers is unknown; therefore, the transformers could contain PCBs due to their age. However, no evidence of leaks, spills, or corrosion was observed in the vicinity of the transformers. Based on their good condition, the pole-mounted transformers were not an environmental concern.

4.9 Vapor Intrusion

According to EPA guidance, vapor intrusion is the general term for the migration of the vapor phase contaminants into buildings or structures. These contaminants are primarily volatile organic compounds (VOCs) and some heavy metals (mercury). These contaminants migrate from any subsurface contaminant source, such as contaminated soil or groundwater, through the soil and into an overlying building. The two general classes of VOCs that account for a large number of soil and groundwater contamination sites in the United States are petroleum hydrocarbons and non-petroleum hydrocarbon fuel additives, and chlorinated solvents (drycleaners and de-greasers.

The potential for vapor intrusion was evaluated for the Project Area. Based on the current and historical use of the Project Area, and the lack of VOC sources in the immediate vicinity, vapor intrusion is not considered to be of concern for the Project Area. In particular, this is also due to the proposed development of the site.

4.10 PFAS

The USEPA finalized a rule on April 19, 2024, which added two Per- and Polyfluoroalkyl Substances (PFAS), perfluorooctanoic acids (PFOA) and perfluorooctanesulfonic acid (PFOS), to the list of hazardous substances under CERCLA. Therefore, a release of PFOA and/or PFOS, are now included in the definition of a REC. PFAS is a family of fluorinated chemicals that vary in chemical and physical properties and could include more than 12,000 chemical substances. Due to their mobility, persistence in the environment, and widespread use, trace amounts of PFAS chemicals have been found in environmental media across the globe. Sources of PFAS include firefighting foams, consumer products, mills (textiles, paper, etc.), metal plating, coatings, and even municipal biosolids.

Potential sources of PFAS were evaluated for the Project Area. Federal and state PFAS databases (refer to the database search in Appendix A) were reviewed for PFAS-related sites/sources within the Project Area search buffer. No listings were identified. However, the following PFAS sources could be associated with the Project Area given known or common practices with agricultural properties:

- Potential application of municipal biosolids in agricultural fields.
- Use of insecticides (pesticides) and herbicides.

PC ORIGINAL PKG

5.0 Data Gap Analysis

The ASTM E 1527-21 standards require a listing of significant "data gaps," including data failure, encountered during the investigative process that may affect the ability of the environmental professional to identify recognized environmental conditions. The ASTM E 1527-21: 12.7 standard requires that the environmental professional estimate the relative importance of the data gaps. Generally, gaps in available data are related to the availability of historical data sources for specific sites of concern. The environmental professional uses multiple historical data sources as a method to provide coverage for data gaps. Historical information is collected on a recurring basis, and the passage of time between data sets may or may not constitute a significant gap in data coverage. For this project, the following data gap as defined by ASTM E 1527-21, were identified:

- HDR was unable to observe all portions of the Project Area due to the size of the property and/or lack of access to the interior of structures. However, based on the observed current land uses and lack of evidence of environmentally-sensitive operations in the surrounding properties, this limitation does not represent a significant concern.
- HDR did not receive a response from one of the landowners, JR Preece Inc. This is considered a data gap due to the lack of additional information regarding open violations associated with their facility located adjacent to the Project Area. However, this is not a significant data gap since the conditions related to these violations are unlikely to impact the Project Area.

PC ORIGINAL PKG

6.0 Findings, Opinions, and Conclusions

This Phase I ESA was performed in accordance with the scope and limitations of ASTM Practice E 1527-21. Any exceptions to, or deletions from, this practice are described previously in this report. Included in this Phase I ESA is a summary of findings, opinions, and conclusions.

6.1 Findings

General findings of this assessment include the following:

- The Project Area is located within the Colorado Desert. The Project Area lies bmsl, with elevations generally ranging from -30 ft bmsl in the southwest corner to -50 ft bmsl in the northeast corner. The Project Area vicinity slopes to the northeast and there are numerous irrigation canals and drains within proximity of the Project.
- The general lithology at the Project Area consists of Pleistocene aged marine and nonmarine sedimentary rocks in older alluvium, lake, playa, and terrace deposits.
- The groundwater flow direction within the Project Area vicinity is estimated to the northeast based on existing topography and surface waters. The nearest measured static water level was collected from a well located approximately 4 miles west of the Project Area and was reported at 52 ft btoc. However, this well is installed at a higher elevation; therefore, groundwater within the Project Area is likely shallower. There weren't any wells mapped within the Project Area.
- The environmental database search identified thirteen (13) mapped listings (for 8 sites) within the Project Area, and 11 listings within the 1-mile search buffer. The listings within the Project Area and many of the listings within the search buffer were determined to be mismapped outside the Project Area vicinity based on further review. The majority of these database listings were for the generation of regulated and/or hazardous wastes. Only one site, Jerry Preece Jr. Farms, located adjacent west of the Project Area had any reported violations associated with waste/chemical storage and disposal, including violations for open used oil filter containers, improper labeling, equipment testing failure, used oil spill, improper lead acid battery management, and not disposing of waste within the required time frames. Five violations remain open for this site, which is located adjacent to the northeast corner of CUP #4.
- Historical sources for the Project Area indicate it has been used for agriculture with irrigation canals since at least 1915. Construction of Interstate 8 adjacent north and additional channelization throughout and adjacent to the Project Area occurred sometime between 1953 and 1976.
- Interviews were conducted with 8 out of 9 landowners (missing JR Preece Inc.) in the Project Area. The responding landowners indicated that the properties have only been used for agricultural purposes under their ownership and there were no environmental concerns identified in the surveys completed. However, Mrs. Susan Downs indicated that there was a homestead that burned down 20 years ago on their property, site cleanup details were not provided. Based on historical aerials, it appears the homestead was located on the northwest corner of parcel 051-290-019 (CUP #4). The site is currently graded; however, associated debris may have been buried in place.
- The site reconnaissance noted that the Project Area was a mix of fallow and agriculturally-developed parcels. Irrigation canals were noted throughout the Project Area vicinity. Two plastic ASTs and a tote associated with agricultural activity was present onsite. No indications of releases or spills was noted during the site reconnaissance. The only permanent structures within the Project Area were a residence and a metal shed with a concrete foundation located on the west side of the intersection of Jessup Road and Campbell Road (CUP #1).

PC ORIGINAL PKG

Opinions

HDR has reviewed the stated data sources, which are part of the ASTM E 1527-21 assessment protocol. Based upon the review of the data, HDR has developed the following professional opinions:

- The footprint of a burned down structure was identified on the northeast corner of parcel 051-290-019. Burned debris may have been buried in-place, which may contain asbestos containing materials or other hazardous building materials. The risk of encountering this debris does not meet the definition of a REC but is considered a BER and should be considered during planning and construction of the solar and battery storage facility.
- Pesticides and herbicides have been applied to the agricultural fields in the Project Area for decades. However, normal application rates are not subject to CERCLA liability (Appendix X1.1.4.3 [4] ASTM 1527-21). Previous incident records of spills or potential over application within the Project Area or adjacent properties have all been closed. The use of pesticides and herbicides in the Project Area is not considered a REC.
- PFAS have been linked to insecticides, herbicides and biosolids. Two PFAS, PFOA and PFOS, are now listed as hazardous substances under the CERCLA. The presence of PFAS in soil and/or groundwater in the Project Area is possible given the historical application of agricultural chemicals, but no reportable releases of insecticides or herbicides or application of biosolids have been documented for the Project Area. The potential presence of PFAS is not currently a REC. It is a BER as PFAS regulations are rapidly evolving.
- Several open violations were reported on an adjacent property to the Project Area, owned by one of the participating landowners. A review of the violations indicates that conditions noted are generally localized to this property and are unlikely to impact the Project Area. Therefore, this is not considered a REC.

Conclusions

Based upon the above-detailed Findings and Opinions, HDR concludes that no RECs have been identified for the Project Area. The following statement is required by ASTM E 1527-21:

> *HDR has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-21 of Big Rock 2 Cluster Solar & Storage Project, located in Imperial County, California. Any exceptions to or deletions from ASTM E 1527-21 are described in this Report. This report has revealed no evidence of recognized environmental conditions in connection with the Property.*

Recommendations

Recommendations included in this Report were developed through the investigative procedures described in the Scope of Services, Significant Assumptions, and Limitations sections of this Report. These findings should be reviewed within the context of the limitations provided in the Limitations section.

HDR makes following recommendations:

Recommendation 1

If construction occurs within the footprint of the burned structure than HDR recommends onsite personnel be made aware of the risk of encountering burned debris during construction. Safety protocols can include worker awareness training, an outlined plan in the event that potential ACM/burned debris is discovered, and an environmental technician on standby to respond if suspected ACM is encountered during fieldwork.

Recommendation 2

HDR recommends that the User consider the “shelf life” of Phase I documents in determining risk. ASTM E 1527-21 states that a conforming “Phase I” report is valid for a period of 180 days and may be updated during the 180 days to 1-year timeframe. The report is valid for use in any of the CERCLA defenses ONLY if it is updated within this time frame. If greater than one year passes from the final

PC ORIGINAL PKG

report date, the Phase I effort would need to be repeated to remain in compliance with ASTM and the "All Appropriate Inquiry" protections.

Report Viability Dates

PHASE I ESA COMPONENT	DATE COLLECTED
Database Search	September 30, 2024
Interview(s)	August 29, 2024 to September 6, 2024
Site Reconnaissance	October 22, 2024
AUL and Environmental Lien Search	User Provided
Environmental Professional Declaration	Report Date
Report Expiration	**February 25, 2025**

PC ORIGINAL PKG

7.0 Qualifications of Environmental Professionals

7.1 Signatures and Qualifications

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in Section 312.10 of 40 Code of Federal Regulations [C.F.R.] Section 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquires in conformance with standards and practices set forth in 40 CFR Part 312.



Qualified Environmental Professional
Ben Czeck, PG (MN)



Qualified Environmental Professional
Hong Spores, CPG

7.1.1 Qualifications of Environmental Professionals

This Phase I ESA was performed by the following HDR personnel:

Mr. Ben Czeck, PG (MN), is a qualified environmental professional, as defined by ASTM Practice E 1527-21, with over 14 years of experience with environmental site assessments and remediation of impacted properties. He has a BS in Geology from the University of St. Thomas and a MS in Environmental Geology from the University of Hawaii. Mr. Czeck specializes in environmental due diligence and brownfield redevelopment as well as permitting and compliance with other federal, state, and local environmental regulations. Mr. Czeck developed and teaches an applied environmental policy course at the University of Saint Thomas and has worked as an environmental consultant and in-house environmental resource in the construction and energy utility industries.

Ms. Hong T. Spores, CPG, is a qualified environmental professional, as defined by ASTM Practice E 1527-21, and has 24 years of experience in the assessment and remediation of impacted properties and compliance with environmental regulations. She has a BS in Geology from the University of Minnesota and an MBA from the University of St. Thomas. Ms. Spores specializes in investigations of hazardous materials-impacted properties for public and private sector clients. She is highly knowledgeable of federal, state, and local environmental regulations and standards, along with environmental due diligence relating to real estate transactions. Her experience covers assessments ranging from agricultural properties to industrial facilities located internationally and in more than 30 states. Ms. Spores specializes in due diligence for alternative energy projects.

PC ORIGINAL PKG

8.0 References

ASTM Practice E1527-21, 2021, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

CalEPA. 2024. CalEPA Regulated Site Portal. https://siteportal.calepa.ca.gov/nsite/map/help. Accessed November 1, 2024.

CalRecycle. 2024. SWIS Facility/Site Search. SWIS Facility/Site Search (ca.gov) . Accessed online August 2, 2024.

EDR. 2024. *EDR Aerial Photo Decade Package*. Big Rock 2 Solar, El Centro, CA 92243. Inquiry 7778963.1. October 03, 2024.

EDR. 2024. *EDR Area/Corridor Report.* Big Rock 2 Solar, El Centro, CA 92243. Inquiry 7778963.4s September 30, 2024.

USACE. 2024. *Formerly Used Defense Sites (FUDS) Viewer- FY22 Data*. https://geospatial.sec.usace.army.mil/arcgis/apps/webappviewer/index.html?id=fe3efb63b00e45b5857d3b9e15420f92. Accessed online October 17, 2024.

USGS. 2024. Topoview. https://ngmdb.usgs.gov/topoview/viewer/#4/40.01/-99.98. Accessed online October 17, 2024.

PC ORIGINAL PKG

A

Governmental Database Search

PC ORIGINAL PKG

Big Rock 2 Solar
Big Rock 2 Solar
El Centro, CA 92243

Inquiry Number: 7778963.4s
September 30, 2024

EDR Area / Corridor Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

PC ORIGINAL PKG

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Mapped Sites Summary	2
Key Map	2
Map Findings Summary	3
Focus Maps	8
Map Findings	32
Orphan Summary	OR-1
Government Records Searched/Data Currency Tracking	GR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA) INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2024 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

PC ORIGINAL PKG

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifcations refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

HWTS: Hazardous Waste Tracking System

A review of the HWTS list, as provided by EDR, and dated 07/19/2024 has revealed that there are 10 HWTS sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
IMPERIAL SOLAR ENERG	3020 W. COUNTY RD 16	A1 / 7	31
PIONEER HARVESTING S	2004 EVAN HEWES HWY	A2 / 7	31
IMPERIAL SOLAR ENERG	3020 W. COUNTY RD 16	A3 / 7	32
MIKE CAMERON	***1750 DREW RD***	***A4 / 7***	***33***
THERMA SOURCE INC	***LAT 325813N LONG 115***	***A5 / 7***	***34***
FIRST SOLAR ISECW	***3020 W COUNTY ROAD 1***	***A6 / 7***	***36***
1X SEELY FOOD MARKET		A7 / 7	47
1X SEELEY UNION SCHO		A8 / 7	48
JOE DATSON	1722 W EVANHEWS HWY	A9 / 7	48
WELLS FARGO BANK	2630 EVAN HEWS HIGHW	A10 / 7	49

HAZNET: Facility and Manifest Data

A review of the HAZNET list, as provided by EDR, and dated 12/31/2023 has revealed that there are 3 HAZNET sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
MIKE CAMERON	***1750 DREW RD***	***A4 / 7***	***33***

PC ORIGINAL PKG

GEPAID: CAC002627321

THERMA SOURCE INC	***LAT 325813N LONG 115***	***A5 / 7***	***34***
GEPAID: CAC002636081			
FIRST SOLAR ISECW	***3020 W COUNTY ROAD 1***	***A6 / 7***	***36***
GEPAID: CAL000406194			

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifcations refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state and tribal registered storage tanks

AST: Aboveground Petroleum Storage Tank Facilities

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JERRY PREECE JR. FAR	2396 W VAUGHN ROAD	WSW 1/8 - 1/4 (0.200 mi.)	B13 / 6	55
Database: AST, Date of Government Version: 07/06/2016				
JERRY PREECE JR FARM	2396 W VAUGHN RD	WSW 1/8 - 1/4 (0.200 mi.)	B14 / 6	56
Database: AST, Date of Government Version: 07/06/2016				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 07/10/2024 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JOHN H BORCHARD RANC	***2396 W VAUGHN RD***	***WSW 1/8 - 1/4 (0.200 mi.)***	***B16 / 6***	***60***

PC ORIGINAL PKG

Local Lists of Registered Storage Tanks

HIST UST: Hazardous Substance Storage Container Database

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JOHN H BORCHARD RANC Facility Id: 00000027461	***2396 W VAUGHN RD***	***WSW 1/8 - 1/4 (0.200 mi.)***	***B16 / 6***	***60***

CERS TANKS: California Environmental Reporting System (CERS) Tanks

A review of the CERS TANKS list, as provided by EDR, and dated 07/10/2024 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JOHN H BORCHARD RANC	***2396 W VAUGHN RD***	***WSW 1/8 - 1/4 (0.200 mi.)***	***B16 / 6***	***60***

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/03/2024 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JERRY PREECE JR FARM EPA ID:: CAL000368294	***2396 W VAUGHN RD***	***WSW 1/8 - 1/4 (0.200 mi.)***	***B15 / 6***	***56***

E MANIFEST: Hazardous Waste Electronic Manifest System

A review of the E MANIFEST list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 E MANIFEST site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JERRY PREECE JR FARM	***2396 W VAUGHN RD***	***WSW 1/8 - 1/4 (0.200 mi.)***	***B15 / 6***	***56***

CUPA Listings: CUPA Resources List

A review of the CUPA Listings list, as provided by EDR, has revealed that there is 1 CUPA Listings site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
JOHN H BORCHARD RANC Database: CUPA IMPERIAL, Date of Government Version: 04/15/2024	***2396 W VAUGHN RD***	***WSW 1/8 - 1/4 (0.200 mi.)***	***B16 / 6***	***60***

PC ORIGINAL PKG

EXECUTIVE SUMMARY

HWTS: Hazardous Waste Tracking System

A review of the HWTS list, as provided by EDR, and dated 07/19/2024 has revealed that there are 3 HWTS sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
MILES PRESERVATION L	*1651 WESTSIDE RD*	*W 0 - 1/8 (0.019 mi.)*	*11 / 2*	*50*
CAMPO VERDE SOLAR LL	*2007 W DIEHL RD*	*S 1/8 - 1/4 (0.126 mi.)*	*12 / 7*	*52*
JOHN H BORCHARD RANC	*2396 W VAUGHN RD*	*WSW 1/8 - 1/4 (0.200 mi.)*	*B16 / 6*	*60*

PC ORIGINAL PKG

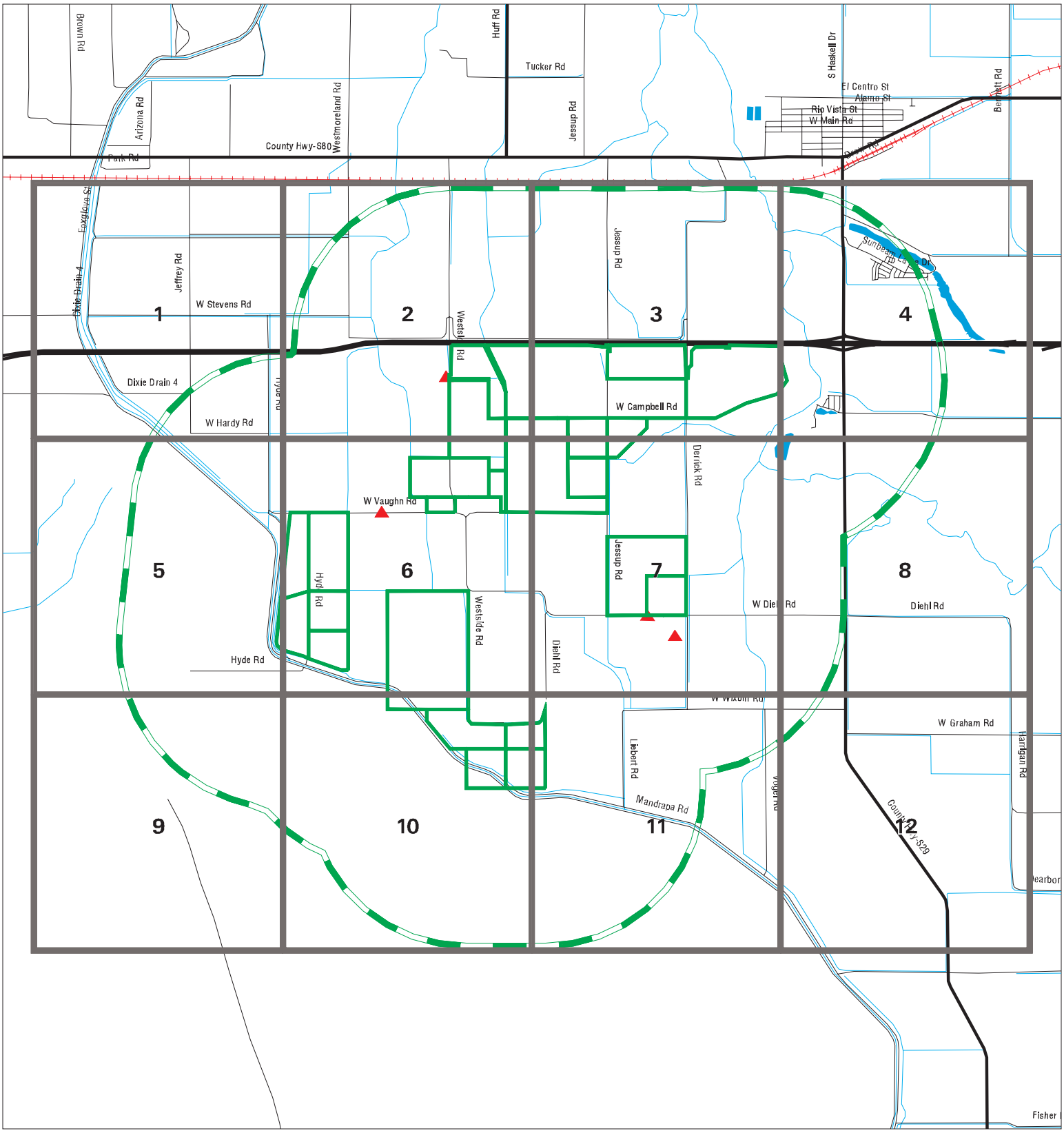
MAPPED SITES SUMMARY

Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
A1 / 7	IMPERIAL SOLAR ENERG	3020 W. COUNTY RD 16	HWTS	TP
A2 / 7	PIONEER HARVESTING S	2004 EVAN HEWES HWY	HWTS	TP
A3 / 7	IMPERIAL SOLAR ENERG	3020 W. COUNTY RD 16	HWTS	TP
A4 / 7	MIKE CAMERON	1750 DREW RD	HWTS, HAZNET	TP
A5 / 7	THERMA SOURCE INC	LAT 325813N LONG 115	HWTS, HAZNET	TP
A6 / 7	FIRST SOLAR ISECW	3020 W COUNTY ROAD 1	HWTS, HAZNET	TP
A7 / 7	1X SEELY FOOD MARKET		HWTS	TP
A8 / 7	1X SEELEY UNION SCHO		HWTS	TP
A9 / 7	JOE DATSON	1722 W EVANHEWS HWY	HWTS	TP
A10 / 7	WELLS FARGO BANK	2630 EVAN HEWS HIGHW	HWTS	TP
11 / 2	MILES PRESERVATION L	1651 WESTSIDE RD	HWTS, HAZNET	101 0.019 West
12 / 7	CAMPO VERDE SOLAR LL	2007 W DIEHL RD	HWTS, HAZNET	666 0.126 South
B13 / 6	JERRY PREECE JR. FAR	2396 W VAUGHN ROAD	AST	1058 0.200 WSW
B14 / 6	JERRY PREECE JR FARM	2396 W VAUGHN RD	AST	1058 0.200 WSW
B15 / 6	JERRY PREECE JR FARM	2396 W VAUGHN RD	RCRA NonGen / NLR, E MANIFEST	1058 0.200 WSW
B16 / 6	JOHN H BORCHARD RANC	2396 W VAUGHN RD	CERS HAZ WASTE, HIST UST, CERS TANKS, CU...	1058 0.200 WSW

PC ORIGINAL PKG

Key Map - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/2 1 Miles

SITE NAME:	Big Rock 2 Solar
ADDRESS:	Big Rock 2 Solar
CITY/STATE:	El Centro CA
ZIP:	92243

CLIENT:	HDR Engineering, Inc.
CONTACT:	Hong Spores
INQUIRY #:	7778963.4s
DATE:	09/30/24 5:23 PM

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

PC ORIGINAL PKG

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	2	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	1	NR	NR	NR	1
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	1	NR	NR	NR	1
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

PC ORIGINAL PKG

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

PC ORIGINAL PKG

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	0	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
E MANIFEST	0.250		0	1	NR	NR	NR	1
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	1	NR	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWTS	0.250	10	1	2	NR	NR	NR	13
HAZNET	TP	3	NR	NR	NR	NR	NR	3
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0

PC ORIGINAL PKG

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		13	1	10	0	0	0	24

NOTES:

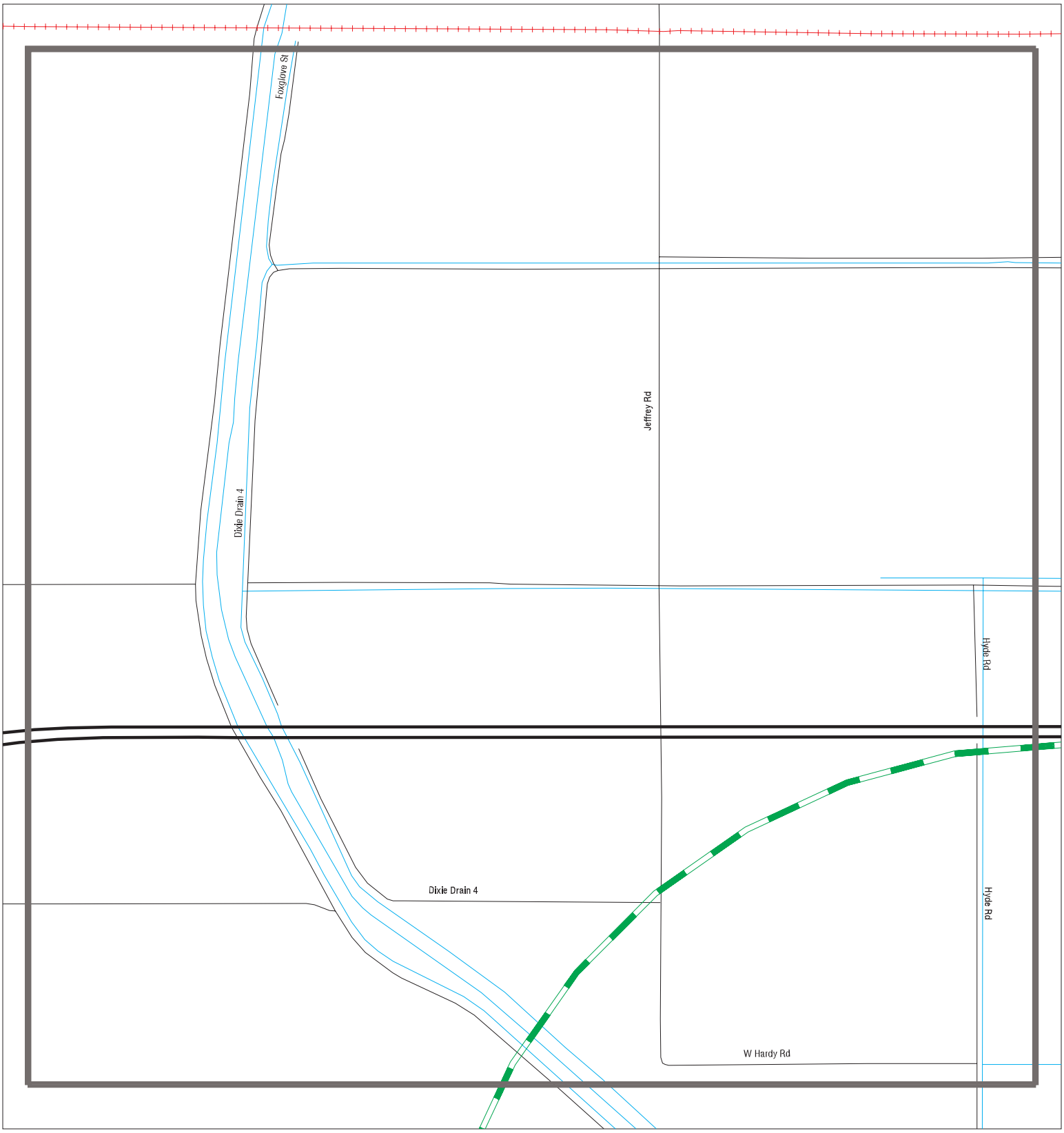
TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

PC ORIGINAL PKG

Focus Map - 1 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 1

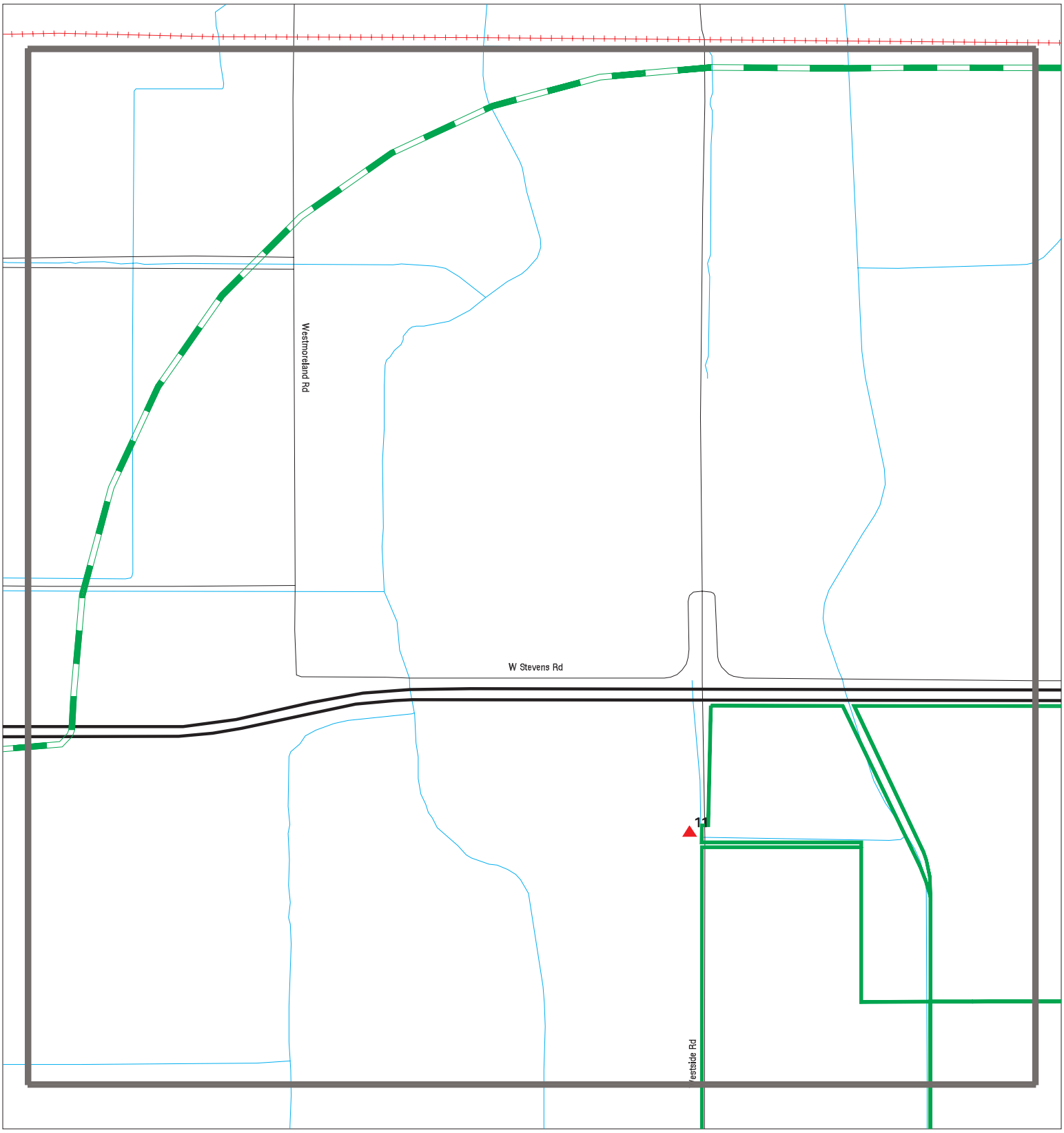
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 2 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

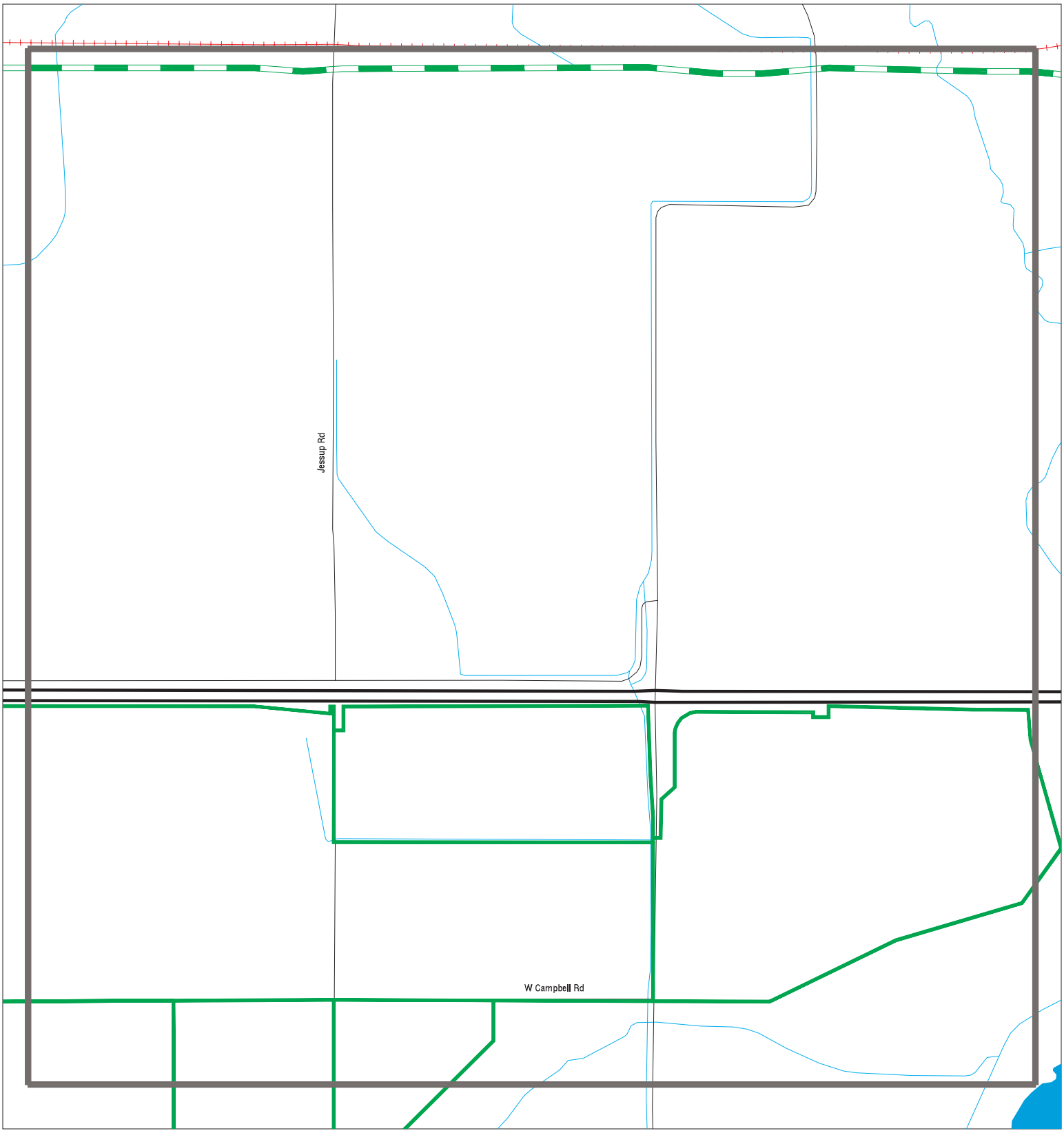
MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
11 / 2	MILES PRESERVATION L	1651 WESTSIDE RD	HWTS, HAZNET	101 0.019 West

PC ORIGINAL PKG

Focus Map - 3 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 4 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 4

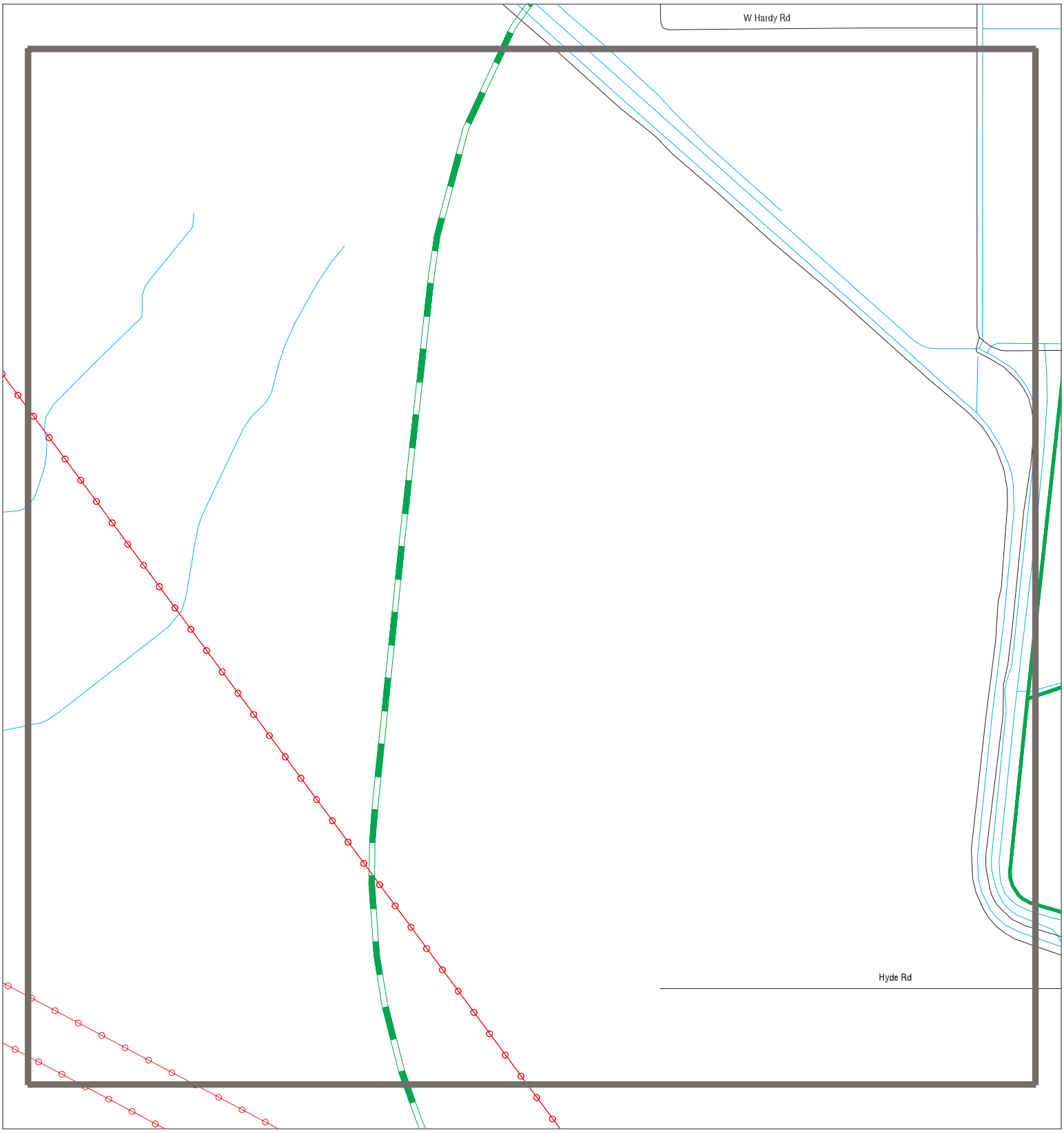
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 5 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 5

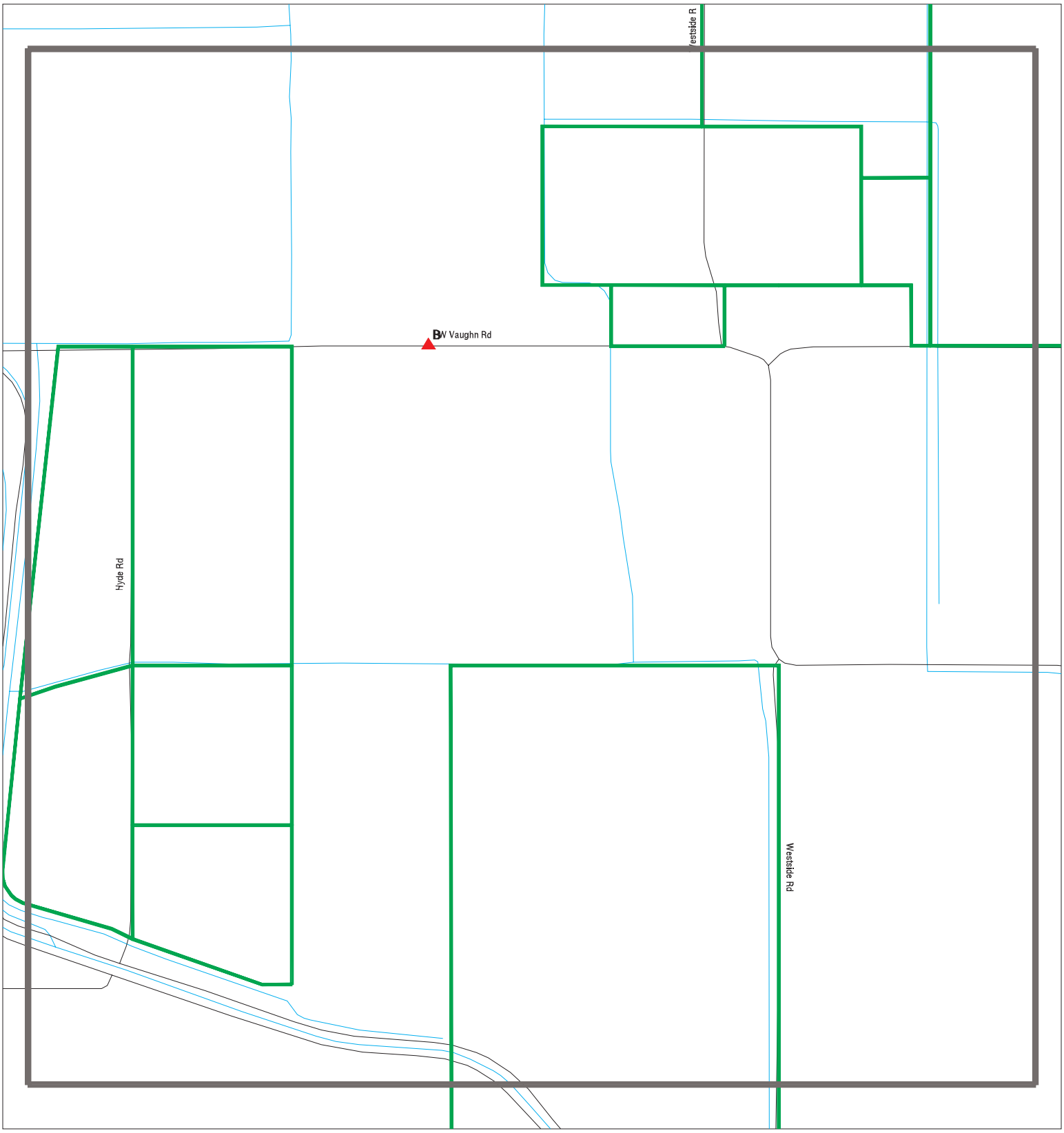
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 6 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

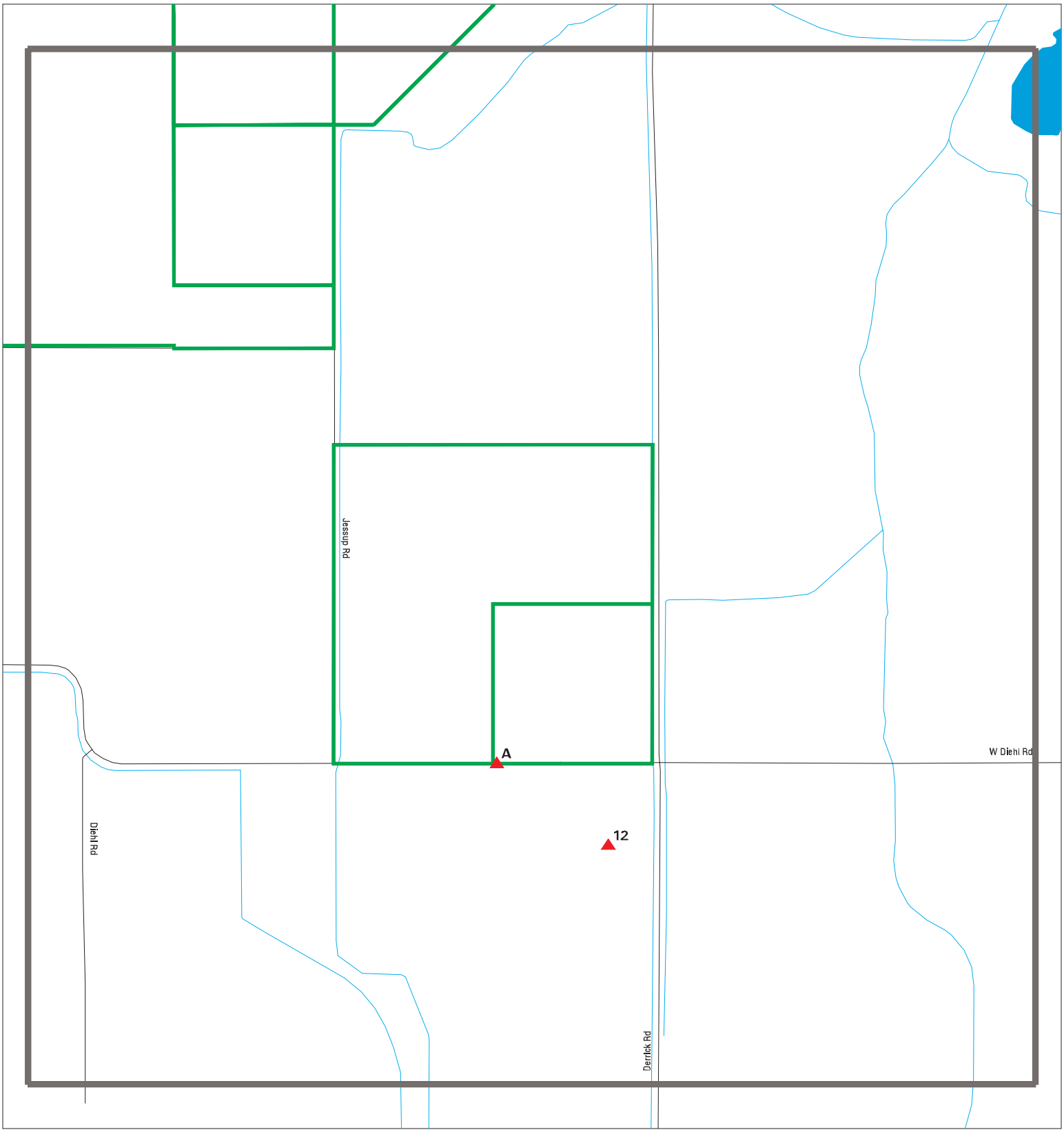
MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
B13 / 6	JERRY PREECE JR. FAR	2396 W VAUGHN ROAD	AST	1058	0.200	WSW
B14 / 6	JERRY PREECE JR FARM	2396 W VAUGHN RD	AST	1058	0.200	WSW
B15 / 6	JERRY PREECE JR FARM	2396 W VAUGHN RD	RCRA NonGen / NLR, E MANIFEST	1058	0.200	WSW
B16 / 6	JOHN H BORCHARD RANC	2396 W VAUGHN RD	CERS HAZ WASTE, HIST UST, CERS TANKS, CU...	1058	0.200	WSW

PC ORIGINAL PKG

Focus Map - 7 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

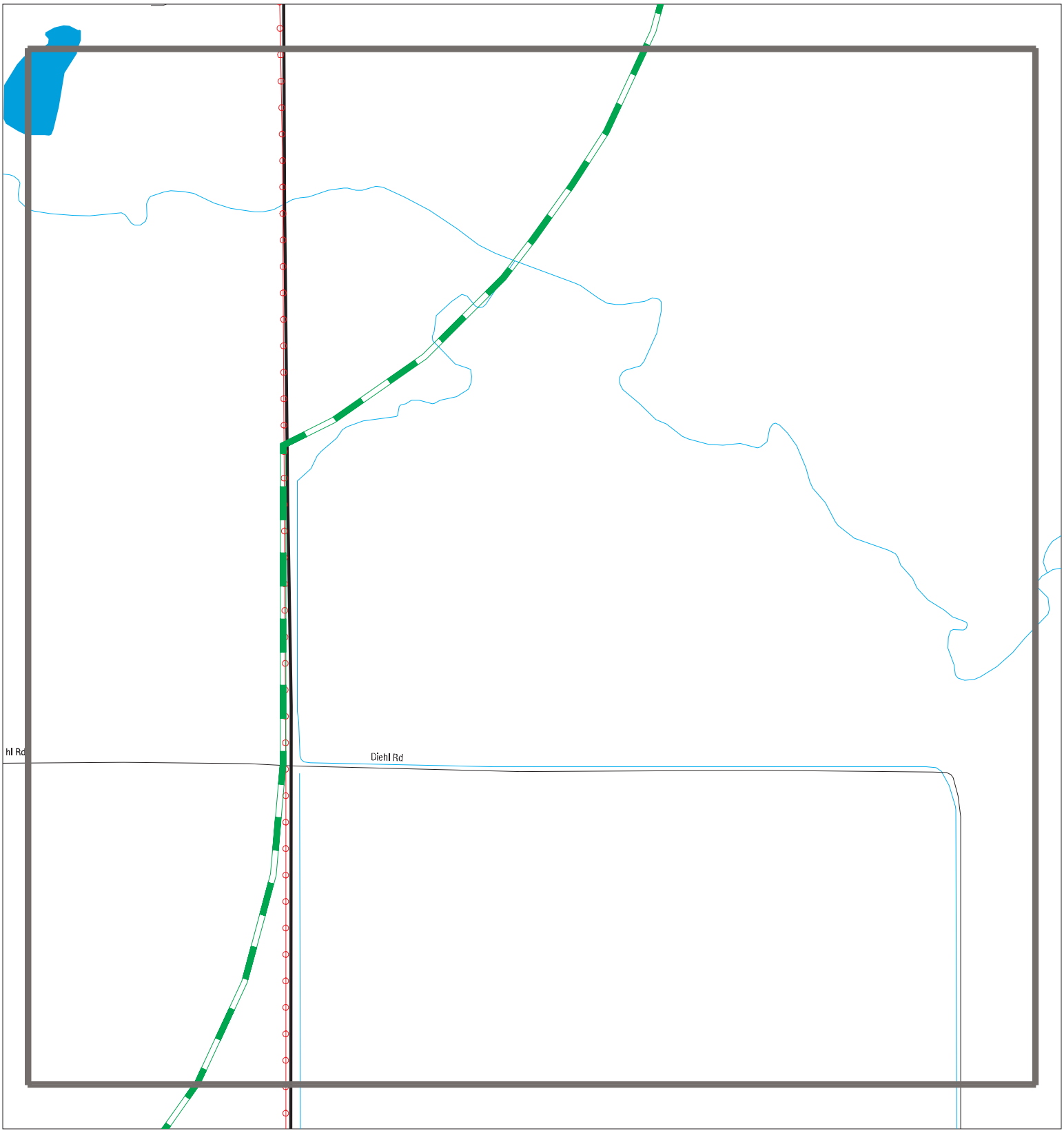
MAPPED SITES SUMMARY - FOCUS MAP 7

Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
A1 / 7	IMPERIAL SOLAR ENERG	3020 W. COUNTY RD 16	HWTS	TP
A2 / 7	PIONEER HARVESTING S	2004 EVAN HEWES HWY	HWTS	TP
A3 / 7	IMPERIAL SOLAR ENERG	3020 W. COUNTY RD 16	HWTS	TP
A4 / 7	MIKE CAMERON	1750 DREW RD	HWTS, HAZNET	TP
A5 / 7	THERMA SOURCE INC	LAT 325813N LONG 115	HWTS, HAZNET	TP
A6 / 7	FIRST SOLAR ISECW	3020 W COUNTY ROAD 1	HWTS, HAZNET	TP
A7 / 7	1X SEELY FOOD MARKET		HWTS	TP
A8 / 7	1X SEELEY UNION SCHO		HWTS	TP
A9 / 7	JOE DATSON	1722 W EVANHEWS HWY	HWTS	TP
A10 / 7	WELLS FARGO BANK	2630 EVAN HEWS HIGHW	HWTS	TP
12 / 7	CAMPO VERDE SOLAR LL	2007 W DIEHL RD	HWTS, HAZNET	666 0.126 South

PC ORIGINAL PKG

Focus Map - 8 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 8

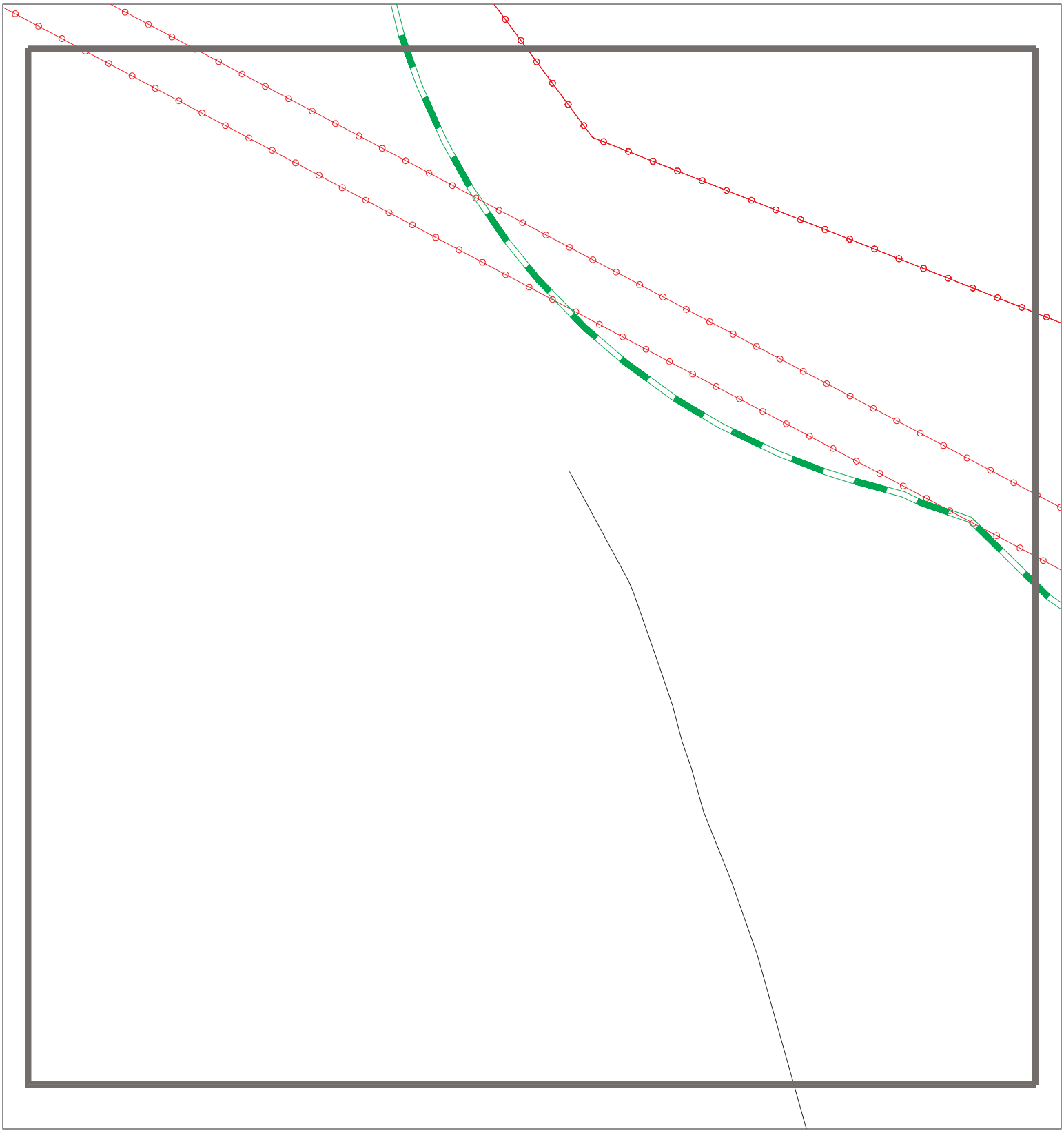
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 9 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 9

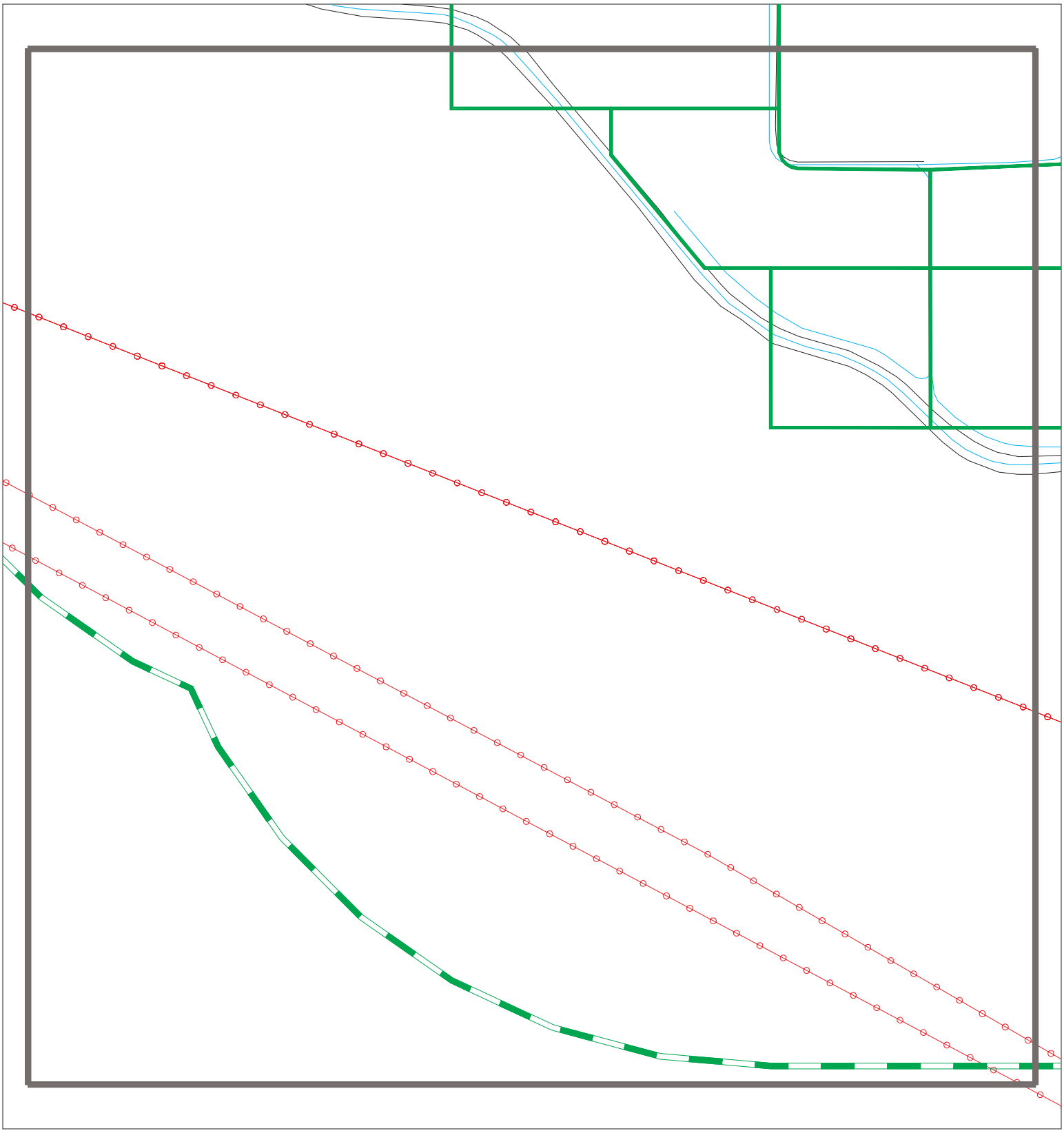
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 10 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 10

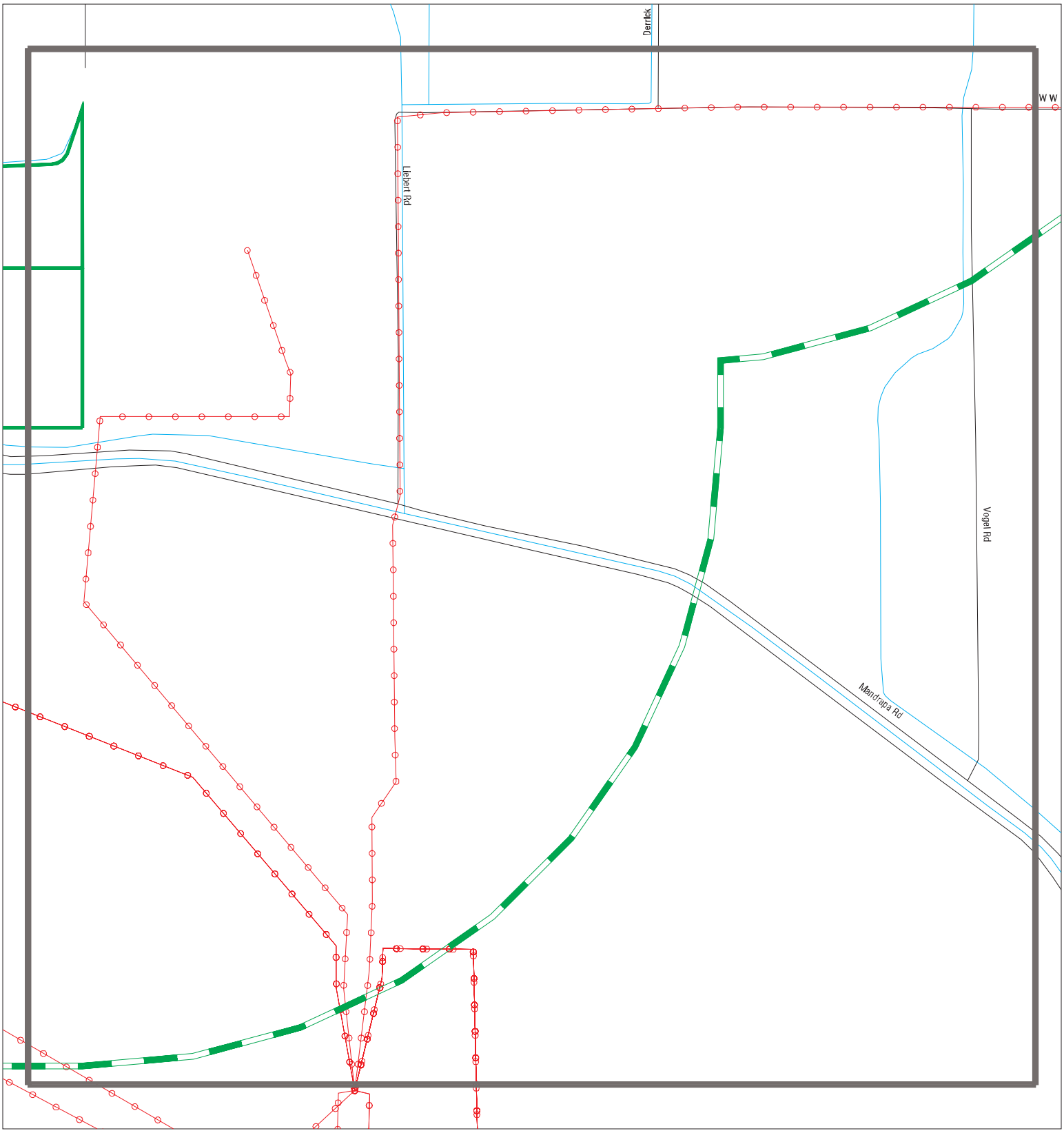
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 11 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 11

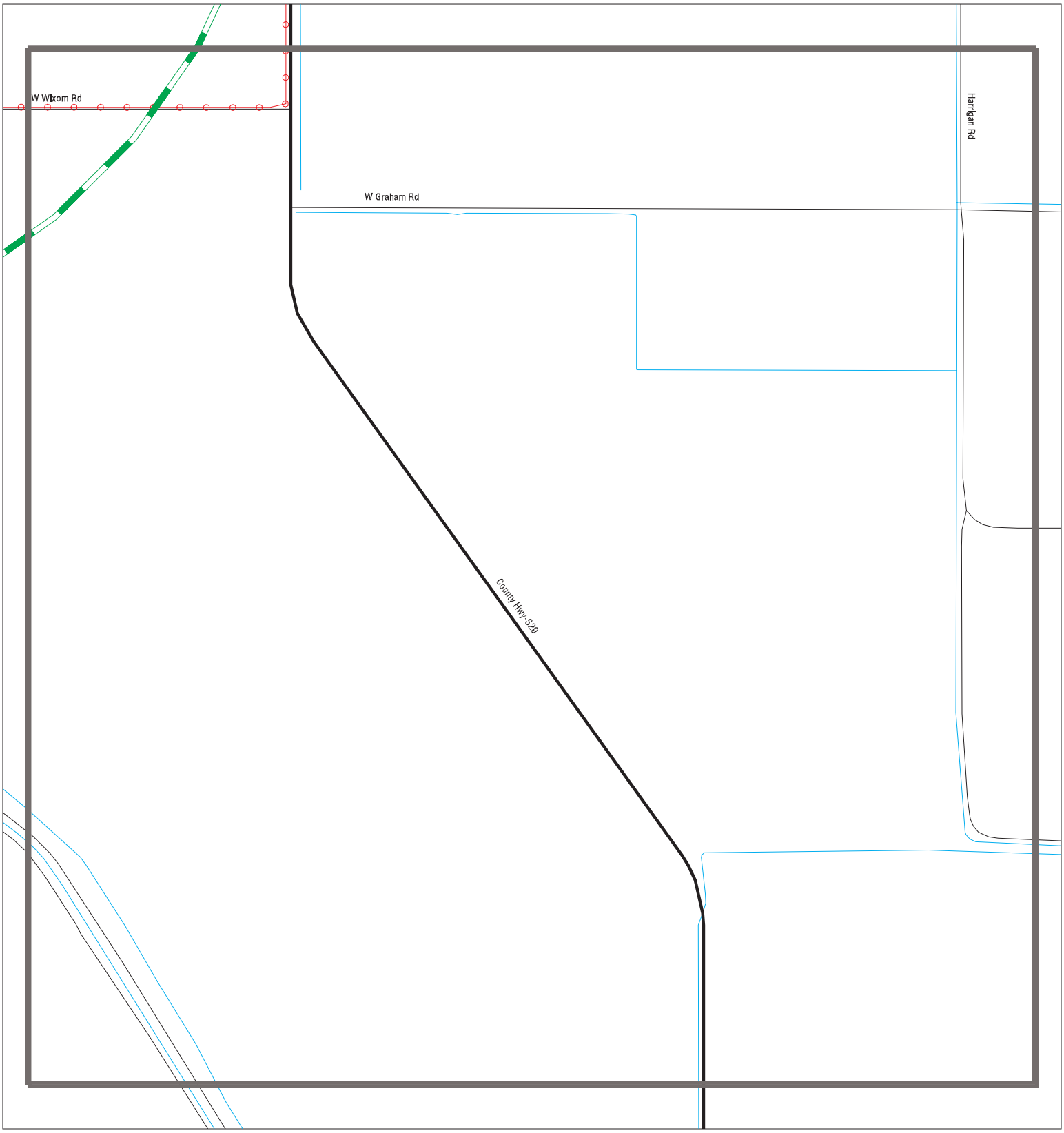
Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

Focus Map - 12 - 7778963.4s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Areas of Concern
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Big Rock 2 Solar	CLIENT: HDR Engineering, Inc.
ADDRESS: Big Rock 2 Solar	CONTACT: Hong Spores
CITY/STATE: El Centro CA	INQUIRY #: 7778963.4s
ZIP: 92243	DATE: 09/30/24

PC ORIGINAL PKG

Copyright © 2024 EDR, Inc. © 2015 TomTom Rel. 2015.

MAPPED SITES SUMMARY - FOCUS MAP 12

Target Property:
BIG ROCK 2 SOLAR
EL CENTRO, CA 92243

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

PC ORIGINAL PKG

A1 **IMPERIAL SOLAR ENERGY CENTER WEST** **HWTS** **S128375325**
Target Property **3020 W. COUNTY RD 16 32.771087,-115.786861** **N/A**
SEELEY, CA 92273

Site 1 of 10 in cluster A

Actual: **-32 ft.**
Focus Map: 7

HWTS:

Name:	IMPERIAL SOLAR ENERGY CENTER WEST
Address:	3020 W. COUNTY RD 16 32.771087,-115.786861
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC003164801
Inactive Date:	Not reported
Create Date:	03/04/2022
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	14302 FNB PARKWAY
Mailing Address 2:	Not reported
Mailing City,State,Zip:	OMAHA, NE 68154
Owner Name:	CSOLAR WEST IV LLC
Owner Address:	14302 FNB PARKWAY
Owner Address 2:	Not reported
Owner City,State,Zip:	OMAHA, NE 68154
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	BEN WILSON
Contact Address:	14302 FNB PARKWAY
Contact Address 2:	Not reported
City,State,Zip:	OMAHA, NE 68154
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

A2 **PIONEER HARVESTING STOP** **HWTS** **S124860096**
Target Property **2004 EVAN HEWES HWY** **N/A**
SEELEY, CA 92273

Site 2 of 10 in cluster A

Actual: **-32 ft.**
Focus Map: 7

HWTS:

Name:	PIONEER HARVESTING STOP
Address:	2004 EVAN HEWES HWY
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAL000306414
Inactive Date:	06/30/2010
Create Date:	05/09/2006
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	625 LILAC LN
Mailing Address 2:	Not reported
Mailing City,State,Zip:	IMPERIAL, CA 922518939
Owner Name:	STEVE DAVIS
Owner Address:	625 LILAC LN
Owner Address 2:	Not reported
Owner City,State,Zip:	IMPERIAL, CA 922518939

PC ORIGINAL PKG

PIONEER HARVESTING STOP (Continued) **S124860096**

Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	STEVE DAVIS
Contact Address:	625 LILAC LN
Contact Address 2:	Not reported
City,State,Zip:	IMPERIAL, CA 922518939
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

NAICS:

EPA ID:	CAL000306414
Create Date:	2006-05-09 15:19:34.267
NAICS Code:	99999
NAICS Description:	Not Otherwise Specified
Issued EPA ID Date:	2006-05-09 15:19:34.22000
Inactive Date:	2010-06-30 00:00:00
Facility Name:	PIONEER HARVESTING STOP
Facility Address:	2004 EVAN HEWES HWY
Facility Address 2:	Not reported
Facility City:	SEELEY
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92273

A3 **IMPERIAL SOLAR ENERGY CENTER WEST** **HWTS** **S128375354**
Target **3020 W. COUNTY RD 16 32.771087, -115.786861** **N/A**
Property **SEELEY, CA 92273**

Site 3 of 10 in cluster A

Actual:
-32 ft.

Focus Map:
7

HWTS:

Name:	IMPERIAL SOLAR ENERGY CENTER WEST
Address:	3020 W. COUNTY RD 16 32.771087, -115.786861
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC003164834
Inactive Date:	Not reported
Create Date:	03/04/2022
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	14302 FNB PARKWAY
Mailing Address 2:	Not reported
Mailing City,State,Zip:	OMAHA, NE 68154
Owner Name:	CSOLAR WEST IV LLC
Owner Address:	14302 FNB PARKWAY
Owner Address 2:	Not reported
Owner City,State,Zip:	OMAHA, NE 68154
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	BEN WILTON
Contact Address:	14302 FNB PARKWAY
Contact Address 2:	Not reported

PC ORIGINAL PKG

IMPERIAL SOLAR ENERGY CENTER WEST (Continued) **S128375354**

City,State,Zip:	OMAHA, NE 68154
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

A4 **MIKE CAMERON** **HWTS** **S112968269**
Target **1750 DREW RD** **HAZNET** **N/A**
Property **SEELEY, CA 92273**

Site 4 of 10 in cluster A

Actual:
-32 ft.

Focus Map:
7

HWTS:

Name:	MIKE CAMERON
Address:	1750 DREW RD
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC002627321
Inactive Date:	08/25/2008
Create Date:	02/26/2008
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	801 W MAIN ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	EL CENTRO, CA 922432811
Owner Name:	MIKE CAMERON
Owner Address:	801 W MAIN ST
Owner Address 2:	Not reported
Owner City,State,Zip:	EL CENTRO, CA 922432811
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	MIKE CAMERON
Contact Address:	801 W MAIN ST
Contact Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 922432811
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

HAZNET:

Name:	MIKE CAMERON
Address:	1750 DREW RD
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 922730000
Contact:	MIKE CAMERON
Telephone:	7609969651
Mailing Name:	Not reported
Mailing Address:	801 W MAIN ST
Year:	2008

PC ORIGINAL PKG

MIKE CAMERON (Continued) **S112968269**

Gepaid:	CAC002627321
TSD EPA ID:	AZC950823111
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	6

Additional Information:

Year:	2008
Gen EPA ID:	CAC002627321
Shipment Date:	20080306
Creation Date:	8/7/2008 18:30:15
Receipt Date:	20080310
Manifest ID:	001507862JJK
Trans EPA ID:	CAR000049064
Trans Name:	ECTI
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	AZC950823111
Trans Name:	LA PAZ LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	6
Waste Quantity:	15
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

A5 **THERMA SOURCE INC** **HWTS** **S112973877**
Target **LAT 325813N LONG 1154830W** **HAZNET** **N/A**
Property **SEELEY, CA 92273**

Site 5 of 10 in cluster A

Actual: **-32 ft.**

Focus Map: **7**

HWTS:

Name:	THERMA SOURCE INC
Address:	LAT 325813N LONG 1154830W
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC002636081
Inactive Date:	04/22/2009
Create Date:	10/23/2008
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	3882 AIRWAY DR STE 340
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SANTA ROSA, CA 95403
Owner Name:	THERMA SOURCE INC

PC ORIGINAL PKG

THERMA SOURCE INC (Continued) **S112973877**

Owner Address:	3882 AIRWAY DR STE 340
Owner Address 2:	Not reported
Owner City,State,Zip:	SANTA ROSA, CA 95403
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	JESSE CARRANZA
Contact Address:	3882 AIRWAY DR STE 340
Contact Address 2:	Not reported
City,State,Zip:	SANTA ROSA, CA 95403
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

HAZNET:

Name:	THERMA SOURCE INC
Address:	LAT 325813N LONG 1154830W
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
Contact:	JESSE CARRANZA
Telephone:	7604556303
Mailing Name:	Not reported
Mailing Address:	3882 AIRWAY DR STE 340
Year:	2008
Gepaid:	CAC002636081
TSD EPA ID:	CAD097030993
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1

Additional Information:

Year:	2008
Gen EPA ID:	CAC002636081
Shipment Date:	20081202
Creation Date:	2/4/2009 18:30:35
Receipt Date:	20081211
Manifest ID:	005136279JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD097030993
Trans Name:	SIEMENS WATER TECHNOLOGIES CORP
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

PC ORIGINAL PKG

THERMA SOURCE INC (Continued) **S112973877**

Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

A6 **FIRST SOLAR ISECW** **HWTS** **S123632673**
Target **3020 W COUNTY ROAD 16** **HAZNET** **N/A**
Property **SEELEY, CA 92273**

Site 6 of 10 in cluster A

Actual:
-32 ft.

Focus Map:
7

HWTS:

Name:	FIRST SOLAR ISECW
Address:	3020 W COUNTY ROAD 16
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAL000406194
Inactive Date:	06/30/2015
Create Date:	04/21/2015
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	135 MAIN ST FL 6
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SAN FRANCISCO, CA 941058113
Owner Name:	FIRST SOLAR ELECTRIC (CALIFORNIA)
Owner Address:	350 W WASHINGTON ST STE 600
Owner Address 2:	Not reported
Owner City,State,Zip:	TEMPE, AZ 852811496
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	STEVEN; VAN ZANT
Contact Address:	3020 W COUNTY ROAD 16
Contact Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

NAICS:

EPA ID:	CAL000406194
Create Date:	2015-04-21 09:53:52.330
NAICS Code:	99999
NAICS Description:	Not Otherwise Specified
Issued EPA ID Date:	2015-04-21 09:53:52.32300
Inactive Date:	2015-06-30 00:00:00
Facility Name:	FIRST SOLAR ISECW
Facility Address:	3020 W COUNTY ROAD 16
Facility Address 2:	Not reported
Facility City:	SEELEY
Facility County:	Not reported

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Facility State: CA
Facility Zip: 92273

HAZNET:
Name: FIRST SOLAR ISECW
Address: 3020 W COUNTY ROAD 16
Address 2: Not reported
City,State,Zip: SEELEY, CA 92273
Contact: STEVEN; VAN ZANT
Telephone: 4802723561
Mailing Name: Not reported
Mailing Address: 135 MAIN ST FL 6

Year: 2016
Gepaid: CAL000406194
TSD EPA ID: AZR000501510
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.68805

Year: 2016
Gepaid: CAL000406194
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0875

Year: 2016
Gepaid: CAL000406194
TSD EPA ID: CAD008252405
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.198

Year: 2015
Gepaid: CAL000406194
TSD EPA ID: Not reported
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1

Year: 2015
Gepaid: CAL000406194
TSD EPA ID: CAD008252405
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.35

Year: 2015
Gepaid: CAL000406194
TSD EPA ID: NVT330010000
CA Waste Code: 352 - Other organic solids

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 1.265

Year: 2015
Gepaid: CAL000406194
TSD EPA ID: NVT330010000
CA Waste Code: 151 - Asbestos containing waste
Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 0.15

Year: 2015
Gepaid: CAL000406194
TSD EPA ID: NVT330010000
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 3.91

Additional Information:
Year: 2016
Gen EPA ID: CAL000406194

Shipment Date: 20151217
Creation Date: 9/26/2016 18:30:40
Receipt Date: 20151223
Manifest ID: 014279458JJK
Trans EPA ID: CAR000172189
Trans Name: AMBERWICK CORPORATION
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: NVT330010000
Trans Name: US ECOLOGY
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: Not reported
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons: 0.15
Waste Quantity: 300
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20151015
Creation Date: 5/4/2016 22:15:28
Receipt Date: 20151022
Manifest ID: 014294340JJK
Trans EPA ID: CAR000172189
Trans Name: AMBERWICK CORPORATION
Trans 2 EPA ID: Not reported

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D007
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151015
Creation Date:	5/4/2016 22:15:55
Receipt Date:	20151022
Manifest ID:	013549277JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	Not reported
Trans Name:	PACIFIC RESOURCE RE
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	2/9/2016 22:15:11
Receipt Date:	20150820
Manifest ID:	014282729JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	2/9/2016 22:15:11
Receipt Date:	20150820
Manifest ID:	014282729JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	4/7/2016 22:15:27
Receipt Date:	20150824
Manifest ID:	014282730JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	4/7/2016 22:15:27
Receipt Date:	20150824
Manifest ID:	014282730JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	1/20/2016 22:15:31
Receipt Date:	20150602
Manifest ID:	013548260JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	CAR000045963
Trans 2 Name:	ARO TRUCKING
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.325
Waste Quantity:	650
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	1/20/2016 22:15:31
Receipt Date:	20150602

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Manifest ID:	013548259JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	CAR000045963
Trans 2 Name:	ARO TRUCKING
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D007
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.75
Waste Quantity:	1500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150529
Creation Date:	11/9/2015 22:15:07
Receipt Date:	20150608
Manifest ID:	013548258JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	CAR000045963
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D007
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.75
Waste Quantity:	1500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2015
Gen EPA ID:	CAL000406194

Shipment Date:	20151217
Creation Date:	9/26/2016 18:30:40
Receipt Date:	20151223
Manifest ID:	014279458JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151015
Creation Date:	5/4/2016 22:15:55
Receipt Date:	20151022
Manifest ID:	013549277JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	Not reported
Trans Name:	PACIFIC RESOURCE RE
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151015
Creation Date:	5/4/2016 22:15:28
Receipt Date:	20151022
Manifest ID:	014294340JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

RCRA Code:	D007
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	4/7/2016 22:15:27
Receipt Date:	20150824
Manifest ID:	014282730JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	4/7/2016 22:15:27
Receipt Date:	20150824
Manifest ID:	014282730JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	2/9/2016 22:15:11
Receipt Date:	20150820
Manifest ID:	014282729JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150812
Creation Date:	2/9/2016 22:15:11
Receipt Date:	20150820
Manifest ID:	014282729JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	1/20/2016 22:15:31

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Receipt Date:	20150602
Manifest ID:	013548260JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	CAR000045963
Trans 2 Name:	ARO TRUCKING
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.325
Waste Quantity:	650
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	1/20/2016 22:15:31
Receipt Date:	20150602
Manifest ID:	013548259JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	CAR000045963
Trans 2 Name:	ARO TRUCKING
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D007
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.75
Waste Quantity:	1500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	11/9/2015 22:15:07
Receipt Date:	20150608
Manifest ID:	013548258JJK
Trans EPA ID:	CAR000172189
Trans Name:	AMBERWICK CORPORATION
Trans 2 EPA ID:	CAR000045963
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000

PC ORIGINAL PKG

FIRST SOLAR ISECW (Continued) **S123632673**

Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D007
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.75
Waste Quantity:	1500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

A7 **1X SEELY FOOD MARKET** **HWTS** **S124526554**
Target Property **SEELY, CA 92273** **N/A**

Site 7 of 10 in cluster A

Actual: **-32 ft.**

Focus Map: 7

HWTS:

Name:	1X SEELY FOOD MARKET
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	SEELY, CA 92273
EPA ID:	CAC000163397
Inactive Date:	10/25/2000
Create Date:	04/04/1989
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SEELY, CA 922730000
Owner Name:	SHELTON, WALLACE
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City,State,Zip:	Not reported
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	SHELTON, WALLACE/OWNER
Contact Address:	Not reported
Contact Address 2:	Not reported
City,State,Zip:	Not reported
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

PC ORIGINAL PKG

A8 **1X SEELEY UNION SCHOOL DISTRICT** **HWTS** **S124527109**
Target **N/A**
Property **SEELEY, CA 92273**

Site 8 of 10 in cluster A

Actual: **-32 ft.**
Focus Map: 7

HWTS:

Name:	1X SEELEY UNION SCHOOL DISTRICT
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC000182309
Inactive Date:	10/25/2000
Create Date:	06/05/1989
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SEELEY, CA 922730000
Owner Name:	SEELEY UNION SCHOOL DISTRICT
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City,State,Zip:	Not reported
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	MRS. LEE, ADMIN. ASST.
Contact Address:	Not reported
Contact Address 2:	Not reported
City,State,Zip:	Not reported
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

A9 **JOE DATSON** **HWTS** **S124555398**
Target **1722 W EVANHEWS HWY** **N/A**
Property **SEELEY, CA 92273**

Site 9 of 10 in cluster A

Actual: **-32 ft.**
Focus Map: 7

HWTS:

Name:	JOE DATSON
Address:	1722 W EVANHEWS HWY
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC001333080
Inactive Date:	10/25/2000
Create Date:	07/09/1997
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 389
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SEELEY, CA 922730000
Owner Name:	JOE DATSUN
Owner Address:	1722 W EVANHEWS HWY
Owner Address 2:	Not reported
Owner City,State,Zip:	SEELY, CA 922730000

PC ORIGINAL PKG

JOE DATSON (Continued) **S124555398**

Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	JOE DATSON
Contact Address:	1722 W EVANHEWS HWY
Contact Address 2:	Not reported
City,State,Zip:	SEELY, CA 922730000
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

A10 **WELLS FARGO BANK** **HWTS** **S124546357**
Target **2630 EVAN HEWS HIGHWAY <80)** **N/A**
Property **SEELEY, CA 92273**

Site 10 of 10 in cluster A

Actual: **-32 ft.**

Focus Map: **7**

HWTS:

Name:	WELLS FARGO BANK
Address:	2630 EVAN HEWS HIGHWAY <80)
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAC000975672
Inactive Date:	10/25/2000
Create Date:	11/24/1993
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	WELLS FARGO BANK
Mailing Address 2:	Not reported
Mailing City,State,Zip:	WALNUT CREEK, CA 945980000
Owner Name:	WELLS FRGO BANK
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City,State,Zip:	Not reported
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	MICHAEL SMITH
Contact Address:	Not reported
Contact Address 2:	Not reported
City,State,Zip:	Not reported
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.748935
Longitude:	-115.711675

PC ORIGINAL PKG

11
West
< 1/8
0.019 mi.
101 ft.

MILES PRESERVATION LLC
1651 WESTSIDE RD
EL CENTRO, CA 92243

HWTS **S112977191**
HAZNET **N/A**

Actual:
-35 ft.

Focus Map:
2

HWTS:

Name:	MILES PRESERVATION LLC
Address:	1651 WESTSIDE RD
Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 92243
EPA ID:	CAC002641261
Inactive Date:	10/11/2009
Create Date:	04/13/2009
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	29960 CENTRAL AVE
Mailing Address 2:	Not reported
Mailing City,State,Zip:	NUEVO, CA 92567
Owner Name:	MILES PRESERVATION LLC
Owner Address:	29960 CENTRAL AVE
Owner Address 2:	Not reported
Owner City,State,Zip:	NUEVO, CA 92567
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	ADAM MILES
Contact Address:	29960 CENTRAL AVE
Contact Address 2:	Not reported
City,State,Zip:	NUEVO, CA 92567
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	32.766182
Longitude:	-115.733222

HAZNET:

Name:	MILES PRESERVATION LLC
Address:	1651 WESTSIDE RD
Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 92243
Contact:	ADAM MILES
Telephone:	9518083346
Mailing Name:	Not reported
Mailing Address:	29960 CENTRAL AVE
Year:	2009
Gepaid:	CAC002641261
TSD EPA ID:	CAD982444481
CA Waste Code:	612 - Household waste
Disposal Method:	-
Tons:	0.025
Year:	2009
Gepaid:	CAC002641261
TSD EPA ID:	CAD982444481
CA Waste Code:	612 - Household waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

PC ORIGINAL PKG

MILES PRESERVATION LLC (Continued) **S112977191**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0375

Additional Information:

Year:	2009
Gen EPA ID:	CAC002641261
Shipment Date:	20090413
Creation Date:	5/27/2009 18:30:20
Receipt Date:	20090417
Manifest ID:	002589932JJK
Trans EPA ID:	CAR000177493
Trans Name:	J&R ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	612 - Household waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090413
Creation Date:	5/27/2009 18:30:20
Receipt Date:	20090417
Manifest ID:	002589932JJK
Trans EPA ID:	CAR000177493
Trans Name:	J&R ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	612 - Household waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

PC ORIGINAL PKG

12
South
1/8-1/4
0.126 mi.
666 ft.

CAMPO VERDE SOLAR LLC
2007 W DIEHL RD
SEELEY, CA 92273

HWTS **S117311567**
HAZNET **N/A**

Actual:
-33 ft.

Focus Map:
7

HWTS:

Name:	CAMPO VERDE SOLAR LLC
Address:	2007 W DIEHL RD
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
EPA ID:	CAL000388565
Inactive Date:	10/06/2014
Create Date:	08/12/2013
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	1148 LEIBERT RD
Mailing Address 2:	Not reported
Mailing City,State,Zip:	EL CENTRO, CA 92243
Owner Name:	CAMPO VERDE SOLAR LLC
Owner Address:	2007 W DIEHL RD
Owner Address 2:	Not reported
Owner City,State,Zip:	SEELEY, CA 92273
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	JAY SHAW
Contact Address:	1148 LEIBERT RD
Contact Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 92243
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	32.747076
Longitude:	-115.70868

NAICS:

EPA ID:	CAL000388565
Create Date:	2013-08-12 13:22:14.980
NAICS Code:	56111
NAICS Description:	Office Administrative Services
Issued EPA ID Date:	2013-08-12 13:22:14.96000
Inactive Date:	2014-10-06 00:00:00
Facility Name:	CAMPO VERDE SOLAR LLC
Facility Address:	2007 W DIEHL RD
Facility Address 2:	Not reported
Facility City:	SEELEY
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92273

HAZNET:

Name:	CAMPO VERDE SOLAR LLC
Address:	2007 W DIEHL RD
Address 2:	Not reported
City,State,Zip:	SEELEY, CA 92273
Contact:	JAY SHAW

PC ORIGINAL PKG

CAMPO VERDE SOLAR LLC (Continued) **S117311567**

Telephone:	7603571784
Mailing Name:	Not reported
Mailing Address:	1148 LEIBERT RD
Year:	2014
Gepaid:	CAL000388565
TSD EPA ID:	CAD008302903
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.06
Year:	2014
Gepaid:	CAL000388565
TSD EPA ID:	AZ0000337360
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1075
Year:	2013
Gepaid:	CAL000388565
TSD EPA ID:	CAD008302903
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.02
Year:	2013
Gepaid:	CAL000388565
TSD EPA ID:	CAD008302903
CA Waste Code:	512 - Other empty containers 30 gallons or more
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.225

Additional Information:

Year:	2014
Gen EPA ID:	CAL000388565
Shipment Date:	20140807
Creation Date:	2/5/2015 22:15:09
Receipt Date:	20140826
Manifest ID:	000655214VES
Trans EPA ID:	NJD080631369
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	AZ0000337360
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1075
Waste Quantity:	215

PC ORIGINAL PKG

CAMPO VERDE SOLAR LLC (Continued) **S117311567**

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140807
Creation Date:	9/30/2014 22:15:08
Receipt Date:	20140819
Manifest ID:	000655213VES
Trans EPA ID:	NJD080631369
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008302903
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.06
Waste Quantity:	120
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2013
Gen EPA ID:	CAL000388565
Shipment Date:	20131022
Creation Date:	11/29/2013 22:15:14
Receipt Date:	20131029
Manifest ID:	000587231VES
Trans EPA ID:	NJD080631369
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008302903
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

PC ORIGINAL PKG

CAMPO VERDE SOLAR LLC (Continued) **S117311567**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	11/29/2013 22:15:14
Receipt Date:	20131029
Manifest ID:	000587231VES
Trans EPA ID:	NJD080631369
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008302903
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

B13 **JERRY PREECE JR. FARMS** **AST** **A100421148**
WSW **2396 W VAUGHN ROAD** **N/A**
1/8-1/4 **EL CENTRO, CA 92243**
0.200 mi.
1058 ft. **Site 1 of 4 in cluster B**

Actual:
-33 ft.

Focus Map:
6

AST:

Name:	JERRY PREECE JR. FARMS
Address:	2396 W VAUGHN ROAD
City/Zip:	EL CENTRO,92243
Certified Unified Program Agencies:	Not reported
Owner:	Jerry Preece, Jr.
Total Gallons:	Not reported
CERSID:	10199557
Facility ID:	Not reported
Business Name:	Jerry Preece Jr. Farms
Phone:	(760) 353-3666
Fax:	(760) 353-4666
Mailing Address:	2396 W Vaughn Road
Mailing Address City:	El Centro
Mailing Address State:	CA
Mailing Address Zip Code:	92243
Operator Name:	Jerry Preece, Jr.
Operator Phone:	(760) 353-3666
Owner Phone:	(760) 353-3666
Owner Mail Address:	2396 W Vaughn Road
Owner State:	CA
Owner Zip Code:	92243
Owner Country:	United States
Property Owner Name:	Jerry Preece
Property Owner Phone:	(760) 353-3666

PC ORIGINAL PKG

JERRY PREECE JR. FARMS (Continued) **A100421148**

Property Owner Mailing Address:	2396 W. Vaughn Rd.
Property Owner City:	El Centro
Property Owner Stat :	CA
Property Owner Zip Code:	92243
Property Owner Country:	United States
EPAID:	CAL000368294

B14 **JERRY PREECE JR FARMS** **AST** **A100324091**
WSW **2396 W VAUGHN RD** **N/A**
1/8-1/4 **EL CENTRO, CA**
0.200 mi.
1058 ft. **Site 2 of 4 in cluster B**

Actual:
-33 ft.

Focus Map:
6

AST:

Name:	JERRY PREECE JR FARMS
Address:	2396 W VAUGHN RD
City/Zip:	EL CENTRO,
Certified Unified Program Agencies:	Imperial
Owner:	MELVIN JERRY PREECE JR.
Total Gallons:	1,320
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

B15 **JERRY PREECE JR FARMS** **RCRA NonGen / NLR** **1024831477**
WSW **2396 W VAUGHN RD** **E MANIFEST** **CAL000368294**
1/8-1/4 **EL CENTRO, CA 92243**
0.200 mi.
1058 ft. **Site 3 of 4 in cluster B**

Actual:
-33 ft.

Focus Map:
6

RCRA Listings:

Date Form Received by Agency:	20111013
Handler Name:	Jerry Preece Jr Farms
Handler Address:	2396 W Vaughn Rd
Handler City,State,Zip:	EL CENTRO, CA 92243

PC ORIGINAL PKG

JERRY PREECE JR FARMS (Continued) **1024831477**

EPA ID:	CAL000368294
Contact Name:	JERRY PREECE
Contact Address:	2396 W VAUGHN RD
Contact City,State,Zip:	EL CENTRO, CA 92243
Contact Telephone:	760-604-6552
Contact Fax:	760-353-4666
Contact Email:	JERRYPREECEJR@YAHOO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2396 W VAUGHN RD
Mailing City,State,Zip:	EL CENTRO, CA 92243-0000
Owner Name:	Jerry Preece
Owner Type:	Other
Operator Name:	Jerry Preece
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No

PC ORIGINAL PKG

JERRY PREECE JR FARMS (Continued) **1024831477**

Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: JERRY PREECE	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2396 W VAUGHN RD
Owner/Operator City,State,Zip:	EL CENTRO, CA 92243-0000
Owner/Operator Telephone:	760-339-4856
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: JERRY PREECE	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2396 W VAUGHN RD
Owner/Operator City,State,Zip:	EL CENTRO, CA 92243
Owner/Operator Telephone:	760-604-6552
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20111013
Handler Name: JERRY PREECE JR FARMS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	115113
NAICS Description:	CROP HARVESTING, PRIMARILY BY MACHINE

Facility Has Received Notices of Violations:

Violations:	No Violations Found

PC ORIGINAL PKG

JERRY PREECE JR FARMS (Continued) **1024831477**

Evaluation Action Summary:
Evaluations: No Evaluations Found

E MANIFEST:

Manifest Tracking Number:	023676091JJK
Last Updated Date:	20220519
Shipped Date:	20220503
Received Date:	20220509
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Web
Generator EPA ID:	CAL000368294
Generator Name:	Jerry Preece Jr Farms
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	2396 W VAUGHN RD
Generator Mail Street 2:	Not reported
Generator Mail City:	EL CENTRO
Generator Mail State:	CA
Generator Mail Zip:	92243
Generator Location Street Number:	Not reported
Generator Location Street 1:	2396 W VAUGHN RD
Generator Location Street 2:	Not reported
Generator Location City:	EL CENTRO
Generator Location Zip:	92243-0000
Generator Location State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000510065
Designated Facility Name:	Us Fuel Oil, Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	STE 117-27
Designated Facility Mail Street 2:	8987 W OLIVE AVE
Designated Facility Mail City:	PEORIA
Designated Facility Mail Zip:	85345-9125
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	3125 W DOME ROCK RD
Designated Facility Location Street 2:	SPC 300
Designated Facility Location City:	QUARTZSITE
Designated Facility Location Zip:	85346
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

State Waste:

Manifest Tracking Number:	023676091JJK
Waste Line Number:	1
State Waste Code Owner:	CA
State Waste Code:	352
State Waste:	Other organic solids

Transporter:

Manifest Tracking Number:	023676091JJK
Transporter Line Number:	1

PC ORIGINAL PKG

JERRY PREECE JR FARMS (Continued) **1024831477**

Transporter EPA ID: CAR000011205
Transporter Name: Efr Env Services Inc

Waste Line:
Manifest Tracking Number: 023676091JJK
Waste Line Number: 1
U.S. DOT Hazardous Indicator: N
U.S. DOT ID Number: Not reported
U.S. DOT Description: Not reported
Non-Hazardous Waste Description: NON-RCRA HAZARDOUS WASTE SOLID (FILTERS CONT. USED OIL)
Number of Containers: 1
Container Type Code: DM
Container Type Description: Metal drums, barrels, kegs
Waste Quantity: 220
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.11
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.11
Waste Quantity, in Kilograms: 99.7733
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 99.7733
Management Method Code: H141
Management Method Description: STORAGE, BULKING AND/OR TRANSFER OFF SITE
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: N

B16 **JOHN H BORCHARD RANCHES** **CERS HAZ WASTE** **U001573909**
WSW **2396 W VAUGHN RD** **HIST UST** **N/A**
1/8-1/4 **EL CENTRO, CA 92243** **CERS TANKS**
0.200 mi. **CUPA Listings**
1058 ft. **Site 4 of 4 in cluster B** **HWTS**
HAZNET
Actual: **CERS**
-33 ft.

Focus Map: 6

CERS HAZ WASTE:
Name: JERRY PREECE JR. FARMS
Address: 2396 W VAUGHN ROAD
City,State,Zip: EL CENTRO, CA 92243
Site ID: 39710
CERS ID: 10199557
CERS Description: Hazardous Waste Generator

HIST UST:
Name: JOHN H BORCHARD RANCHES

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Address:	2396 W VAUGHN RD
City,State,Zip:	EL CENTRO, CA 92243
File Number:	00023f9e
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00023f9e.pdf
Region:	STATE
Facility ID:	00000027461
Facility Type:	Other
Other Type:	FARM
Contact Name:	MC NEECE BROS. OIL CO., INC.
Telephone:	6193524704
Owner Name:	JOHN H. BORCHARD
Owner Address:	1425 CYPRESS DR.
Owner City,St,Zip:	EL CENTRO, CA 92243
Total Tanks:	0001
Tank Num:	001
Container Num:	#1
Year Installed:	1974
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

CERS TANKS:

Name:	JERRY PREECE JR. FARMS
Address:	2396 W VAUGHN ROAD
City,State,Zip:	EL CENTRO, CA 92243
Site ID:	39710
CERS ID:	10199557
CERS Description:	Aboveground Petroleum Storage

CUPA IMPERIAL:

Facility ID:	FA0000628
Name:	JERRY PREECE JR. FARMS
Address:	2396 W VAUGHN RD
City,State,Zip:	EL CENTRO, CA 92243

HWTS:

Name:	JERRY PREECE JR FARMS
Address:	2396 W VAUGHN RD
Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 92243
EPA ID:	CAL000368294
Inactive Date:	Not reported
Create Date:	10/13/2011
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	2396 W VAUGHN RD
Mailing Address 2:	Not reported
Mailing City,State,Zip:	EL CENTRO, CA 922430000
Owner Name:	JERRY PREECE
Owner Address:	2396 W VAUGHN RD
Owner Address 2:	Not reported

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Owner City,State,Zip:	EL CENTRO, CA 922430000
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	JERRY PREECE
Contact Address:	2396 W VAUGHN RD
Contact Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 92243
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	32.758572
Longitude:	-115.752849

NAICS:

EPA ID:	CAL000368294
Create Date:	2011-10-13 16:08:46.023
NAICS Code:	115113
NAICS Description:	Crop Harvesting, Primarily by Machine
Issued EPA ID Date:	2011-10-13 16:08:45.76000
Inactive Date:	Not reported
Facility Name:	JERRY PREECE JR FARMS
Facility Address:	2396 W VAUGHN RD
Facility Address 2:	Not reported
Facility City:	EL CENTRO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92243

HAZNET:

Name:	JERRY PREECE JR FARMS
Address:	2396 W VAUGHN RD
Address 2:	Not reported
City,State,Zip:	EL CENTRO, CA 92243
Contact:	JERRY PREECE
Telephone:	7604272086
Mailing Name:	Not reported
Mailing Address:	2396 W VAUGHN RD
Year:	2013
Gepaid:	CAL000368294
TSD EPA ID:	CAD028409019
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.6

Additional Information:

Year:	2013
Gen EPA ID:	CAL000368294
Shipment Date:	20130325
Creation Date:	9/5/2013 16:41:05
Receipt Date:	20130402

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Manifest ID:	004821465JJK
Trans EPA ID:	CAR000011205
Trans Name:	EFR ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON PLANT #1
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.6
Waste Quantity:	1200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	JERRY PREECE JR. FARMS
Address:	2396 W VAUGHN ROAD
City,State,Zip:	EL CENTRO, CA 92243
Site ID:	39710
CERS ID:	10199557
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	39710
Site Name:	JERRY PREECE JR. FARMS
Violation Date:	03-03-2020
Citation:	40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description:	Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes:	OBSERVATION: Used oil and used oil filter containers were observed open. CORRECTIVE ACTION: Submit photos to the CUPA demonstrating that the container listed above has been properly closed.
Violation Division:	Imperial CUPA - DTSC
Violation Program:	HW
Violation Source:	CERS,

Site ID:	39710
Site Name:	JERRY PREECE JR. FARMS
Violation Date:	05-23-2017
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

	characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 05/23/2017. 55 gallon drum used oil filters with no start initiation date.
Violation Division:	Imperial CUPA - DTSC
Violation Program:	HW
Violation Source:	CERS,
Site ID:	39710
Site Name:	JERRY PREECE JR. FARMS
Violation Date:	03-03-2020
Citation:	40 CFR 1 265.33 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.33
Violation Description:	Failure to test and maintain as necessary all facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment to assure its proper operation in time of emergency.
Violation Notes:	OBSERVATION: Eye wash has not been tested and maintained to assure its proper operation in time of emergency. CORRECTIVE ACTION: Submit photos/documentation to the CUPA demonstrating [LIST EQUIPMENT] has been properly tested or maintained.
Violation Division:	Imperial CUPA - DTSC
Violation Program:	HW
Violation Source:	CERS,
Site ID:	39710
Site Name:	JERRY PREECE JR. FARMS
Violation Date:	03-03-2020
Citation:	40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31
Violation Description:	Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
Violation Notes:	OBSERVATION: Used Oil was observed [DESCRIBE SPILL] in the [LOCATION]. CORRECTIVE ACTION: Submit photos/documentation to the CUPA demonstrating the spill has been properly removed and managed.
Violation Division:	Imperial CUPA - DTSC
Violation Program:	HW
Violation Source:	CERS,
Site ID:	39710
Site Name:	JERRY PREECE JR. FARMS
Violation Date:	03-03-2020
Citation:	22 CCR 16 66266.81(a)(1) - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.81(a)(1)
Violation Description:	Failure to meet the spent lead acid battery management requirements, when handling, storing, or transporting more than 10 lead acid batteries at any one time.
Violation Notes:	OBSERVATION: Generator failed to meet the spent lead acid battery management requirements, when handling, storing, or transporting more than 10 lead acid batteries at any one time. CORRECTIVE ACTION: Owner/Operator shall immediatly begin to handle, store, and/or transport lead acid batteries in accordance with Title 22 regulations.
Violation Division:	Imperial CUPA - DTSC
Violation Program:	HW

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Violation Source: CERS,

Site ID: 39710
Site Name: JERRY PREECE JR. FARMS
Violation Date: 03-03-2020
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes: OBSERVATION: Owner/Operator is a small quantity generator and failed to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles), or has failed to comply with the conditions of CCR 66262.34(d) and has stored hazardous waste over 90 days. CORRECTIVE ACTION: Dispose of hazardous waste that has been stored over the applicable time limit and provide documentation that the violation has been corrected.
Violation Division: Imperial CUPA - DTSC
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-03-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Imperial CUPA - DTSC
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Imperial CUPA - DTSC
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-03-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Imperial CUPA - DTSC
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-03-2020

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Imperial CUPA - DTSC
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Imperial CUPA - DTSC
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-15-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Imperial CUPA - DTSC
Eval Program: APSA
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: Legal Owner
Entity Name: Jerry Preece, Jr.
Entity Title: Not reported
Affiliation Address: 2396 W Vaughn Road
Affiliation City: El Centro
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92243
Affiliation Phone: (760) 339-4856,

Affiliation Type Desc: CUPA District
Entity Name: Imperial CUPA - DTSC
Entity Title: Not reported
Affiliation Address: 627 Wake Avenue
Affiliation City: El Centro
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92243
Affiliation Phone: (760) 352-0381,

Affiliation Type Desc: Document Preparer
Entity Name: Ruiz & Associates
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Entity Name:	Jerry Preece Jr. Farms
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Jerry Preece, Jr.
Entity Title:	Not reported
Affiliation Address:	2396 W Vaughn Road
Affiliation City:	El Centro
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92243
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2396 W Vaughn Road
Affiliation City:	El Centro
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92243
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Justin Preece
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Jerry Preece, Jr.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 339-4856,
Affiliation Type Desc:	Property Owner
Entity Name:	Jerry Preece
Entity Title:	Not reported
Affiliation Address:	2396 W. Vaughn Rd.
Affiliation City:	El Centro
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92243

PC ORIGINAL PKG

JOHN H BORCHARD RANCHES (Continued) **U001573909**

Affiliation Phone: (760) 339-4856,

PC ORIGINAL PKG

Count: 22 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EL CENTRO	2016143003		I-8 NEAR EXIT FORRESTER		ERNS
EL CENTRO	2018225612		I-8 W, MM 64		ERNS
EL CENTRO	93184192		I-8		ERNS
EL CENTRO	9194749		EAST BOUND I-8		ERNS
EL CENTRO	S106390388		E/B I-8 1.1 MILES WEST OF SR 98 MILE MARKER 9 NEAR		CHMIRS
EL CENTRO	S118738127		I-8 NEAR EXIT FORRESTER IVO MP 33.69		CHMIRS
EL CENTRO	S105652782		I-8 AT CROSS OF DOGWOOD RD.		CHMIRS
EL CENTRO	S105637743		IMPERIAL & ADAM BIG JOHN FOOD MART		CHMIRS
EL CENTRO	S108405875		WB I-8 AT MPM 101		CHMIRS
EL CENTRO	S110421881		EASTBOUND I-8 JUST EAST OF THE TRUCK ESCAPE RAMPS NEAR MOUNTAIN SPRINGS EXIT		CHMIRS
EL CENTRO	S105670132		WB I-8 MPM 31.356		CHMIRS
EL CENTRO	1026486489	GRANITE CONSTRUCTION COMPANY	I-8 AND IMPERIAL AVE BRIDGE	92243	RCRA NonGen / NLR, E MANIFEST
EL CENTRO	1026468735	CALTRANS, STATE OF CALIFORNIA	EB & WB I-8, PM R36.5/R37.5 (41040)	92243	RCRA NonGen / NLR
EL CENTRO	1026558767	CALTRANS, STATE OF CALIFORNIA	EB & WB I-8, PM R36.5/R37.5 (41040)	92243	FINDS, ECHO
EL CENTRO	S111785815	NEXTEL OF CALIFORNIA CA8991	SW CORNER I-8	92243	CUPA Listings
EL CENTRO	S111785816	NEXTEL OF CALIFORNIA CA8990	NE CORNER OF I-8	92243	CUPA Listings
EL CENTRO	S124644285	CALTRANS D-11/EA 11-263304	RTE I-8 WB/EB PM 38.8-39.1	92243	HWTS
IMPERIAL COUNTY	877980		WESTBOUND I-8 1/4 MILE W OF GORDON'S WELL		ERNS
IMPERIAL COUNTY	87463981		WB I-8 NR:GORDON'S WELL		ERNS
IMPERIAL COUNTY	S106389103		E/B 1-8 EAST OF MOUNTAIN SPRING RD OVERTURNED BIG RIG		CHMIRS
IMPERIAL COUNTY	S105630386		I-8 AT STATE ROUTE 111		CHMIRS
UNCORPERATED	S105644651		BETWEEN ROSS AND I-8 ON SILSBY RD	92243	CHMIRS

PC ORIGINAL PKG

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

PC ORIGINAL PKG

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/07/2024
Date Data Arrived at EDR: 06/25/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/24/2024
Next Scheduled EDR Contact: 01/09/2025
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/24/2024
Date Data Arrived at EDR: 08/01/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

PC ORIGINAL PKG

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/24/2024
Date Data Arrived at EDR: 08/01/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

PC ORIGINAL PKG

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 48

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 07/31/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/24/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/24/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 79

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/22/2024
Date Data Arrived at EDR: 04/23/2024
Date Made Active in Reports: 07/17/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/22/2024
Date Data Arrived at EDR: 04/23/2024
Date Made Active in Reports: 07/17/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/06/2024
Date Data Arrived at EDR: 05/07/2024
Date Made Active in Reports: 07/30/2024
Number of Days to Update: 84

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/06/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

PC ORIGINAL PKG

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

PC ORIGINAL PKG

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

PC ORIGINAL PKG

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/15/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 90

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

PC ORIGINAL PKG

Date of Government Version: 02/13/2024
Date Data Arrived at EDR: 03/05/2024
Date Made Active in Reports: 06/03/2024
Number of Days to Update: 90

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

PC ORIGINAL PKG

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/22/2024
Date Data Arrived at EDR: 04/23/2024
Date Made Active in Reports: 07/17/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/17/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/10/2024
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/11/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

PC ORIGINAL PKG

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 07/17/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 04/04/2024
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 04/15/2024
Number of Days to Update: 10

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 07/31/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/22/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 05/21/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 79

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/22/2024
Date Data Arrived at EDR: 04/23/2024
Date Made Active in Reports: 07/17/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 06/12/2024
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

PC ORIGINAL PKG

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/10/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 2

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 05/21/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 79

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 04/29/2024
Date Data Arrived at EDR: 04/30/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 84

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/10/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 2

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Quarterly

PC ORIGINAL PKG

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/31/2024
Date Data Arrived at EDR: 06/21/2024
Date Made Active in Reports: 09/11/2024
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 05/28/2024
Date Data Arrived at EDR: 05/29/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 83

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/14/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 06/24/2024
Number of Days to Update: 7

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

PC ORIGINAL PKG

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 02/01/2024
Date Data Arrived at EDR: 04/16/2024
Date Made Active in Reports: 07/11/2024
Number of Days to Update: 86

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

PC ORIGINAL PKG

Date of Government Version: 05/13/2024
Date Data Arrived at EDR: 05/14/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 86

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/12/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/11/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/02/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/05/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/10/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

PC ORIGINAL PKG

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/25/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/01/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/12/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/13/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 86

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/11/2024
Date Data Arrived at EDR: 07/11/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 1

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/11/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 16

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Annually

PC ORIGINAL PKG

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/01/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/11/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 05/23/2024
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/26/2024
Number of Days to Update: 86

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/02/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Quarterly

PC ORIGINAL PKG

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/06/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 89
Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 07/11/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 87
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 08/27/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/01/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

PC ORIGINAL PKG

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/23/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2024
Date Data Arrived at EDR: 07/08/2024
Date Made Active in Reports: 09/26/2024
Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Biennially

PC ORIGINAL PKG

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/02/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 05/08/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 14

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/03/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

PC ORIGINAL PKG

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/26/2024
Number of Days to Update: 86

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/02/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Quarterly

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/06/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 1

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/14/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 05/22/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 85

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/13/2024
Date Data Arrived at EDR: 06/14/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 82

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 8

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/08/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/23/2024
Date Data Arrived at EDR: 06/28/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/28/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

PC ORIGINAL PKG

Date of Government Version: 05/13/2024
Date Data Arrived at EDR: 05/14/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

PC ORIGINAL PKG

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

PC ORIGINAL PKG

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 07/01/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: No Update Planned

PC ORIGINAL PKG

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 04/14/2024
Date Data Arrived at EDR: 04/16/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 07/16/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

UST FINDER: UST Finder Database
EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database
US EPA’s UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA’s Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Semi-Annually

E MANIFEST: Hazardous Waste Electronic Manifest System
EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 04/18/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing
A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

PC ORIGINAL PKG

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 6

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/04/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/04/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/17/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

CUPA LIV-PLE: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 77

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

DRYCLEAN GLENN: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 01/08/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SONOMA: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 01/05/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 04/24/2024
Number of Days to Update: 7

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 10/18/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 90

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RVR: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PC ORIGINAL PKG

DRYCLEAN SAN DIEGO: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 03/19/2024
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 04/12/2024
Number of Days to Update: 22

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/02/2024
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 04/15/2024
Number of Days to Update: 10

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Annually

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 07/25/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

DRYCLEAN LAKE: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/27/2024
Date Made Active in Reports: 05/15/2024
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Varies

DRYCLEAN MENDOCINO: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/28/2024
Date Made Active in Reports: 05/15/2024
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PC ORIGINAL PKG

DRYCLEAN EAST KERN: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/05/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 75

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTERY BAY: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/05/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 75

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 76

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PC ORIGINAL PKG

DRYCLEAN SAN JOAQUIN: San Joaquin Valley Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/21/2024
Number of Days to Update: 77

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN N COAST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SIERRA: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PC ORIGINAL PKG

DRYCLEAN VENTURA: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 02/08/2024
Number of Days to Update: 23

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 05/21/2024
Date Data Arrived at EDR: 05/23/2024
Date Made Active in Reports: 08/19/2024
Number of Days to Update: 88

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 84

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/11/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 04/16/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 87

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/16/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/11/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/07/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 14

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 07/31/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

PC ORIGINAL PKG

Date of Government Version: 05/13/2024
Date Data Arrived at EDR: 05/14/2024
Date Made Active in Reports: 08/07/2024
Number of Days to Update: 85

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/12/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/13/2024
Date Data Arrived at EDR: 05/14/2024
Date Made Active in Reports: 08/07/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/12/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/02/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/19/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/02/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Annually

PC ORIGINAL PKG

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/04/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 86
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/22/2024
Date Data Arrived at EDR: 05/29/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 83
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/06/2024
Date Data Arrived at EDR: 05/07/2024
Date Made Active in Reports: 07/31/2024
Number of Days to Update: 85
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/06/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 05/28/2024
Date Data Arrived at EDR: 05/29/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 83
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/06/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 88
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: No Update Planned

PC ORIGINAL PKG

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 07/23/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/02/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 09/05/2024
Number of Days to Update: 1

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/03/2024
Next Scheduled EDR Contact: 10/14/2024
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

PC ORIGINAL PKG

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/04/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/20/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 08/22/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/10/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 2

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

PC ORIGINAL PKG

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Semi-Annually

PC ORIGINAL PKG

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/23/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 03/01/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/11/2024
Number of Days to Update: 84

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 07/23/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

PC ORIGINAL PKG

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 04/23/2024
Date Made Active in Reports: 07/17/2024
Number of Days to Update: 85

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/17/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/27/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

PC ORIGINAL PKG

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 86

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 05/23/2024
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 6

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 04/25/2024
Date Data Arrived at EDR: 05/01/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

PC ORIGINAL PKG

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 07/26/2024
Date Data Arrived at EDR: 07/29/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 10

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/08/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/08/2024
Date Made Active in Reports: 07/10/2024
Number of Days to Update: 2

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/09/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/09/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Varies

PC ORIGINAL PKG

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/03/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 07/09/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation LA County List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/16/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Annually

PC ORIGINAL PKG

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/03/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/16/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 86

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/12/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

PC ORIGINAL PKG

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/15/2023
Date Data Arrived at EDR: 11/20/2023
Date Made Active in Reports: 02/15/2024
Number of Days to Update: 87

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/17/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 04/23/2024
Date Data Arrived at EDR: 04/25/2024
Date Made Active in Reports: 06/26/2024
Number of Days to Update: 62

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Orange County
Petroleum and non-petroleum spills.

Date of Government Version: 02/02/2024
Date Data Arrived at EDR: 03/13/2024
Date Made Active in Reports: 06/04/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/30/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/22/2024
Date Data Arrived at EDR: 03/13/2024
Date Made Active in Reports: 06/04/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/30/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/22/2024
Date Data Arrived at EDR: 03/13/2024
Date Made Active in Reports: 06/04/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/30/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/22/2024
Date Data Arrived at EDR: 05/23/2024
Date Made Active in Reports: 08/19/2024
Number of Days to Update: 88

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

RIVERSIDE COUNTY:

PC ORIGINAL PKG

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/23/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/23/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2024
Date Data Arrived at EDR: 08/01/2024
Date Made Active in Reports: 08/07/2024
Number of Days to Update: 6

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

PC ORIGINAL PKG

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2024
Date Data Arrived at EDR: 05/22/2024
Date Made Active in Reports: 05/24/2024
Number of Days to Update: 2

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/22/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 01/31/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 04/29/2024
Date Data Arrived at EDR: 04/30/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 84

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 07/23/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 04/29/2024
Date Data Arrived at EDR: 04/30/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 84

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 04/16/2024
Date Made Active in Reports: 07/15/2024
Number of Days to Update: 90

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 07/16/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/13/2024
Date Data Arrived at EDR: 05/14/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 86

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

SAN MATEO COUNTY:

PC ORIGINAL PKG

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 08/27/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/16/2024
Date Data Arrived at EDR: 05/16/2024
Date Made Active in Reports: 08/07/2024
Number of Days to Update: 83
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/13/2024
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

PC ORIGINAL PKG

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

SITE MIT SANTA CRUZ: Site Mitigation Santa Cruz County List
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/07/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

PC ORIGINAL PKG

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/03/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 04/12/2024
Date Data Arrived at EDR: 06/05/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 86

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 12/05/2023
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 27

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/20/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 86

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

TULARE COUNTY:

PC ORIGINAL PKG

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 07/24/2024
Next Scheduled EDR Contact: 11/11/2024
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/10/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 6

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/15/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/31/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/18/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 5

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/15/2024
Next Scheduled EDR Contact: 10/28/2024
Data Release Frequency: Quarterly

PC ORIGINAL PKG

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/28/2024
Date Data Arrived at EDR: 06/04/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 87

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/20/2024
Date Data Arrived at EDR: 06/27/2024
Date Made Active in Reports: 09/24/2024
Number of Days to Update: 89

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/19/2024
Date Data Arrived at EDR: 04/23/2024
Date Made Active in Reports: 07/15/2024
Number of Days to Update: 83

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/18/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/05/2024
Date Data Arrived at EDR: 05/07/2024
Date Made Active in Reports: 08/01/2024
Number of Days to Update: 86

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/06/2024
Next Scheduled EDR Contact: 11/18/2024
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Annually

PC ORIGINAL PKG

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/25/2024
Next Scheduled EDR Contact: 11/04/2024
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/03/2024
Next Scheduled EDR Contact: 10/21/2024
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/08/2024
Next Scheduled EDR Contact: 11/26/2024
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

PC ORIGINAL PKG

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

STREET AND ADDRESS INFORMATION

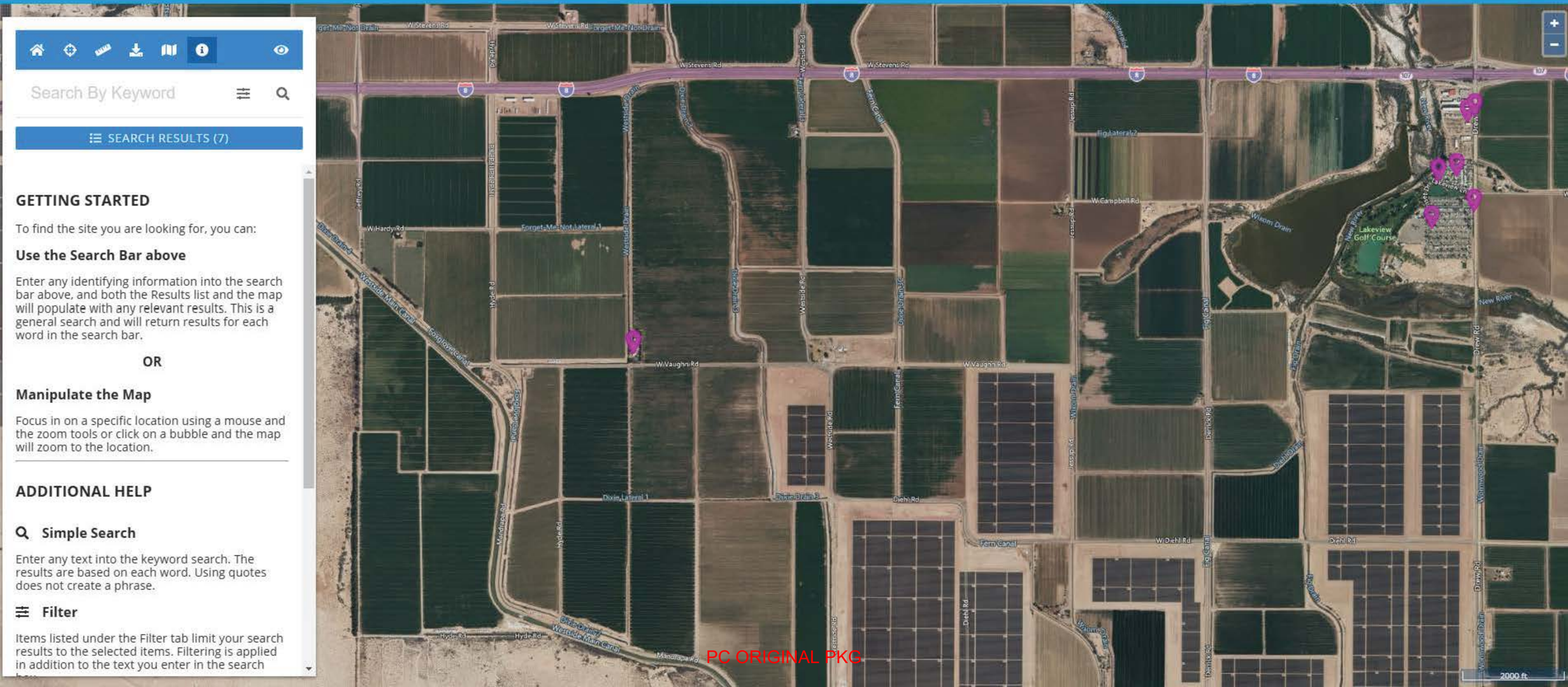
© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

PC ORIGINAL PKG

B

Supplemental Review Information

PC ORIGINAL PKG



PC ORIGINAL PKG

JERRY PREECE JR. FARMS
2396 W VAUGHN ROAD
EL CENTRO CA 92243

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Evaluations
Evaluations With Violations 2
Evaluations Without Violations 4

Violations
Open 5
Resolved 1

Compliance
Total 0

Open (5)

Determination Date	Program
03/03/2020	HW - Hazardous Waste Generator

NOTES
OBSERVATION: Used Oil was observed [DESCRIBE SPILL] in the [LOCATION]. CORRECTIVE ACTION: Submit photos to the CUPA demonstrating the spill has been properly removed and managed.

CITATIONS
22 CCR 12 66262.34(d)(2): California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)(2)
40 CFR 1 262.34(d)(4): U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(4)
40 CFR 1 265.31: U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

03/03/2020	HW - Hazardous Waste Generator

NOTES
OBSERVATION: Used oil and used oil filter containers were observed open. CORRECTIVE ACTION: Submit photos demonstrating that the container listed above has been properly closed.

CITATIONS
22 CCR 12 66262.34(d)(2): California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)(2)
40 CFR 1 262.34(d)(2): U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(2)
40 CFR 1 265.173: U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173

03/03/2020	HW - Hazardous Waste Generator

NOTES
OBSERVATION: Eye wash has not been tested and maintained to assure its proper operation in time of emergen ACTION: Submit photos/documentation to the CUPA demonstrating [LIST EQUIPMENT] has been properly testec

PC ORIGINAL PKG

CITATIONS
22 CCR 12 66262.34(d)(2): California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)(2)
40 CFR 1 262.34(d)(4): U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(4)
40 CFR 1 265.33: U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.33

−	03/03/2020	HW - Hazardous Waste Generator

NOTES
OBSERVATION: Owner/Operator is a small quantity generator and failed to send hazardous waste offsite for trea or disposal within 180 days (or 270 days if waste is transported over 200 miles), or has failed to comply with the CCR 66262.34(d) and has stored hazardous waste over 90 days. CORRECTIVE ACTION: Dispose of hazardous was stored over the applicable time limit and provide documentation that the violation has been corrected.

CITATIONS
22 CCR 12 66262.34(d): California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)
HSC 6.5 25123.3(h)(1): California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)

−	03/03/2020	HW - Hazardous Waste Generator

NOTES
OBSERVATION: Generator failed to meet the spent lead acid battery management requirements, when handling, transporting more than 10 lead acid batteries at any one time. CORRECTIVE ACTION: Owner/Operator shall imm handle, store, and/or transport lead acid batteries in accordance with Title 22 regulations.

CITATIONS
22 CCR 16 66266.81(a)(1): California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.81(a)(1)

Resolved (1)

	Determination Date	Program
−	05/23/2017	HW - Hazardous Waste Generator

NOTES
Returned to compliance on 05/23/2017. 55 gallon drum used oil filters with no start initiation date.

CITATIONS
22 CCR 12 66262.34(f): California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

PC ORIGINAL PKG

Site Report
JERRY PREECE JR. FARMS

2396 W VAUGHN ROAD
EL CENTRO, CA 92243

County	Imperial County
CalEnviroscreen 4.0 Percentile Range	>80 - 90



SIC Codes

0191 General farms, primarily crop

NAICS Codes

Alternate IDs

FRS	110055908442	**EPA Identifier**	CAL000368294
Facilities Explorer ID	39710		

Regulatory Programs

Description	Source System	Program Id	Start Date	End Date
Hazardous Waste Generator	California Environmental Reporting System	10199557	07/10/2013	
Chemical Storage Facilities	California Environmental Reporting System	10199557	07/10/2013	
Aboveground Petroleum Storage	California Environmental Reporting System	10199557	07/10/2013	

Site Contacts

Name	Title	Phone	Address

PC ORIGINAL PKG

Name	Title	Phone	Address
Imperial CUPA - DTSC		(760) 352-0381	627 Wake Avenue El Centro, CA 92243
Jerry Preece		(760) 339-4856	2396 W. Vaughn Rd. El Centro, CA 92243
Jerry Preece Jr. Farms			
Jerry Preece, Jr.		(760) 339-4856	2396 W Vaughn Road El Centro, CA 92243
Justin Preece	Owner		
Mailing Address			2396 W Vaughn Road El Centro, CA 92243
Ruiz & Associates			

PC ORIGINAL PKG

C

Historical Aerial Photographs

PC ORIGINAL PKG

Big Rock 2 Solar

Big Rock 2 Solar

El Centro, CA 92243

Inquiry Number: 7778963.1

October 03, 2024

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

PC ORIGINAL PKG

Date EDR Searched Historical Sources:

Aerial Photography October 03, 2024

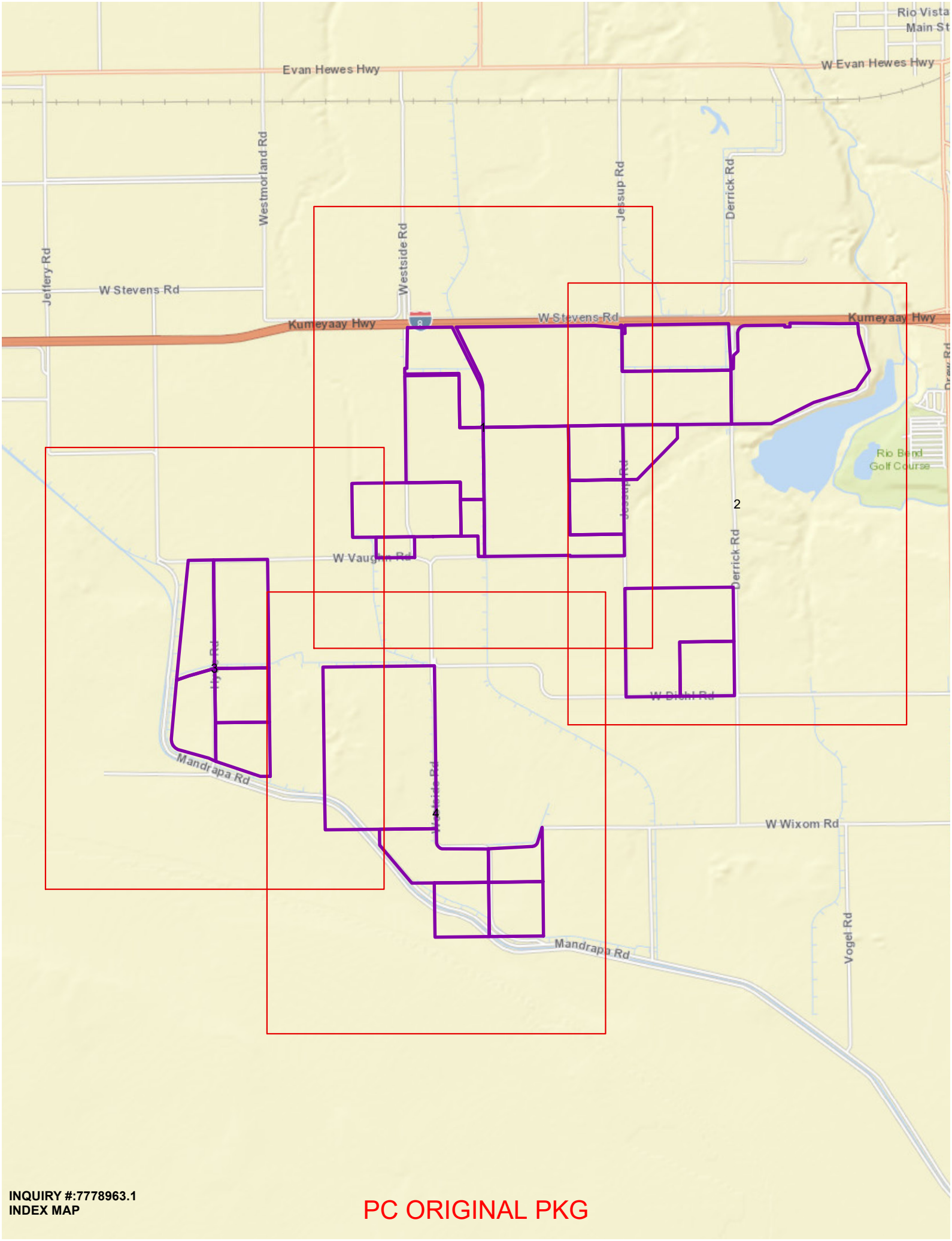
Target Property:

Big Rock 2 Solar

El Centro, CA 92243

Year	***Scale***	***Details***	***Source***
1937	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1937	USDA
1949	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1949	USDA
1953	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1953	USDA
1976	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1976	USGS
1985	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1985	USDA
1996	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1996	USGS/DOQQ
2002	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2002	USGS/DOQQ
2006	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2006	USDA/NAIP
2009	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2009	USDA/NAIP
2012	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2012	USDA/NAIP
2016	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2016	USDA/NAIP
2020	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2020	USDA/NAIP

PC ORIGINAL PKG



INQUIRY #:7778963.1
INDEX MAP

PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1937
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1937
SCALE: 1"=1000'
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1937
SCALE: 1"=1000'

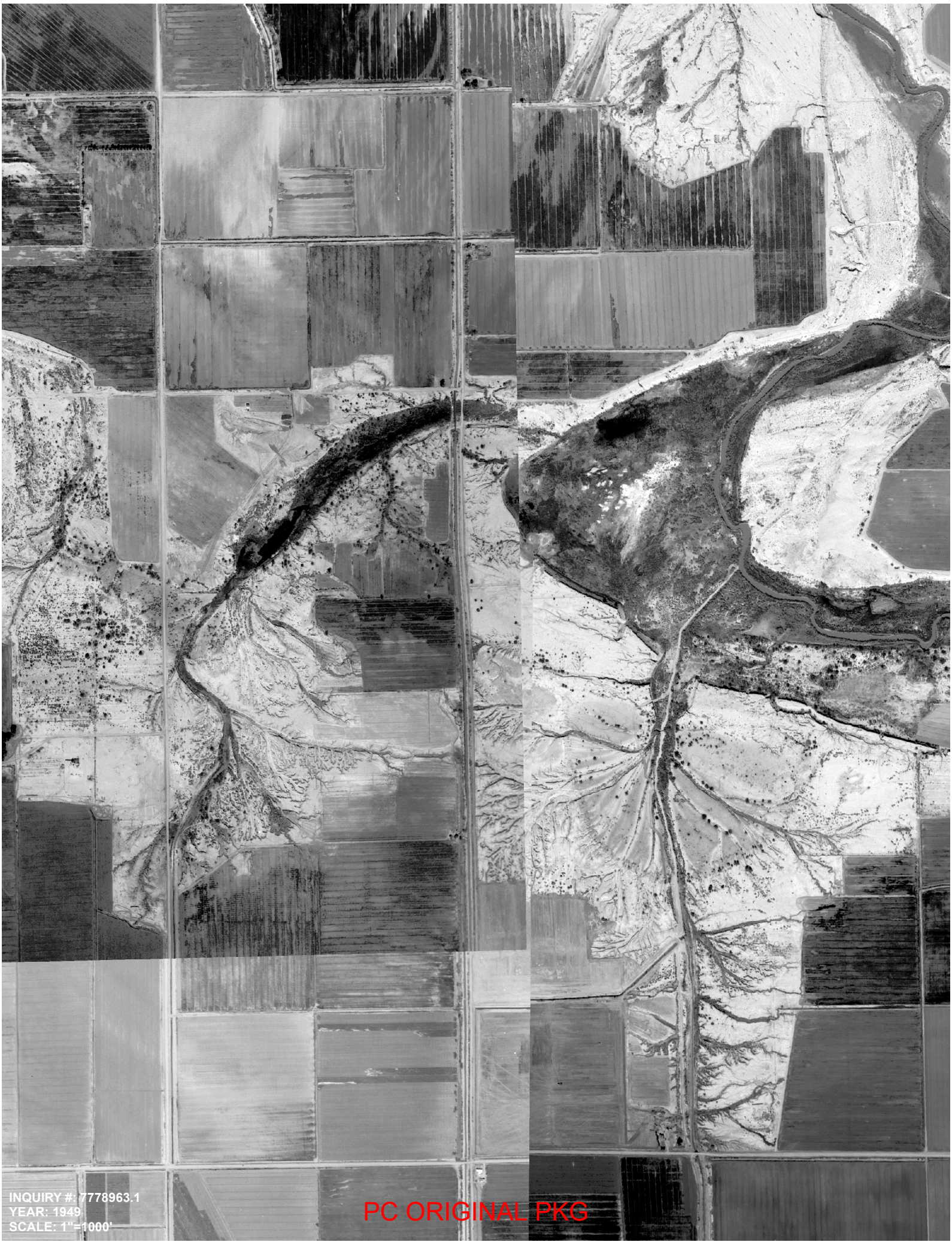
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1937
SCALE: 1"=1000'

PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1949
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1949
SCALE: 1"=1000'
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1949
SCALE: 1"=1000'

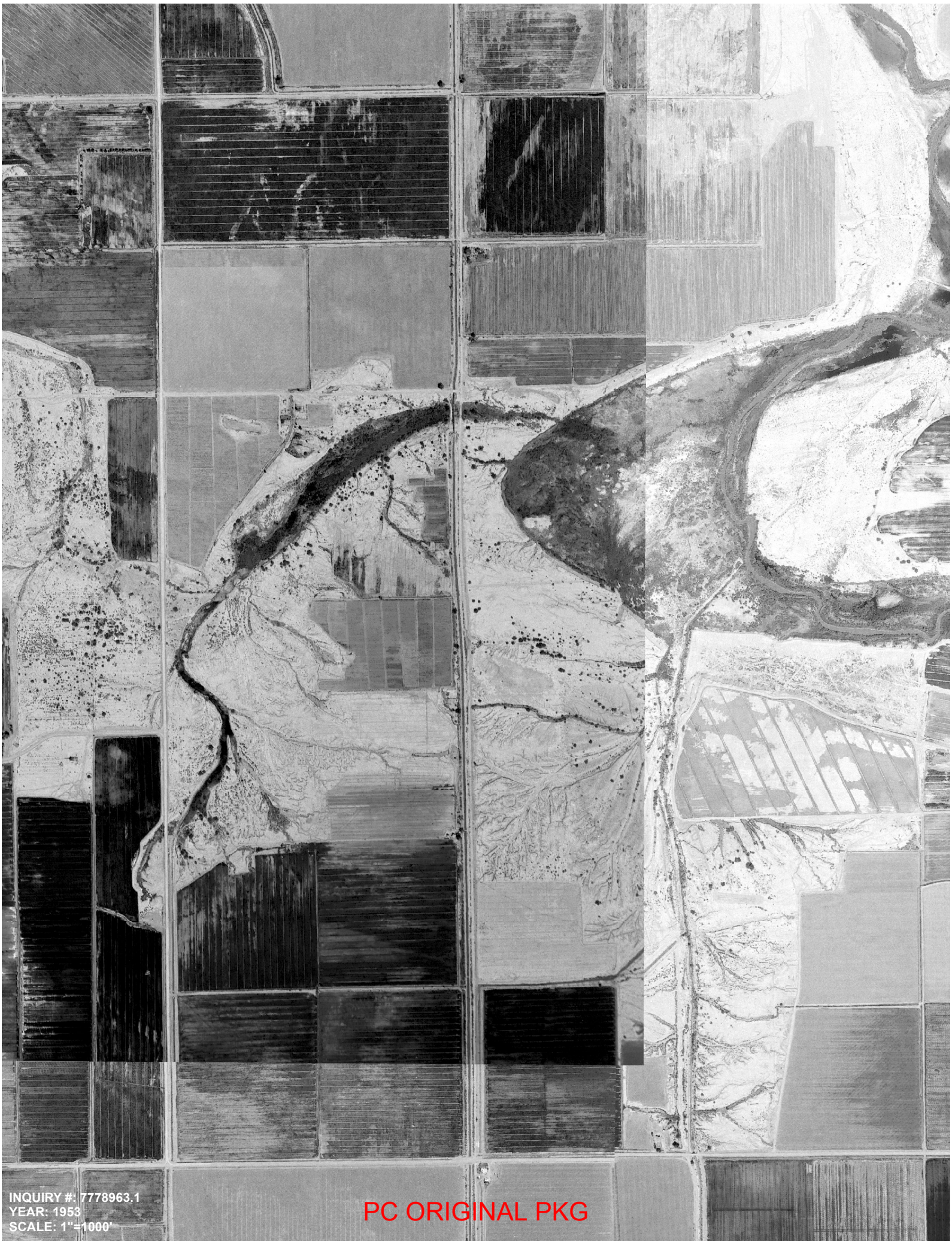
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1949
SCALE: 1"=1000'

PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1953
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1953
SCALE: 1"=1000'
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1953
SCALE: 1"=1000'

PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1953
SCALE: 1"=1000'

PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1976
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1976
SCALE: 1"=1000'
PC ORIGINAL PKG



PC ORIGINAL PKG



PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1985
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1985
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1985
SCALE: 1"=1000'
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1985
SCALE: 1"=1000'

PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1996
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1998
SCALE: 1" = 1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 1996
SCALE: 1"=1000'
PC ORIGINAL PKG



INQUIRY #: 7778963.1
YEAR: 1996
SCALE: 1"=1000'

PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2002
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2002
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2002
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2002
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2006
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2006
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2006
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2006
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2009
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2009
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2009
SCALE: 1"=1000'
PC ORIGINAL PKG



PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2012
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2012
SCALE: 1"=1000'
PC ORIGINAL PKG



PC ORIGINAL PKG



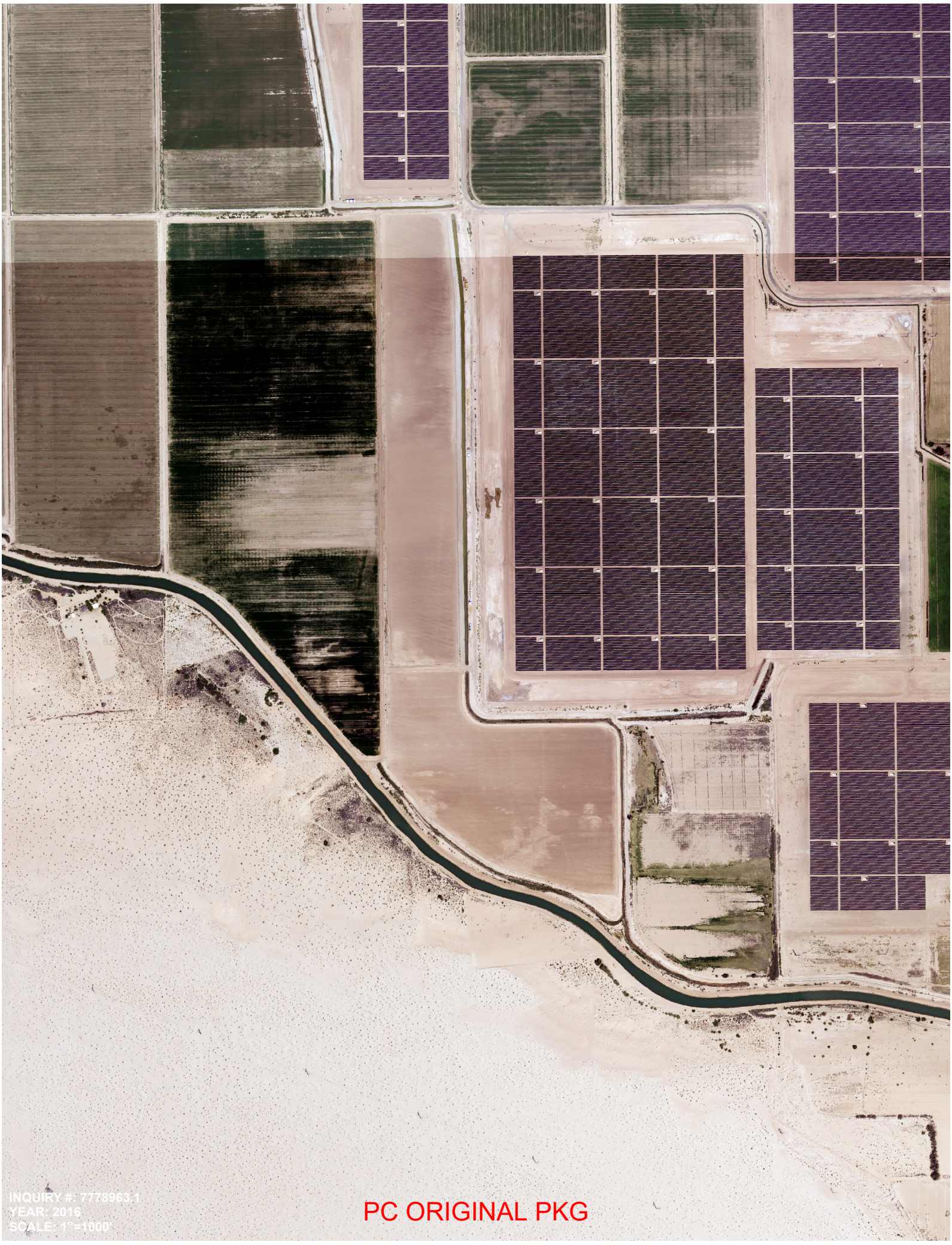
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2016
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2016
SCALE: 1"=1000'
PC ORIGINAL PKG



PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2016
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2020
SCALE: 1"=1000'
PC ORIGINAL PKG


INQUIRY#: 7778963.1
YEAR: 2020
SCALE: 1" =1000'
PC ORIGINAL PKG



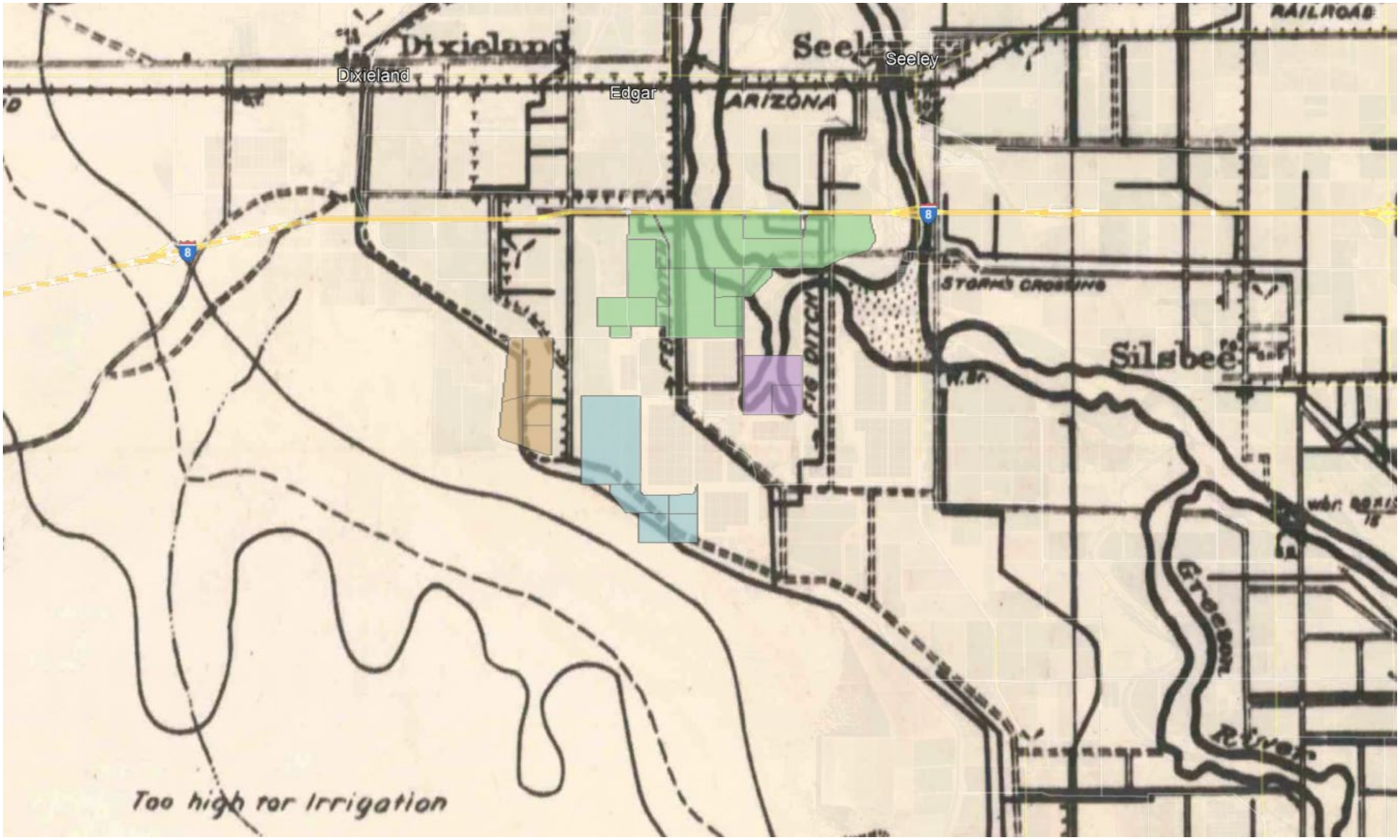
PC ORIGINAL PKG


INQUIRY #: 7778963.1
YEAR: 2020
SCALE: 1"=1000'
PC ORIGINAL PKG

D

Historical Topographic Maps

PC ORIGINAL PKG

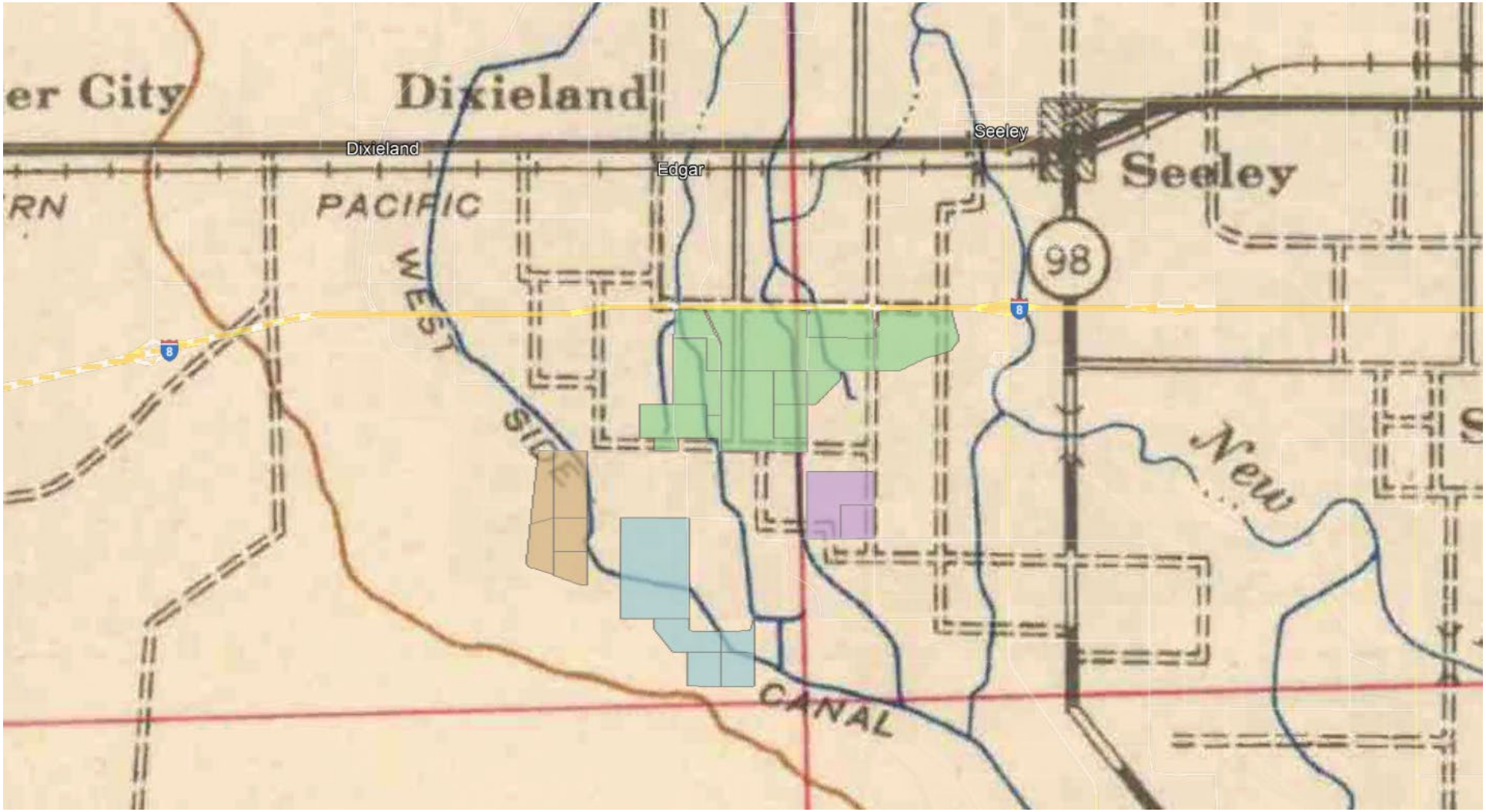


Source: USGS Quadrangle, El Centro, CA 1915

1915 HISTORICAL TOPOGRAPHIC MAPS

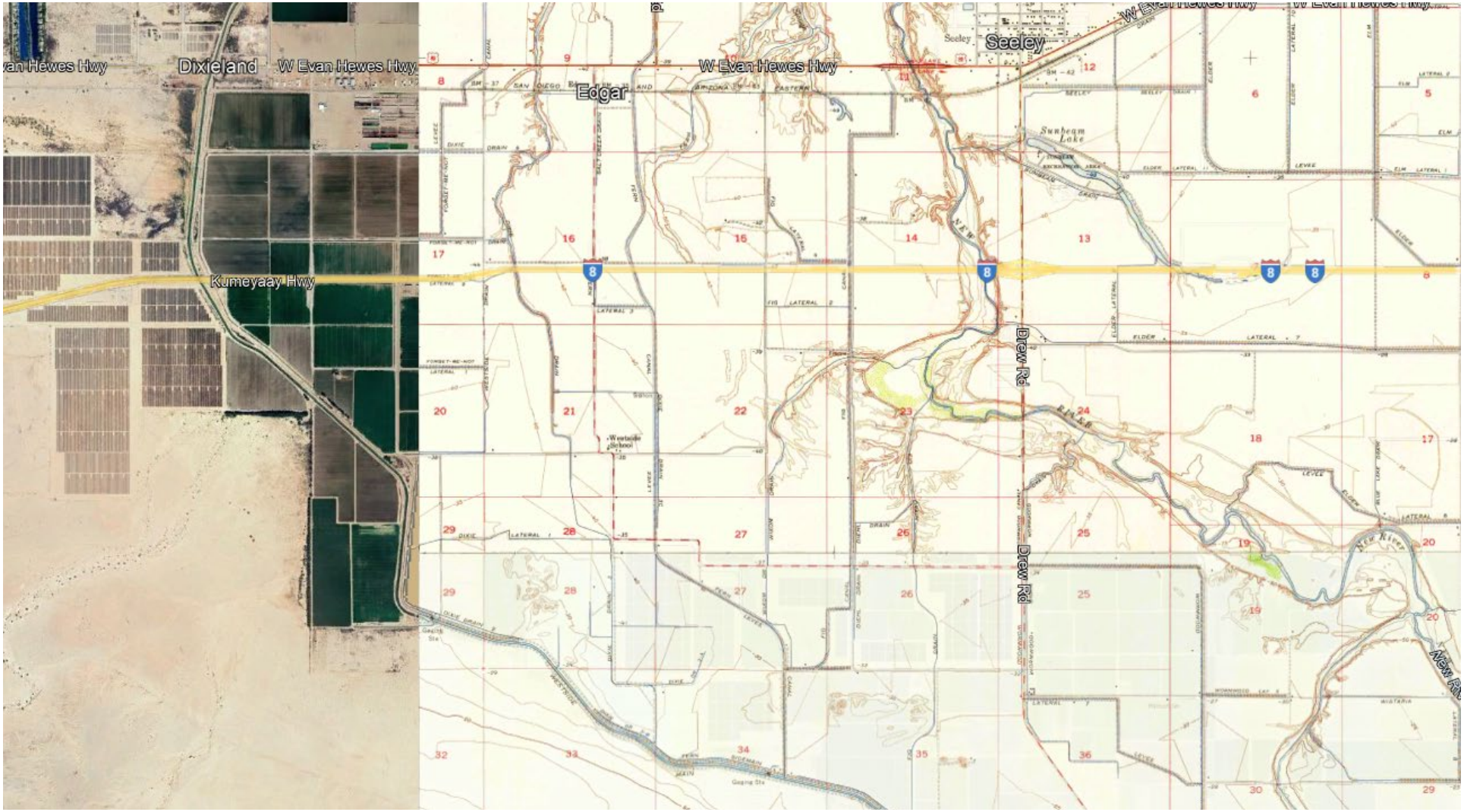
Big Rock 2 Cluster Solar & Storage Project

PC ORIGINAL PKG



Source: USGS Quadrangle, El Centro, CA 1942

PC ORIGINAL PKG

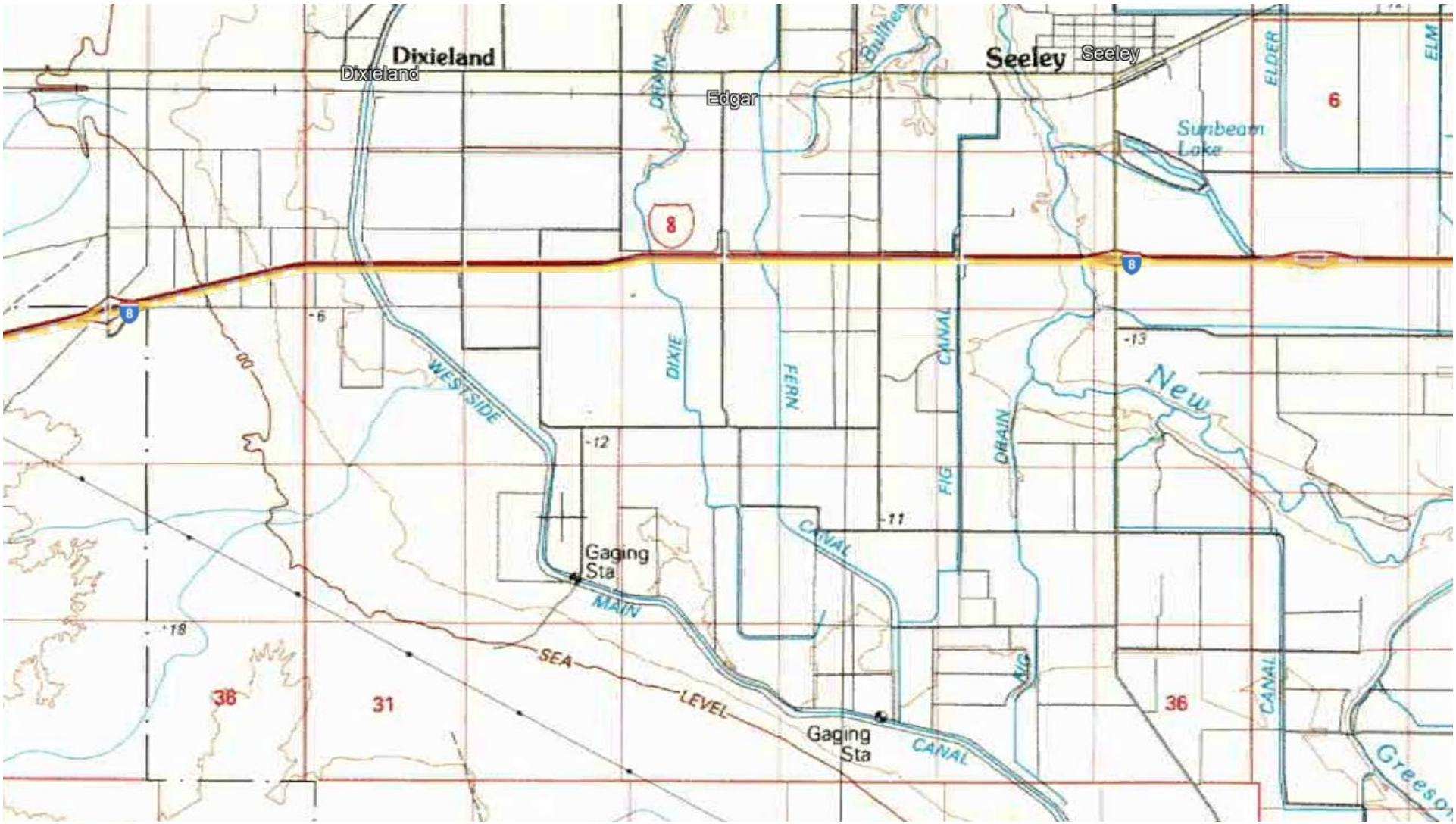


Source: USGS Quadrangle, Seeley, CA 1957

1957 HISTORICAL TOPOGRAPHIC MAPS

Big Rock 2 Cluster Solar & Storage Project

PC ORIGINAL PKG

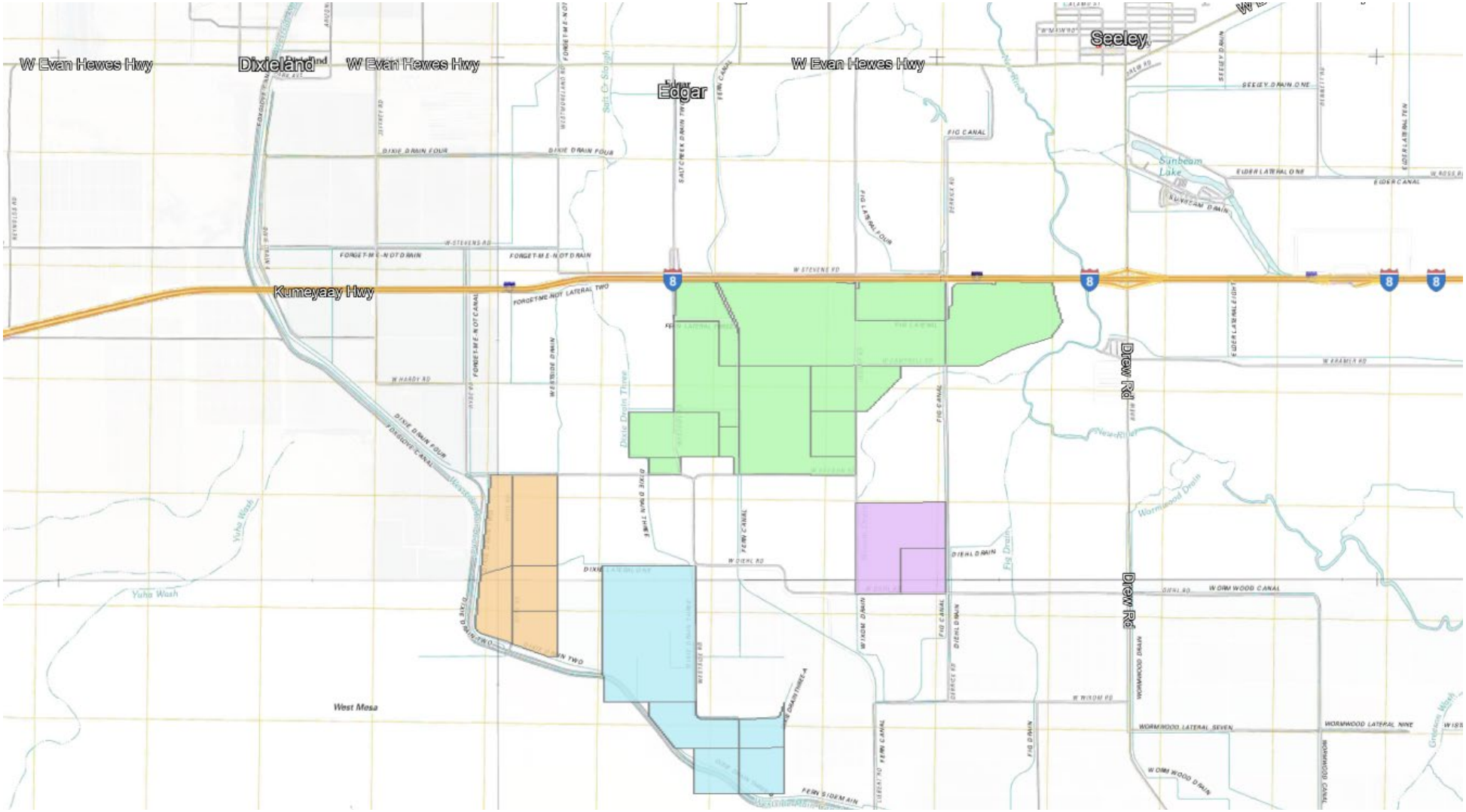


Source: USGS Quadrangle, El Centro, CA 1989

1989 HISTORICAL TOPOGRAPHIC MAPS

Big Rock 2 Cluster Solar & Storage Project

PC ORIGINAL PKG



Source: USGS Quadrangle, Seeley, Mount Signal, Yuha Basin, and Plaster City, CA 2012

2012 HISTORICAL TOPOGRAPHIC MAPS

Big Rock 2 Cluster Solar & Storage Project

PC ORIGINAL PKG

E

Landowner Interviews

PC ORIGINAL PKG

Landowner Interviews

Big Rock 2 Cluster Solar & Storage Project

	Landowner Name	Interview Completed	Date
1	Tomlinson, William	Yes	8/29/24
2	Tomlinson, Frank	Yes, see William Tomlinson	8/29/24
3	JR Preece Inc.	No	
4	Kuhn, John R	Yes	9/6/24
5	F.C. & M.K. Tomlinson LLC	Yes, see William Tomlinson	8/29/24
6	La Valle Sabbia Inc.	Yes	8/29/24
7	Whitmer, Randall & Soknin	Yes	9/5/24
8	Brundy, Thomas & Karen, JT D	Yes	8/29/2024
9	Downs, Susan & Derrick, Timothy	Yes	9/1/24

PC ORIGINAL PKG

The ASTM Standard (E 1527-21, Section 10) for Phase I Environmental Site Assessments requires interviews with past and present owners and occupants of the property in order to obtain information on the history and uses of the property. Please answer the questions below to the best of your knowledge. Please provide additional information for all YES answers.

1. **Current Property Uses and Buildings:**
   How long have you owned or occupied the property?

30 years

Describe the current uses of the property.

Agriculture

How long has the property been used for these purposes?

100 years

Describe any buildings on the property and indicate the years they were constructed.

none

PC ORIGINAL PKG

2. **Past Uses:** Describe the past use(s) of the property and indicate the time period for each use, if known.

Agriculture

3. **Previous Owners/Operators:** Please identify previous owners and operators and provide their contact information (if available).

4. **Industrial Uses:** Please indicate whether the property or adjoining properties have been used for the following industrial uses. **Adjoining properties** include properties that are across the street from yours.

Industrial Use	Yes (Property)	Yes (Adjoining Property)	No
Gasoline Station	☐	☐	☒
Printing Facility	☐	☐	☒
Metal Plating Manufacturing	☐	☐	☒
Landfill	☐	☐	☒
Auto Repair/Service Facility	☐	☐	☒
Dry Cleaners	☐	☐	☒
Junkyard/Auto Dismantling	☐	☐	☒
Waste Treatment	☐	☐	☒
Other Industrial Use (please describe below):	☐	☐	☒

PC ORIGINAL PKG

5. **Agricultural Uses:** Has the subject property ever been used for agricultural purposes?
☒ Yes ☐ No ☐ Unknown

If yes, please indicate whether any of the following have been present on the subject property.

Agricultural Use	Yes	No	Location
Cattle Hoof Wash	☐	☒	
Wheel Wash, Copper Solution or Other	☐	☒	
Orchards	☐	☒	Location, type, duration:
Orchard Heaters/Smudge Pots	☐	☒	
Pesticide/Herbicide/Fungicide Storage	☐	☒	Location, type, duration:
Pesticide/Herbicide/Fungicide Application	☒	☐	Location, type, duration: Only Products allowed by County and State

6. **Dump/Burn Areas:** Have any hazardous substances, petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or other waste materials been dumped above ground, buried, or burned on the property?
☐ Yes ☒ No ☐ Unknown

If yes, please describe:

PC ORIGINAL PKG

7. **Hazardous Substances Storage:** Have any of the following items been stored on the property in containers *greater than 5 gallons*? If yes, please describe.

Substance	Yes	No	Substance and Container Size (e.g., waste oil in 55-gallon drum)
Paint	☐	☒	
Chemicals	☐	☒	
Solvents	☐	☒	
Pesticides	☐	☒	
Fuel	☐	☒	
Oil	☐	☒	
Other (please identify):	☐	☒	

8. **Hazardous Substances Spills:** Have there been spills of the substances in Question 6?
☐ Yes ☒ No ☐ Unknown
If yes, please describe:

9. **Pipelines:** Have hazardous substances or petroleum products been transferred across the property in pipelines, either above or below ground?
☐ Yes ☒ No ☐ Unknown
If yes, please provide the type of hazardous substance:

PC ORIGINAL PKG

Have any spills occurred?

☐ Yes ☒ No ☐ Unknown

If yes, please describe:

10. Fill Dirt: Has fill dirt been brought onto the property from an off-site source?

☐ Yes ☒ No ☐ Unknown

If yes, what was the source of fill dirt?

If yes, was/is there evidence that the fill dirt in may be contaminated?

☐ Yes ☐ No ☐ Unknown

If yes, please provide soil sampling data, if available, or describe other evidence:

11. Pits, Ponds, and Lagoons: Are there currently any pits, ponds, or lagoons on the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe:

PC ORIGINAL PKG

Have any pits, ponds, or lagoons previously existed on the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe:

12. Stained Soil: Are there currently any areas on the property with stained soil?

☐ Yes ☒ No ☐ Unknown

If yes, please describe where, the size of stain, if there were odors, etc.:

Has stained soil previously existed on the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe where, size of stain, if there were odors, etc.:

PC ORIGINAL PKG

13. Storage Tanks: Do underground or aboveground storage tanks exist or have they existed previously on the property?

☐ Yes ☒ No ☐ Unknown

If yes, please provide details below. If tanks previously existed on the property, please describe how they were closed (e.g., removed, abandoned in place).

Tank Size	Year Installed	Contents	Closure Method (if applicable)	Year Closed (if applicable)

14. Fill Pipes/Vent Pipes/Access Ways: Do fill pipes, vent pipes, or access ways indicating the presence of underground storage tanks currently exist on the property?

☐ Yes ☒ No ☐ Unknown

Have fill pipes or vent pipes, which may indicate the presence of an underground storage tank, been removed from the property?

☐ Yes ☒ No ☐ Unknown

15. Floor Drains: Are floor drains stained with anything other than water or do they emit foul odors on the property?

☐ Yes ☒ No ☐ Unknown

16. Private Well/Non-Public Water Source: Is the property served by a private well or other non-public water source?

☐ Yes ☒ No ☐ Unknown

If yes, please describe source

PC ORIGINAL PKG

Are contaminants known to exist in any private well or non-public water system serving the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe

17. **Wastewater:** Does the property discharge wastewater, other than domestic wastewater or stormwater, into the sewer?

☐ Yes ☒ No ☐ Unknown

If yes, please describe

Does a neighboring property discharge wastewater, other than stormwater, onto the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe

Other than permission for domestic hookup, has any type of permit(s) for wastewater discharge been issued to the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe

18. **Septic Tank:** Does a septic tank exist, or has one existed previously at the property?

☐ Yes (currently exists) ☐ Yes (previously existed, was removed) ☒ No ☐ Unknown

PC ORIGINAL PKG

19. Cesspools/Cisterns: Do cesspools or cisterns currently exist on the property?

☐ Yes (cesspool) ☐ Yes (cistern) ☒ No ☐ Unknown

Have cesspools or cisterns previously existed on the property?

☐ Yes (cesspool) ☐ Yes (cistern) ☒ No ☐ Unknown

20. Transformer/Capacitor: Is there a transformer or capacitor on the property?

☐ Yes ☒ No ☐ Unknown

If yes, is it known to contain PCBs?

☐ Yes ☐ No ☐ Unknown _____

21. Hydraulic Equipment: Is there any hydraulic equipment such as automobile lifts or elevators on the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe type and number of equipment:

If yes, is the hydraulic oil known to contain PCBs?

☐ Yes ☐ No ☐ Unknown

22. Surveys: Has an asbestos and/or lead based paint survey been conducted at the property?

☐ Yes ☒ No ☐ Unknown

If yes, when was the survey(s) conducted? Please provide copies of the reports if available.

PC ORIGINAL PKG

23. **Pesticides:** Have pesticides, herbicides, or insecticides been applied on the property?
☒ Yes ☐ No ☐ Unknown
If yes, describe type and when they were used:

Only Pesticides Allowed by County, State and Federal Agencies.

24. **Environmental Cleanups:** Are you aware of any environmental cleanups/remediation that have occurred on the property?
☐ Yes ☒ No ☐ Unknown

25. **Notice of Violation:** Have notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products associated with activities conducted on the property been issued?
☐ Yes ☒ No ☐ Unknown

26. **Documents:** Has the property been included in any of the following documents? (Please provide any of the available documents.)

Document	Yes	No	Unknown
Phase I or II Environmental Assessment Reports	☐	☒	☐
Environmental Compliance Audits	☐	☒	☐
Environmental Permits	☐	☒	☐
Underground or Aboveground Tank Registrations	☐	☒	☐
Underground Injection System Registrations	☐	☒	☐
Health & Safety Plan / Safety Data Sheets	☐	☒	☐
Community Right-to-Know Plan	☐	☒	☐
Spill Prevention, Control, and Countermeasure Plan	☐	☒	☐
Hazardous Materials Business Plan	☐	☒	☐
Sampling, Remediation, or Risk Assessment Reports	☐	☒	☐
Hazardous Waste Generator Manifests	☐	☒	☐
Geotechnical Reports	☐	☒	☐

PC ORIGINAL PKG

27. **Environmental** Assessments: Are there any other environmental assessments that identified hazardous substances or petroleum products on the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe:

28. **Litigation/Administrative Proceedings:** Is there any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products associated with the property?

☐ Yes ☒ No ☐ Unknown

If yes, please describe:

29. **Additional Knowledge:** Are you aware of any other information (not provided above) about the property related to a releases or potential release of hazardous substances or petroleum products?

☐ Yes ☒ No ☐ Unknown

If yes, please describe:

Tom Brundy May 15, 2023 T.B. 8/29/2024

Signature Date

Tom Brundy ☒ Owner ☐ Occupant ☐ Owner Representative

Name (Printed)

Property Address: Westside Main 14A -
Foxglove 3 -

PC ORIGINAL PKG

Property Environmental Site Assessment

Please complete the following questions for only the property or properties participating in the Project.

		Please check the appropriate box below		
		Yes	**No**	**Unknown**
1	Has your property been used for any purpose other than agriculture?		X	
2	How long have you owned the property (approximations are fine)	30+		Years
3	Has your property or an adjacent property been used as a: *gas station, motor repair facility, junkyard, landfill, or waste treatment, storage, disposal, processing, or recycling facility*?		X	
4	Are there currently or previously been any *discarded automotive/industrial batteries, pesticides, paints, or other chemicals* in individual containers that total greater than 5 gallons stored or used at the property?		X	
5	Are there currently or previously been any 55-gallon drums, totes, or sacks of chemicals stored or used on the property?		X	
6	Are you aware of any dumping, burning, or burying of *hazardous waste, petroleum products, waste materials, tires, or batteries* on the property?		X	
7	Do you currently have fill dirt on your property that was brought in from an unknown or potentially contaminated site?		X	
8	Are there currently or previously been any stained soils on your property? (i.e. dark soil staining resulting from a spill of motor oil)		X	
9	Are there currently or previously been any registered or un-registered storage tanks (above and underground) on the property?		X	
10	Are there currently any fill pipes or vent pipes, which can indicate an underground tank, protruding from the ground or adjacent to any structures?		X	
11	Are there any wells (for water, petroleum, etc.) located on the property?		X	
12	If there is a well on the property, do you have knowledge of contamination associated with the well or if the well has been designated as contaminated by any government agency?		X	
13	Do you have any knowledge of environmental liens, governmental notifications, or past environmental violations relating to the property?		X	
14	Are you aware of any abandoned homesteads that have been burned or buried on the property?		X	

If you answered "**Yes**" to any of the above questions, please provide additional details below.

Q. #	**Answer**

If you require additional space, please use the back of this form.

Property Owner: Tom and Karen Brundy

Form Completed By: Tom Brundy Relationship to Owner: Self

Indicate "Self" if you are the owner

Date: Aug 29, 2020 Phone: (760) 554-1044

PC ORIGINAL PKG

Property Environmental Site Assessment

Please complete the following questions for only the property or properties participating in the Project.

		Please check the appropriate box below		
		Yes	**No**	**Unknown**
1	Has your property been used for any purpose other than agriculture?	☐	✔	☐
2	How long have you owned the property (approximations are fine)	20		Years
3	Has your property or an adjacent property been used as a: *gas station, motor repair facility, junkyard, landfill, or waste treatment, storage, disposal, processing, or recycling facility*?	☐	✔	☐
4	Are there currently or previously been any *discarded automotive/industrial batteries, pesticides, paints, or other chemicals* in individual containers that total greater than 5 gallons stored or used at the property?	☐	✔	☐
5	Are there currently or previously been any 55-gallon drums, totes, or sacks of chemicals stored or used on the property?	☐	✔	☐
6	Are you aware of any dumping, burning, or burying of *hazardous waste, petroleum products, waste materials, tires, or batteries* on the property?	☐	✔	☐
7	Do you currently have fill dirt on your property that was brought in from an unknown or potentially contaminated site?	☐	✔	☐
8	Are there currently or previously been any stained soils on your property? (i.e. dark soil staining resulting from a spill of motor oil)	☐	✔	☐
9	Are there currently or previously been any registered or un-registered storage tanks (above and underground) on the property?	☐	✔	☐
10	Are there currently any fill pipes or vent pipes, which can indicate an underground tank, protruding from the ground or adjacent to any structures?	☐	✔	☐
11	Are there any wells (for water, petroleum, etc.) located on the property?	☐	✔	☐
12	If there is a well on the property, do you have knowledge of contamination associated with the well or if the well has been designated as contaminated by any government agency?	☐	✔	☐
13	Do you have any knowledge of environmental liens, governmental notifications, or past environmental violations relating to the property?	☐	✔	☐
14	Are you aware of any abandoned homesteads that have been burned or buried on the property?	✔	☐	☐

If you answered "**Yes**" to any of the above questions, please provide additional details below.

Q. #	**Answer**
	The house burned down 20 years ago.

If you require additional space, please use the back of this form.

Property Owner: Susan Downs

Form Completed By: _____ Relationship to Owner: _____
Indicate "Self" if you are the owner

Date: 9/1/24 Phone: (760) 554-4856

PC ORIGINAL PKG

Property Environmental Site Assessment

Please complete the following questions for only the property or properties participating in the Project.

		Please check the appropriate box below		
		Yes	No	Unknown
1	Has your property been used for any purpose other than agriculture?	☐	☒	☐
2	How long have you owned the property (approximations are fine)		62	Years
3	Has your property or an adjacent property been used as a: *gas station, motor repair facility, junkyard, landfill, or waste treatment, storage, disposal, processing, or recycling facility*?	☐	☒	☐
4	Are there currently or previously been any *discarded automotive/industrial batteries, pesticides, paints, or other chemicals* in individual containers that total greater than 5 gallons stored or used at the property?	☐	☒	☐
5	Are there currently or previously been any 55-gallon drums, totes, or sacks of chemicals stored or used on the property?	☐	☒	☐
6	Are you aware of any dumping, burning, or burying of *hazardous waste, petroleum products, waste materials, tires, or batteries* on the property?	☐	☒	☐
7	Do you currently have fill dirt on your property that was brought in from an unknown or potentially contaminated site?	☐	☒	☐
8	Are there currently or previously been any stained soils on your property? (i.e. dark soil staining resulting from a spill of motor oil)	☐	☒	☐
9	Are there currently or previously been any registered or un-registered storage tanks (above and underground) on the property?	☐	☒	☐
10	Are there currently any fill pipes or vent pipes, which can indicate an underground tank, protruding from the ground or adjacent to any structures?	☐	☒	☐
11	Are there any wells (for water, petroleum, etc.) located on the property?	☐	☒	☐
12	If there is a well on the property, do you have knowledge of contamination associated with the well or if the well has been designated as contaminated by any government agency?	☐	☒	☐
13	Do you have any knowledge of environmental liens, governmental notifications, or past environmental violations relating to the property?	☐	☒	☐
14	Are you aware of any abandoned homesteads that have been burned or buried on the property?	☐	☒	☐

If you answered "**Yes**" to any of the above questions, please provide additional details below.

Q. #	Answer

If you require additional space, please use the back of this form.

Property Owner: John Kuhn

Form Completed By: John Kuhn Relationship to Owner: self

Indicate "Self" if you are the owner

Date: 9/6/24 Phone: (843) 577-3700

PC ORIGINAL PKG

Property Environmental Site Assessment

Please complete the following questions for only the property or properties participating in the Project.

		Please check the appropriate box below		
		Yes	**No**	**Unknown**
1	Has your property been used for any purpose other than agriculture?	☐	✓	☐
2	How long have you owned the property (approximations are fine)	31		Years
3	Has your property or an adjacent property been used as a: *gas station, motor repair facility, junkyard, landfill, or waste treatment, storage, disposal, processing, or recycling facility*?	☐	✓	☐
4	Are there currently or previously been any *discarded automotive/industrial batteries, pesticides, paints, or other chemicals* in individual containers that total greater than 5 gallons stored or used at the property?	☐	✓	☐
5	Are there currently or previously been any 55-gallon drums, totes, or sacks of chemicals stored or used on the property?	☐	✓	☐
6	Are you aware of any dumping, burning, or burying of *hazardous waste, petroleum products, waste materials, tires, or batteries* on the property?	☐	✓	☐
7	Do you currently have fill dirt on your property that was brought in from an unknown or potentially contaminated site?	☐	✓	☐
8	Are there currently or previously been any stained soils on your property? (i.e. dark soil staining resulting from a spill of motor oil)	☐	✓	☐
9	Are there currently or previously been any registered or un-registered storage tanks (above and underground) on the property?	☐	✓	☐
10	Are there currently any fill pipes or vent pipes, which can indicate an underground tank, protruding from the ground or adjacent to any structures?	☐	✓	☐
11	Are there any wells (for water, petroleum, etc.) located on the property?	☐	✓	☐
12	If there is a well on the property, do you have knowledge of contamination associated with the well or if the well has been designated as contaminated by any government agency?	☐	✓	☐
13	Do you have any knowledge of environmental liens, governmental notifications, or past environmental violations relating to the property?	☐	✓	☐
14	Are you aware of any abandoned homesteads that have been burned or buried on the property?	☐	✓	☐

If you answered "**Yes**" to any of the above questions, please provide additional details below.

Q. #	**Answer**

If you require additional space, please use the back of this form.

Property Owner: Alex Abatti, Jr.

Form Completed By: Rick Bush Relationship to Owner: Farm Manager

Indicate "Self" if you are the owner

Date: 08/29/2024 Phone: (760) 482-9426

PC ORIGINAL PKG

Property Environmental Site Assessment

Please complete the following questions for only the property or properties participating in the Project.

		Please check the appropriate box below		
		Yes	**No**	**Unknown**
1	Has your property been used for any purpose other than agriculture?	☐	☐	X
2	How long have you owned the property (approximations are fine)	50+		Years
3	Has your property or an adjacent property been used as a: *gas station, motor repair facility, junkyard, landfill, or waste treatment, storage, disposal, processing, or recycling facility*?	☐	☐	X
4	Are there currently or previously been any *discarded automotive/industrial batteries, pesticides, paints, or other chemicals* in individual containers that total greater than 5 gallons stored or used at the property?	☐	☐	X
5	Are there currently or previously been any 55-gallon drums, totes, or sacks of chemicals stored or used on the property?	☐	☐	X
6	Are you aware of any dumping, burning, or burying of *hazardous waste, petroleum products, waste materials, tires, or batteries* on the property?	☐	☐	X
7	Do you currently have fill dirt on your property that was brought in from an unknown or potentially contaminated site?	☐	☐	X
8	Are there currently or previously been any stained soils on your property? (i.e. dark soil staining resulting from a spill of motor oil)	☐	☐	X
9	Are there currently or previously been any registered or un-registered storage tanks (above and underground) on the property?	☐	☐	X
10	Are there currently any fill pipes or vent pipes, which can indicate an underground tank, protruding from the ground or adjacent to any structures?	☐	☐	X
11	Are there any wells (for water, petroleum, etc.) located on the property?	☐	X	☐
12	If there is a well on the property, do you have knowledge of contamination associated with the well or if the well has been designated as contaminated by any government agency?	☐	☐	☐
13	Do you have any knowledge of environmental liens, governmental notifications, or past environmental violations relating to the property?	☐	X	☐
14	Are you aware of any abandoned homesteads that have been burned or buried on the property?	☐	X	☐

If you answered "**Yes**" to any of the above questions, please provide additional details below.

Q. #	**Answer**

If you require additional space, please use the back of this form.

Property Owner: Tomlinson

Form Completed By: William Tomlinson Relationship to Owner: Manager

Indicate "Self" if you are the owner

Date: 8-29-24 Phone: (714) 529-1335

PC ORIGINAL PKG

The ASTM Standard (E 1527-21, Section 10) for Phase I Environmental Site Assessments requires interviews with past and present owners and occupants of the property in order to obtain information on the history and uses of the property. Please answer the questions below to the best of your knowledge. Please provide additional information for all YES answers.

1. **Current Property Uses and Buildings:**
   How long have you owned or occupied the property?

Over 50 years

Describe the current uses of the property.

Farm land

How long has the property been used for these purposes?

Over 50 years

Describe any buildings on the property and indicate the years they were constructed.

None

PC ORIGINAL PKG

2. **Past Uses:** Describe the past use(s) of the property and indicate the time period for each use, if known.

Farm land

3. **Previous Owners/Operators:** Please identify previous owners and operators and provide their contact information (if available).

Tenant farmer - Kevin Grizzle Farms (760) 356-4381. Contact Kevin Grizzle. Previous tenant farmer was Kuhn Farms.

4. **Industrial Uses:** Please indicate whether the property or adjoining properties have been used for the following industrial uses. **Adjoining properties** include properties that are across the street from yours.

Industrial Use	Yes (Property)	Yes (Adjoining Property)	No
Gasoline Station	☐	☐	☐
Printing Facility	☐	☐	☐
Metal Plating Manufacturing	☐	☐	☐
Landfill	☐	☐	☐
Auto Repair/Service Facility	☐	☐	☐
Dry Cleaners	☐	☐	☐
Junkyard/Auto Dismantling	☐	☐	☐
Waste Treatment	☐	☐	☐
Other Industrial Use (please describe below):	☐	☐	☐
Unknown but doubtful for all of the above.			

PC ORIGINAL PKG

5. **Agricultural Uses:** Has the subject property ever been used for agricultural purposes?
☑ Yes ☐ No ☐ Unknown

If yes, please indicate whether any of the following have been present on the subject property.

Agricultural Use	Yes	No	Location
Cattle Hoof Wash	☐	☐	unknown
Wheel Wash, Copper Solution or Other	☐	☐	unknown
Orchards	☐	☐	Location, type, duration: unknown
Orchard Heaters/Smudge Pots	☐	☐	unknown
Pesticide/Herbicide/Fungicide Storage	☐	☐	Location, type, duration: unknown
Pesticide/Herbicide/Fungicide Application	☐	☐	Location, type, duration: unknown

6. **Dump/Burn Areas:** Have any hazardous substances, petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or other waste materials been dumped above ground, buried, or burned on the property?
☐ Yes ☐ No ☑ Unknown

If yes, please describe:

PC ORIGINAL PKG

7. **Hazardous Substances Storage:** Have any of the following items been stored on the property in containers *greater than 5 gallons*? If yes, please describe.

Substance	Yes	No	Substance and Container Size (e.g., waste oil in 55-gallon drum)
Paint	☐	☐	
Chemicals	☐	☐	
Solvents	☐	☐	
Pesticides	☐	☐	
Fuel	☐	☐	
Oil	☐	☐	
Other (please identify):	☐	☐	unknown for all

8. **Hazardous Substances Spills:** Have there been spills of the substances in Question 6?

☐ Yes ☐ No ☑ Unknown

If yes, please describe:

9. **Pipelines:** Have hazardous substances or petroleum products been transferred across the property in pipelines, either above or below ground?

☐ Yes ☐ No ☑ Unknown

If yes, please provide the type of hazardous substance:

PC ORIGINAL PKG

Have any spills occurred?

☐ Yes ☐ No ☑ Unknown

If yes, please describe:

10. **Fill Dirt:** Has fill dirt been brought onto the property from an off-site source?

☐ Yes ☐ No ☑ Unknown

If yes, what was the source of fill dirt?

If yes, was/is there evidence that the fill dirt in may be contaminated?

☐ Yes ☐ No ☑ Unknown

If yes, please provide soil sampling data, if available, or describe other evidence:

11. **Pits, Ponds, and Lagoons:** Are there currently any pits, ponds, or lagoons on the property?

☐ Yes ☐ No ☑ Unknown

If yes, please describe:

PC ORIGINAL PKG

Have any pits, ponds, or lagoons previously existed on the property?

☐ Yes ☐ No ☑ Unknown

If yes, please describe:

12. Stained Soil: Are there currently any areas on the property with stained soil?

☐ Yes ☐ No ☑ Unknown

If yes, please describe where, the size of stain, if there were odors, etc.:

Has stained soil previously existed on the property?

☐ Yes ☐ No ☑ Unknown

If yes, please describe where, size of stain, if there were odors, etc.:

PC ORIGINAL PKG

13. **Storage Tanks:** Do underground or aboveground storage tanks exist or have they existed previously on the property?

☐ Yes ☐ No ☑ Unknown

If yes, please provide details below. If tanks previously existed on the property, please describe how they were closed (e.g., removed, abandoned in place).

Tank Size	Year Installed	Contents	Closure Method (if applicable)	Year Closed (if applicable)

14. **Fill Pipes/Vent Pipes/Access Ways:** Do fill pipes, vent pipes, or access ways indicating the presence of underground storage tanks currently exist on the property?

☐ Yes ☐ No ☑ Unknown

Have fill pipes or vent pipes, which may indicate the presence of an underground storage tank, been removed from the property?

☐ Yes ☐ No ☑ Unknown

15. **Floor Drains:** Are floor drains stained with anything other than water or do they emit foul odors on the property?

☐ Yes ☐ No ☑ Unknown

16. **Private Well/Non-Public Water Source:** Is the property served by a private well or other non-public water source?

☐ Yes ☑ No ☐ Unknown

If yes, please describe source

PC ORIGINAL PKG

Are contaminants known to exist in any private well or non-public water system serving the property?

☐ Yes ☐ No ☑ Unknown

If yes, please describe

17. **Wastewater:** Does the property discharge wastewater, other than domestic wastewater or stormwater, into the sewer?

☐ Yes ☐ No ☑ Unknown

If yes, please describe

Does a neighboring property discharge wastewater, other than stormwater, onto the property?

☐ Yes ☑ No ☐ Unknown

If yes, please describe

Other than permission for domestic hookup, has any type of permit(s) for wastewater discharge been issued to the property?

☐ Yes ☑ No ☐ Unknown

If yes, please describe

18. **Septic Tank:** Does a septic tank exist, or has one existed previously at the property?

☐ Yes (currently exists) ☐ Yes (previously existed, was removed) ☑ No ☐ Unknown

PC ORIGINAL PKG

19. Cesspools/Cisterns: Do cesspools or cisterns currently exist on the property?

☐ Yes (cesspool) ☐ Yes (cistern) ☐ No ☑ Unknown

Have cesspools or cisterns previously existed on the property?

☐ Yes (cesspool) ☐ Yes (cistern) ☐ No ☑ Unknown

20. Transformer/Capacitor: Is there a transformer or capacitor on the property?

☐ Yes ☐ No ☑ Unknown

If yes, is it known to contain PCBs?

☐ Yes ☐ No ☐ Unknown _____

21. Hydraulic Equipment: Is there any hydraulic equipment such as automobile lifts or elevators on the property?

☐ Yes ☐ No ☑ Unknown

If yes, please describe type and number of equipment:

If yes, is the hydraulic oil known to contain PCBs?

☐ Yes ☐ No ☐ Unknown

22. Surveys: Has an asbestos and/or lead based paint survey been conducted at the property?

☐ Yes ☑ No ☐ Unknown

If yes, when was the survey(s) conducted? Please provide copies of the reports if available.

PC ORIGINAL PKG

23. **Pesticides:** Have pesticides, herbicides, or insecticides been applied on the property?

☐ Yes ☐ No ☑ Unknown

If yes, describe type and when they were used:

24. **Environmental Cleanups:** Are you aware of any environmental cleanups/remediation that have occurred on the property?

☐ Yes ☐ No ☑ Unknown

25. **Notice of Violation:** Have notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products associated with activities conducted on the property been issued?

☐ Yes ☐ No ☑ Unknown

26. **Documents:** Has the property been included in any of the following documents? (Please provide any of the available documents.)

Document	Yes	No	Unknown
Phase I or II Environmental Assessment Reports	☐	☐	☑
Environmental Compliance Audits	☐	☐	☑
Environmental Permits	☐	☐	☑
Underground or Aboveground Tank Registrations	☐	☐	☑
Underground Injection System Registrations	☐	☐	☑
Health & Safety Plan / Safety Data Sheets	☐	☐	☑
Community Right-to-Know Plan	☐	☐	☑
Spill Prevention, Control, and Countermeasure Plan	☐	☐	☑
Hazardous Materials Business Plan	☐	☐	☑
Sampling, Remediation, or Risk Assessment Reports	☐	☐	☑
Hazardous Waste Generator Manifests	☐	☐	☑
Geotechnical Reports	☐	☐	☑

PC ORIGINAL PKG

27. **Environmental** Assessments: Are there any other environmental assessments that identified hazardous substances or petroleum products on the property?

☐ Yes ☐ No ☑ Unknown

If yes, please describe:

28. **Litigation/Administrative Proceedings:** Is there any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products associated with the property?

☐ Yes ☑ No ☐ Unknown

If yes, please describe:

29. **Additional Knowledge:** Are you aware of any other information (not provided above) about the property related to a releases or potential release of hazardous substances or petroleum products?

☐ Yes ☑ No ☐ Unknown

If yes, please describe:

William M. Tomlinson 8/29/24

William M. Tomlinson May 15, 2023

Signature Date

William Tomlinson ☐ Owner ☐ Occupant ☑ Owner Representative

Name (Printed)

Property Address: Imperial County APNs 051-270-28, 051-300-11, 051-300-26, 051-300-16, 051-270-20

PC ORIGINAL PKG

Property Environmental Site Assessment

Please complete the following questions for only the property or properties participating in the Project.

		Please check the appropriate box below		
		Yes	**No**	**Unknown**
1	Has your property been used for any purpose other than agriculture?	☐	☑	☐
2	How long have you owned the property (approximations are fine)			Years
3	Has your property or an adjacent property been used as a: *gas station, motor repair facility, junkyard, landfill, or waste treatment, storage, disposal, processing, or recycling facility*?	☐	☑	☐
4	Are there currently or previously been any *discarded automotive/industrial batteries, pesticides, paints, or other chemicals* in individual containers that total greater than 5 gallons stored or used at the property?	☐	☑	☐
5	Are there currently or previously been any 55-gallon drums, totes, or sacks of chemicals stored or used on the property?	☐	☑	☐
6	Are you aware of any dumping, burning, or burying of *hazardous waste, petroleum products, waste materials, tires, or batteries* on the property?	☐	☑	☐
7	Do you currently have fill dirt on your property that was brought in from an unknown or potentially contaminated site?	☐	☑	☐
8	Are there currently or previously been any stained soils on your property? (i.e. dark soil staining resulting from a spill of motor oil)	☐	☑	☐
9	Are there currently or previously been any registered or un-registered storage tanks (above and underground) on the property?	☐	☑	☐
10	Are there currently any fill pipes or vent pipes, which can indicate an underground tank, protruding from the ground or adjacent to any structures?	☐	☑	☐
11	Are there any wells (for water, petroleum, etc.) located on the property?	☐	☑	☐
12	If there is a well on the property, do you have knowledge of contamination associated with the well or if the well has been designated as contaminated by any government agency?	☐	☑	☐
13	Do you have any knowledge of environmental liens, governmental notifications, or past environmental violations relating to the property?	☐	☑	☐
14	Are you aware of any abandoned homesteads that have been burned or buried on the property?	☐	☑	☐

If you answered "**Yes**" to any of the above questions, please provide additional details below.

Q. #	Answer

If you require additional space, please use the back of this form.

Property Owner: Randall R. Whitmer

Form Completed By: Randall & Ted Whitmer Relationship to Owner: _____

Indicate "Self" if you are the owner

Date: 9-5-2024 Phone: (210) 482-0745

PC ORIGINAL PKG

F

Site Photographs

PC ORIGINAL PKG



Photo 1: Typical fallow agricultural land located on the northeast portion of the Project Area



Photo 2: Typical paved road within the Project Area

PC ORIGINAL PKG



Photo 3: Typical agricultural land, on the central portion of the Project Area



Photo 4: Metal shed and pole-mounted transformer

PC ORIGINAL PKG



Photo 5: Additional view of the metal shed



Photo 6: Additional view of the pole-mounted transformer and concrete-lined canal

PC ORIGINAL PKG



Photo 7: Residential property within the Project Area



Photo 8: Typical agricultural land, on the central portion of the Project Area

PC ORIGINAL PKG



Photo 9: Typical agricultural land, on the central portion of the Project Area



Photo 10: Unlined canal

PC ORIGINAL PKG



Photo 11: Typical fallow land, on the western side of the Project Area



Photo 12: Typical agricultural land, on the southern portion of the Project Area

PC ORIGINAL PKG



Photo 13: Electrical pump, AST, and pole-mounted transformer, on the southern portion of the Project Area



Photo 14: Additional view of the pump and AST

PC ORIGINAL PKG



Photo 15: Additional AST and storage tote, on the southern portion of the Project Area



Photo 16: Additional view of the AST and the adjacent dry canal

PC ORIGINAL PKG



Photo 17: Typical agricultural land, on the southern portion of the Project Area



Photo 18: Unpaved road along the southern side of the Project Area

PC ORIGINAL PKG



Photo 19: Piles of hay



Photo 20: Covered piles of hay

PC ORIGINAL PKG



Photo 21: Typical unpaved roads and power transmission lines within the Project Area



Photo 22: Typical agricultural land, on the western portion of the Project Area

PC ORIGINAL PKG



Photo 23: Underground utility signage



Photo 24: Adjacent Solar Farm property

PC ORIGINAL PKG

SB 610 – Draft Water Supply Assessment

For

Big Rock 2 Cluster Solar and Storage Project

April 2025 (Revised from November 2023)

Prepared For:

Imperial County
801 Main Street
El Centro, California 92243

PC ORIGINAL PKG

(This page Intentionally left blank)

PC ORIGINAL PKG

Contents

PURPOSE OF WATER SUPPLY ASSESSMENT 7
Project Determination According to SB 610 - Water Supply Assessment 7
EXECUTIVE SUMMARY 9
PROJECT DESCRIPTION 12
Water Use Efficiency Best Management Practice Incorporated Into Project 13
Additional Project Measures Under Potential Water Curtailment 13
Description of IID Service Area 17
Climate Factors 17
Imperial Valley Historic and Future Land and Water Uses 20
Imperial Integrated Regional Water Management Plan (October 2012) 21
IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009) 24
IID Temporary Land Conversion Fallowing Policy (May 2012) 25
IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS 26
California Law 26
Law of the River 26
IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND 36
WATER AVAILABILITY – NORMAL YEAR 36
EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS 39
Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP) 39
Equitable Distribution Plan (EDP) History 42
Projected Water Supplies 43
PROJECT WATER AVAILABILITY FOR A 20-YEAR PERIOD TO MEET PROJECTED DEMANDS 45
EXPECTED WATER DEMANDS FOR THE PROPOSED PROJECT 47
IID'S ABILITY TO MEET DEMANDS WITH WATER SUPPLY 51
Expanding Water Supply Portfolio 54
IID Near Term Water Supply Projections 57
COUNTY OF IMPERIAL FINDINGS 59
ASSESSMENT CONCLUSION 61
RESOURCES AND REFERENCES 62
ATTACHMENTS 64

PC ORIGINAL PKG

Figures

Figure 1. Project Site Regional Location 14
Figure 2. Aerial Map of Project Vicinity 15
Figure 3. Project Layout/Site Plan 16
Figure 4. IID Imperial Unit Boundary and Canal Network 18
Figure 5. Major Colorado River Reservoir Storage Facilities and Basin Location Map 32
Figure 6. Lake Mead Water Elevation Levels 02.11.24 35
Figure 7. Lake Mead Schematic (June 15, 2022) 41

Tables

Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024 19
Table 2. IID Areawide Annual Precipitation (In). (1990-2024) 19
Table 3. Monthly Mean Temperature (°F)- Imperial, CA 10- Year, 30- Year & 100- Year (2015-2024,1995-2024,1925-2024) 19
Table 4. Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024) 20
Table 5. Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY) 22
Table 6 Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY) 23
Table 7. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2020 24
Table 8. Interim Water Supply Policy 2024 Annual Non-Agricultural Water Supply Development Fee Schedule 24
Table 9. CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY) 30
Table 10. Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2022 33
Table 11. IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B) 37
Table 12. IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024 40
Table 13. IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024 41
Table 14. Project Operational Water Uses (AFY) 47
Table 15. Ten-Year Historic Delivery (AFY), 2012-2021 48
Table 16. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024 51
Table 17. IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2025 52
Table 18. 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam 52
Table 19. IID Capital Project Alternatives and Cost (May 2009 price levels $) 57

PC ORIGINAL PKG

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects
Attachment B: IID Equitable Distribution Plan

PC ORIGINAL PKG

Acronyms

AF	Acre-Foot or Acre-Feet
AFY	Acre-Feet per Year
AOP	Annual Operations Plan
CAP	Central Arizona Project
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CDWR	California Department of Water Resources
CEQA	California Environmental Quality Act
CRWDA	Colorado River Water Delivery Agreement
CUP	Conditional Use Permit
CVWD	Coachella Valley Water District
EDP	IID Equitable Distribution Plan
EIS	Environmental Impact Statement
ICPDS	Imperial County Planning and Development Services
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IOPP	Inadvertent Overrun Payback Policy
ISG	Interim Surplus Guidelines
IRWMP	Integrated Regional Water Management Plan
IWSP	Interim Water Supply Policy
KAF	Thousand Acre Feet
LAFCO	Local Agency Formation Commission
LCR	Lower Colorado Region
MCI	Municipal, commercial, industrial
MGD	Million Gallons per Day
MW	Megawatt
MWD	Metropolitan Water District of Southern California
NAF	Naval Air Facility
PVID	Palo Verde Irrigation District
QSA/	Quantification Settlement Agreement and Related Agreements Transfer Agreements
SB	Senate Bill
SDCWA	San Diego County Water Authority
SNWA	Southern Nevada Water Authority
TLCFP	Temporary Land Conversion Fallowing Policy
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
WSA	Water Supply Assessment

PC ORIGINAL PKG

PURPOSE OF WATER SUPPLY ASSESSMENT

This Water Supply Assessment (WSA) was prepared for the County of Imperial (Lead Agency) by Dudek, regarding the Big Rock 2 Cluster Solar and Storage Project (Big Rock 2 Solar or Project) proposed by 90 FL 8ME LLC (the "Applicant"). This study is a requirement of California law, specifically Senate Bill 610 (referred to as SB 610). SB 610 is an act that amended Section 21151.9 of the Public Resources Code, and Sections 10631, 10656, 10910, 10911, 10912, and 10915 of the Water Code. SB 221 is an act that amended Section 11010 of the Business and Professions Code, while amending Section 65867.5 and adding Sections 66455.3 and 66473.7 to the Government Code. SB 610 was approved by the Governor and filed with the Secretary of State on October 9, 2001, and became effective January 1, 2002.[1] SB 610 requires that a lead agency determine that a project (as defined in CWC Section 10912) that is subject to the California Environmental Quality Act (CEQA), to identify any public water system that may supply water for the project and to request the applicants to prepare a specified water supply assessment.

This study has been prepared pursuant to the requirements of CWC Section 10910, as amended by SB 610 (Costa, Chapter 643, Stats. 2001). The purpose of SB 610 is to advance water supply planning efforts in the State of California; therefore, SB 610 requires the Lead Agency, to identify any public water system or water purveyor that may supply water for the project and to prepare the WSA after a consultation. Once the water supply system is identified and water usage is established for construction and operations for the life of the project, the lead agency is then able to coordinate with the local water supplier and make informed land use decisions to help provide California's cities, farms and rural communities with adequate water supplies.

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in California Water Code (CWC) Section 10912 [a]) that are subject to the California Environmental Quality Act (CEQA). Due to increased water demands statewide, this water bill seeks to improve the link between information on water availability and certain land use decisions made by cities and counties. This bill takes a significant step toward managing the demand placed on California's water supply. It provides further regulations and incentives to preserve and protect future water needs. Ultimately, this bill will coordinate local water supply and land use decisions to help provide California's cities, farms, rural communities and industrial developments with adequate long-term water supplies. The WSA will allow the lead agency to determine whether water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Project Determination According to SB 610 - Water Supply Assessment

With the introduction of SB 610, any project under the California Environmental Quality Act (CEQA) shall provide a Water Supply Assessment if the project meets the definition of CWC Section 10912. Water Code

[1] SB 610 amended Section 21151.9 of the California Public Resources Code, and amended Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Section 10913, and added and amended Section 10657 of the Water Code. SB 610 was approved by California Governor Gray Davis and filed with the Secretary of State on October 9, 2001.

PC ORIGINAL PKG

section 10911(c) requires that the lead agency "determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." Specifically, Water Code section 10910(c)(3) states that "If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses."

After review of CWC Section 10912a, and Section 10912 (a)(5)(B), it was determined that the proposed Big Rock 2 Solar is deemed a project as it is considered an industrial use that will occupy 1,849 acres of privately owned agricultural land.

PC ORIGINAL PKG

EXECUTIVE SUMMARY

The County of Imperial in coordination with Imperial Irrigation District (IID) has requested a WSA as part of the environmental review for the proposed Big Rock 2 Solar Project ("Project"). This study is intended for use by Imperial County and Imperial Irrigation District in its evaluation of water supplies for existing and future land uses. The evaluation examines the following water elements:

- Water availability during a normal year
- Water availability during a single dry year, and multiple dry water years
- Water availability during a 30-year projection to meet existing demands
- Expected 30-year water demands of the Project
- Reasonably foreseeable planned future water demands to be served by the Imperial Irrigation District under Equitable Distribution Plan apportionment

The proposed Project site is located within unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. Existing land uses surrounding the Project site consist largely of agricultural parcels sparsely occupied by farm or rural residential uses. The Project site is located across multiple U.S. Geological Survey 7.5-minute quadrangles, including the Seeley, Plaster City, Mount Signal, and Yuha Basin quadrangles. The Project site is within IID's Imperial Unit and district boundary and as such is eligible to receive water service. Water infrastructure capacity is not a part of this assessment. 90FL 8ME LLC is responsible for contacting IID Water Engineering Department for an infrastructure capacity assessment. Any infrastructure improvements, costs and environmental compliance associated with improvements to accommodate the Project's water supply or for the conservation of the water supply needed for the Project is the sole responsibility of 90FL 8ME LLC.

IID adopted an Interim Water Supply Policy (IWSP) in 2009 for new Non-Agricultural Projects, under which water supplies may be contracted to serve new developments within IID's water service area. For applications processed under the IWSP, applicants shall be required to pay a processing fee and, after IID board approval of the corresponding water supply agreement, will be required to pay a reservation fee(s) and annual water supply development fees. The water supply development fees are collected for the development of water supply projects, such as water conservation projects, water storage projects and/or water augmentation projects.

Under the IWSP, IID may set aside up to 25,000 acre-feet annually (AFY) of IID's Colorado River water supply to serve new non-agricultural projects with water created from IID efficiency conservation projects and programs. As of March 2025, a balance of 18,620 AFY remains available under the IWSP for new non-agricultural projects, providing a mechanism for the development of reasonably sufficient water supplies for such projects. The proposed Project water demand of approximately 10 AFYrepresents 0.054 percent of the annual unallocated supply that may be created and set aside for new non-agricultural projects.

The County of Imperial anticipates non-agricultural project water supply demand within their jurisdiction, as the land use authority, is likely to exhaust the 18,620 AFY available under the IWSP within the

PC ORIGINAL PKG

foreseeable 30-year planning period. Thus, the proposed Project's estimated water demand, combined with other development anticipated in the area is likely to adversely affect IID's ability to provide water to other users in IID's water service area unless mitigation is incorporated. This industrial water use project may need to enter into a water supply agreement with IID under which water conservation and augmentation commitments may be required of the Big Rock 2 Solar facility.

IID has a proven record of successful development and implementation of water conservation programs and projects in response to fully executed water supply agreements with public and private entities for water conservation efforts that are fully funded by the party requesting the conserved water supply. IID will continue to meet all existing and new water supply and conservation agreement obligations consistent with the terms and conditions set forth in those agreements, including any environmental requirements and cost provisions.

In efforts to address any potential water supply/demand imbalances, IID adopted a revised Equitable Distribution Plan for the apportionment of water to all water user categories including for commercial/industrial water uses such as the proposed Project. Implementation of the EDP initiates every January 1st and continues throughout the year unless the IID Board of Directors takes specific action. The latest revisions to the EDP were made in July of 2023 (IID EDP). Under the EDP, water supplies may be restricted to Big Rock 2 as described under the IID Water Supply & Demand Section, Equitable Distribution Plan sub-section of this WSA.

In June 2022, U.S. Bureau of Reclamation Commissioner Camille Touton testified before a congressional committee and called for the Basin states to develop a plan before the end of the year to reduce demands by 2-4 million acre-feet per year, through 2026, or the Secretary of the Interior would take regulatory action to force these reductions in order to protect the Colorado River system in light of the prolonged drought conditions.

In 2023, California submitted a voluntary conservation proposal to Reclamation to conserve up to 400,000 AFY through 2026 as their commitment to Lake Mead and the Colorado River System. Post 2026, new operating guidelines would come into effect, potentially affecting all River contractors. IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community while simultaneously ramping up water conservation programs in an effort to augment local water supplies, to some degree, should Basin-wide cuts be unavoidable. In the interim, IID has entered into a System Conservation Implementation Agreement (SCIA) with the U.S. Bureau of Reclamation for its share of the California proposal under a voluntary plan that would not exceed 250,000 AFY (through 2026) and result in compensation from Reclamation for local water conservation efforts.

IID's Lake Mead contributions for 2022 and 2023 were 25,000 AF and 56,111 AF, respectively, which were over and above IID's transfer obligation schedule. For 2024, IID conserved an estimated 195,000 AF for Lake Mead above its transfer obligation schedule. Provisional conservation numbers indicate IID saved a total of 661,000 AF in 2024 for all commitments combined. Consequently, California's 2024 water use, are the lowest in decades and IID's, in particular, is the lowest since 1941. Despite these historic contributions,

PC ORIGINAL PKG

Lake Mead elevation had increased by only 17 feet by the end of 2024, and continues to operate under shortage conditions. It is unknown, as of April 2025, what post 2026 conservation measures may need to be considered by the district. Nonetheless, IID's conservation capacity remains reliable.

PC ORIGINAL PKG

PROJECT DESCRIPTION

90FL 8ME LLC is proposing to construct and operate a 500-megawatt (MW) utility-scale photovoltaic solar energy generation and a 500 MW battery energy storage system (BESS) on approximately 1,849 acres of private lands in Imperial County**.** More specifically, the Project is located within unincorporated Imperial County, immediately south of Interstate 8, approximately one mile southwest of the town of Seeley, California, and approximately six miles north of the United States International Border with Mexico. The Project site is located across multiple U.S. Geological Survey 7.5-minute quadrangles, including the Seeley, Plaster City, Mount Signal, and Yuha Basin quadrangles. Existing land uses surrounding the Project site consist largely of agricultural parcels sparsely occupied by farm or rural residential uses. Affected parcels are noted as follows: 051-270-020, 051-270-028, 051-270-036, 051-270-041, 051-280-054, 051-300-011, 051-300-016, 051-300-026, 051-300-035, 051-300-037, 051-300-032, 051-300-036, 051-330-003, 051-350-004, 051-350-006, 051-350-007, 051-350-008, 051-310-027, 051-310-28, 051-290-018, 051-290-019, 051-320-005, 051-320-006, and 051-320-007.

Please refer to **Figure 1** for the Project's Regional Location (**Figure 1.** Project Site Regional Location), and **Figure 2** for the Project Site and Vicinity **(Figure 2.** Aerial View of Project Site and Vicinity**)**.

In general, the project can be described as follows: the Project's permanent facilities would include service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, energy storage system(s), and operations and maintenance (O&M) facilities, none of which is expected to adversely affect any of the existing IID laterals or drains. Power generated by the Project would be collected using up to 66-kilovolt (kV) collector lines, which could run overhead and/or underground to a dedicated Project substation. A 230-kV overhead gen-tie line would then link the Project substation to the planned Liebert Switchyard, which will be connected via an overhead 230-kilovolt gen-tie line to the existing San Diego Gas & Electric (SDG&E) Imperial Valley Substation. Please refer to **Figure 3** for the conceptual project layout and tentative site plan. (**Figure 3.** Project Layout/Site Plan).

The solar facility involves seeking approval of a total of four Conditional Use Permits (CUPs) that will allow for 90FL 8ME LLC to secure the CUPs from the Lead Agency along with permits and approvals from other relevant agencies as required by law.

Water services for the Project will be provided by Imperial Irrigation District (IID). The Project is anticipated to require 700 AF of water to support construction over a 1.5 to 2-year period, and up to 10 AFY to support Project O&M over a 30-year operational period. The construction water demand, would primarily be for dust suppression, whereas operational demands would be for the operation and maintenance O&M building, fire flow storage, and periodic panel washing.

The Project's O&M water demand is conservatively assumed to be up to 10 AFY for long-term planning purposes. However, the actual O&M demand will likely be much lower, possibly as little as approximately 1 AFY. This estimate is based on the sanitary demands of 15 employees at 55 gallons per capita per day

PC ORIGINAL PKG

(approximately 0.9 AFY)[2], a one-time demand to fill one or more water storage tanks totaling 100,000 gallons for fire supply (approximately 0.01 AFY over the life of the Project)[3], and annual panel washing requiring approximately 16,500 gallons per panel washing event (0.05 AFY)[4]. It is assumed that no water for dust control during operation will be necessary.

The proposed Project will need to contract with IID to deliver up to 350 AFY of untreated water for construction, and up to 10 AFY for O&M via the IID Westside Main Canal and delivery gates listed in Table 15..

Water Use Efficiency Best Management Practice Incorporated Into Project

The Project proposes to incorporate the following Best Management Practices for water use efficiency under the requested operational water supply amount of 10 AFY: 1) limit panel washing to the minimum frequency required to maintain output from solar facility, 2) install low flow fixtures in O&M building, and 3) repair water leaks immediately.

Additional Project Measures Under Potential Water Curtailment

Should reductions to IID's water supply be ordered or directed from a governmental authority having appropriate jurisdiction, Big Rock 2 Solar may be required to reduce its water supply demand by a proportionate reduction of the total volume of water available to IID. Additional, operational changes that may be implemented by the Project under these unpredictable conditions are as follows: 1) use portable toilets and 2) no panel washing

Incorporation of these additional measures is anticipated to conserve approximately 100 percent of overall water supply demand for the Project if operating under curtailment.

[2] 55 gpd/person * 15 persons = 825 gpd; 825 gpd * 365 days = 301,125 gallons per year.
[3] 100,000 gallons / 33 years = 3,030 gallons per year.
[4] 33 gal/MW * 500 MW = 16,500 gallons per annual panel washing event (Klise et al., 2013; Macknick et al., 2011).

PC ORIGINAL PKG



Figure 1. Project Site Regional Location

PC ORIGINAL PKG

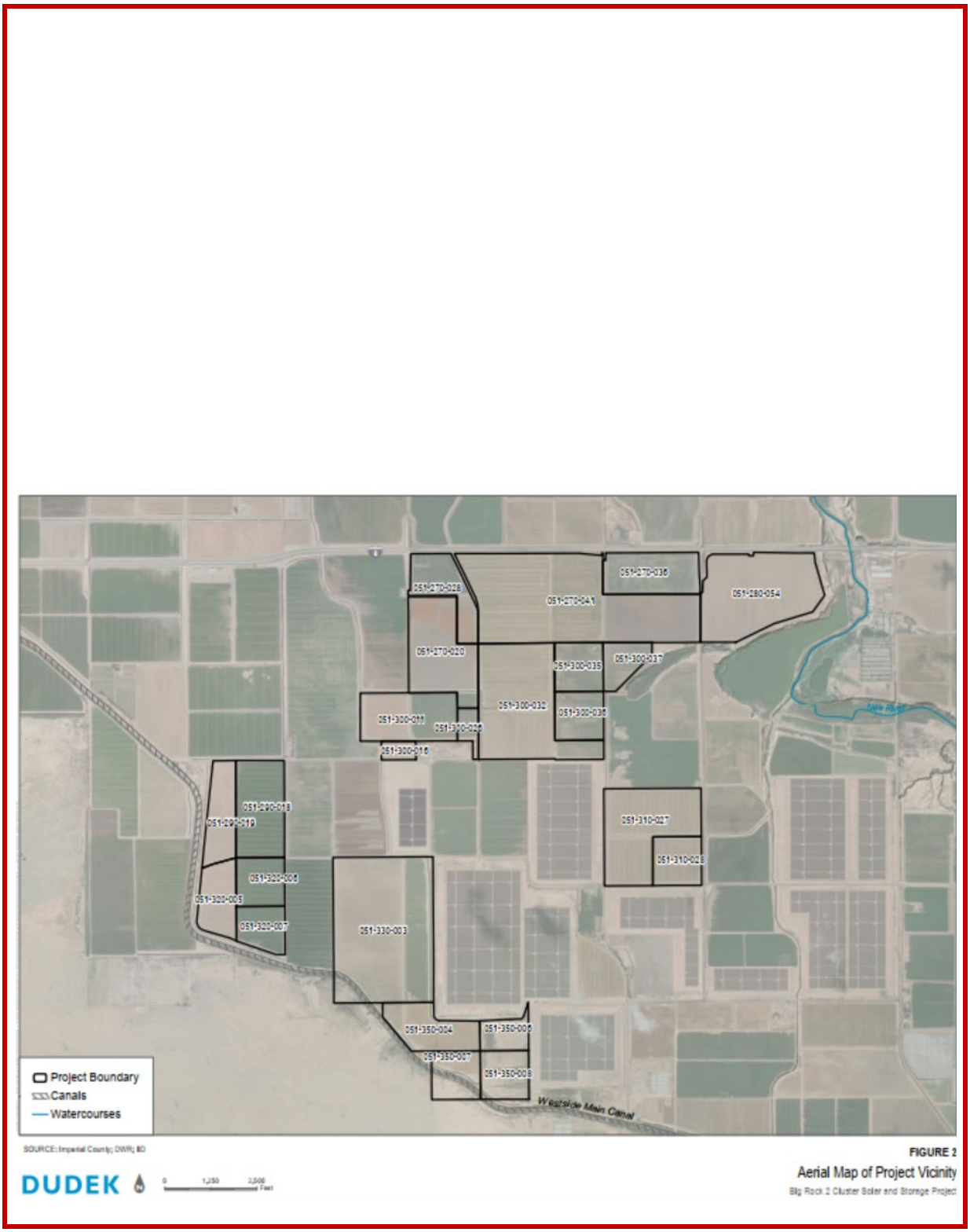


Figure 2. Aerial Map of Project Vicinity

PC ORIGINAL PKG

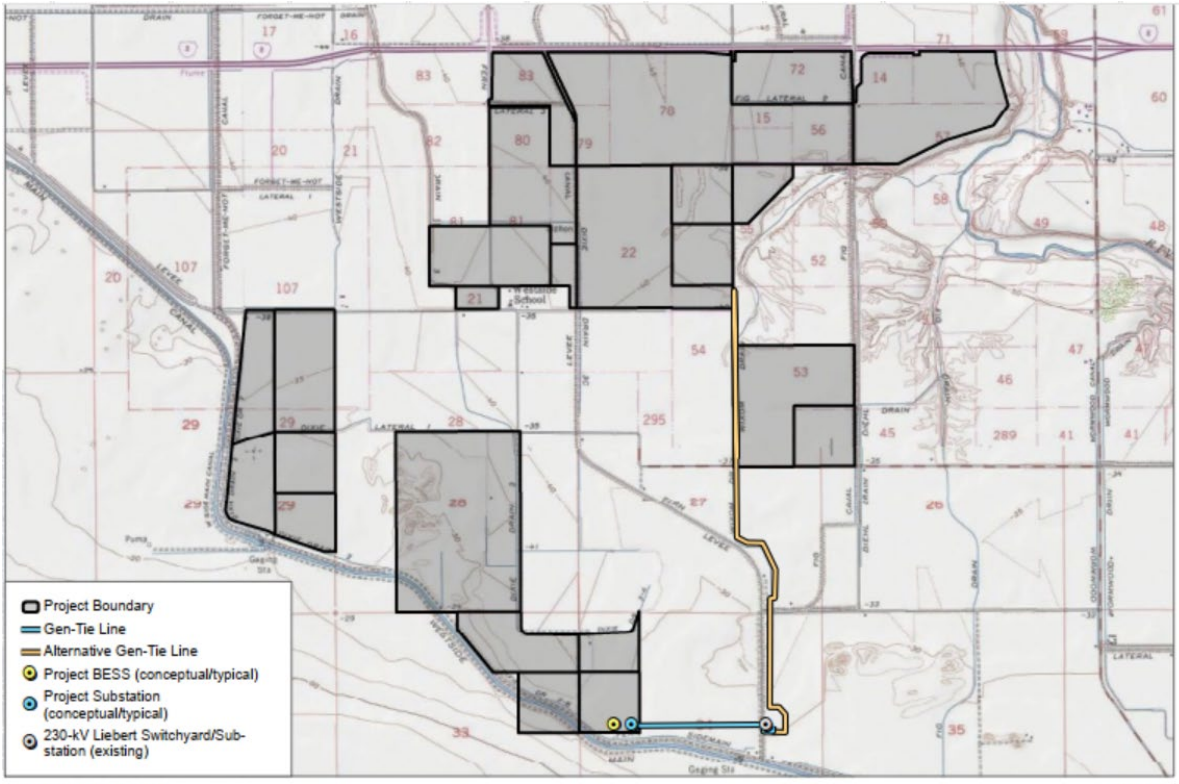


Figure 3. Project Layout/Site Plan

PC ORIGINAL PKG

Description of IID Service Area

The proposed Project site is located in Imperial County in the southeastern corner of California. The County is comprised of approximately 4,597 square miles or 2,942,080 acres.[5] Imperial County is bordered by San Diego County to the west, Riverside County to the north, the Colorado River/Arizona boundary to the east, and 84 miles of International Boundary with the Republic of Mexico to the south. Approximately fifty percent of Imperial County is undeveloped land under federal ownership and jurisdiction. The Salton Sea accounts for approximately 11 percent of Imperial County's surface area. In 2024, 16 percent of the area was in irrigated agriculture (468,530 acres), including 14,676 acres of the Yuma Project, some 35 sections or 5,5568 acres served by Palo Verde Irrigation District (PVID), and 448,286 net acres served by IID.[6, 7]

The area primarily served by IID is located in the Imperial Valley, which is generally contiguous with IID's Imperial Unit, lies south of the Salton Sea, north of the U.S./Mexico International Border, and generally in the 699,132 acre area between IID's Westside Main and East Highline Canals. In 2024, IID delivered untreated water to 497,241 acres, predominantly in the Imperial Valley, along with small areas of East and West Mesa land, including non-agricultural use, but excluding temporarily fallowed land.

The developed area consists of seven incorporated cities (Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland), three unincorporated communities (Heber, Niland and Seeley), and three institutions (Naval Air Facility [NAF] El Centro, Calipatria CDCR, and Centinela CDCR) and supporting facilities. **Figure 4** provides a map of the IID canal network, as well as cities, communities and main canals.

Climate Factors

Imperial Valley, located in the Northern Sonoran Desert, which has a subtropical desert climate is characterized by hot, dry summers and mild winters. Clear and sunny conditions typically prevail, and frost is rare. The region receives 85 to 90 percent of possible sunshine each year, the highest in the United States. Winter temperatures are mild rarely dropping below 32°F, but summer temperatures are very hot, with more than 100 days over 100°F each year. The remainder of the year has a relatively mild climate with temperatures averaging in the mid-70s.

The 100-year average climate characteristics are provided in Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-202**4**. Rainfall contributes around 50,000 AF of effective agricultural water per inch of rain. Most rainfall occurs from November through March; however, summer storms can be significant in some years. Annual areawide rainfall is shown in Table 2. IID Areawide Annual Precipitation (In). (1990-2024). The thirty-year, 1995-2024, average annual air temperature was 74.13°F, and average annual rainfall was 2.40 inches, see Tables 3 and 4. This record shows that while average annual rainfall has fluctuated, the 10-year average temperatures have slightly increased over the 30-year averages.

[5] *Imperial County General Plan*, Land Use Element 2008 Update
[6] *USBR website: Yuma Project. PVID contacted Chris Parrish for acreage April 2025.*
[7] IID Annual Inventory of Areas Receiving Water Years 2023, 2022, 2021.

PC ORIGINAL PKG

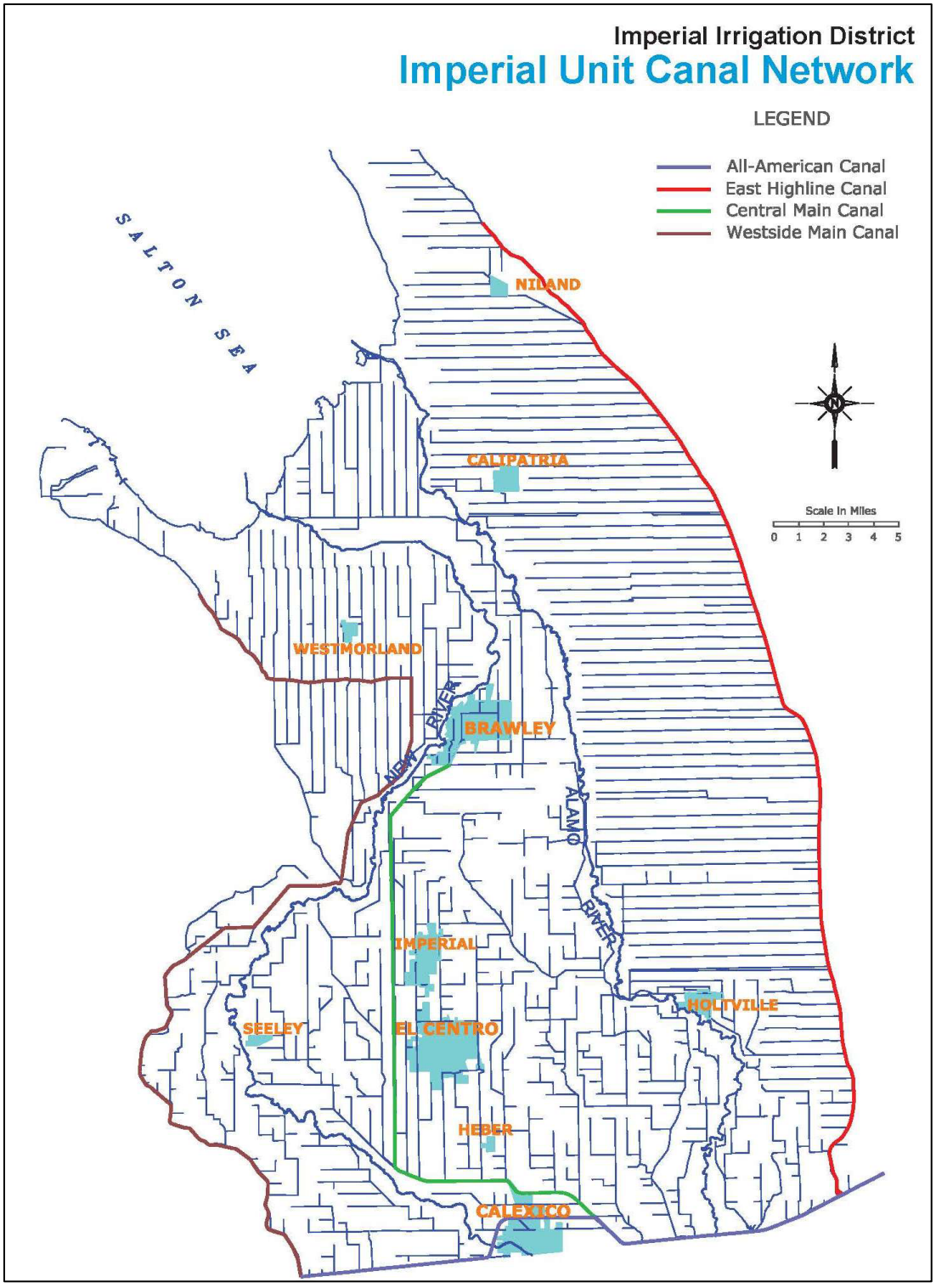


Figure 4. IID Imperial Unit Boundary and Canal Network

PC ORIGINAL PKG

Table 1. Climate Characteristics, Imperial, CA 100- Year Record, 1925-2024

Climate Characteristic	Annual Value
Average Precipitation (100-year record, 1925-2024)	2.75 inches (in)
Minimum Temperature, Jan 1937	16 ºF
Maximum Temperature, July 1995	121 ºF
Average Minimum Temperature, 1925-2024	48.5 ºF
Average Maximum Temperature, 1925-2024	98.4 ºF
Average Temperature, 1925-2024	73.2 ºF

Source: IID Imperial Weather Station Record

Table 2. IID Areawide Annual Precipitation (In). (1990-2024)

1990	1991	1992	1993	1994	1995	1996
1.646	3.347	4.939	2.784	1.775	1.251	0.685
1997	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1.328	2.604	1.399	0.612	0.516	0.266	2.402
2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
4.116	4.140	0.410	1.331	1.301	0.619	3.907
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
2.261	2.752	2.772	1.103	2.000	1.867	2.183
2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
1.305	3.017	2.685	1.688	1.265	1.40	TBD

Source: Computation based on polygon average of CIMIS as station came online in the WISKI.[8]

Notable from Table 2 (above) and Table 3(below) is that while average annual rainfall measured at IID Headquarters in Imperial, California, has been decreasing, monthly average temperatures are remarkably consistent.

Table 3. Monthly Mean Temperature (°F)- Imperial, CA 10- Year, 30- Year & 100- Year (2015-2024,1995-2024,1925-2024)

	Jan			Feb			Mar			Apr		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	81	34	**58**	85	36	**51**	92	42	**67**	101	49	**74**
30-year	81	34	**57**	84	36	**60**	93	41	**66**	100	47	**72**
100-year	80	32	**56**	84	35	**59**	91	40	**65**	99	46	**71**
	May			**Jun**			**Jul**			**Aug**		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	104	54	**77**	115	62	**89**	116	72	**95**	115	73	**94**
30-year	106	54	**78**	113	60	**87**	115	69	**93**	114	70	**93**
100-year	105	53	**78**	113	59	**86**	114	68	**92**	113	68	**91**
	Sep			**Oct**			**Nov**			**Dec**		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	112	65	**88**	103	53	**78**	90	40	**65**	82	36	**58**
30-year	111	63	**88**	102	51	**76**	90	39	**64**	81	33	**56**
100-year	111	61	**86**	102	49	**75**	89	38	**63**	80	32	**56**

Source: IID Imperial Headquarters Station Record (Data provided by IID staff)

[8] From 1/1/1990-3/23/2004, 3 CIMIS stations: Seeley, Calipatria/Mulberry, Meloland; 3/24/2004-7/5/2009, 4 CIMIS stations (added Westmorland N.); 7/6/2009-12/1/2009, 3 CIMIS stations: Westmorland N. offline; 12/2/2009-2/31/2009, 4 CIMIS stations, Westmorland N. back online; 1/1/2010-9/20/2010.

PC ORIGINAL PKG

Table 4. Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
10-year	0.58	0.17	0.27	0.11	0.08	0.01	0.07	0.16	0.34	0.12	0.17	0.32	**2.38**
30-year	0.43	0.35	0.23	0.09	0.05	0.00	0.13	0.23	0.31	0.16	0.19	0.31	**2.40**
100-year	0.38	0.36	0.24	0.10	0.03	0.00	0.10	0.30	0.35	0.24	0.19	0.47	**2.75**

Source: IID WIS: CIMIS stations polygon calculation (Data provided by IID staff).

Imperial Valley depends on the Colorado River for its water, which IID transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Golden State Water (which includes all or portions Calipatria, Niland, and some land adjacent within Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. Industries outside the municipal areas treat the water to the required standards of their industry. To comply with U.S. Environmental Protection Agency (USEPA) requirements and avoid termination of canal water service, residents in the IID water service area who do not receive treated water service must obtain alternative water service for drinking and cooking from a state-approved provider. To avoid penalties that could exceed $25,000 a day, IID strictly enforces this rule. The IID Water Department tracks nearly 3,200 raw water service accounts required by the State Water Resources Control Board's Department of Drinking Water to have alternate state approved drinking water service. IID maintains a small-acreage pipe and drinking water database and provides an annual compliance update to the Department of Drinking Water.

Imperial Valley Historic and Future Land and Water Uses

Agricultural development in the Imperial Valley began at the turn of the twentieth century. In 2023, gross agricultural production for Imperial County was valued at $2,692,716,000, of which approximately $2.6 billion was produced in the IID water service area.[9] While the agriculture-based economy is expected to continue, land use is projected to change somewhat over the years as industrial and/or alternative energy development and urbanization occur in rural areas and in areas adjacent to existing urban centers, respectively.

Imperial Valley's economy is gradually diversifying. Agriculture will likely continue to be the primary industry within the valley; however, two principal factors anticipated to reduce crop acreage are renewable energy (geothermal and solar) and urban development. Over the next twenty years, urbanization is expected to slightly decrease agriculture land use to provide space for an increase in residential, commercial and industrial uses. The transition from agricultural land use typically results in a net decrease in water demand for municipal, commercial, and solar energy development; and a net increase in water demand for geothermal energy development. Local energy resources include geothermal, wind, biomass and solar. The County General Plan provides for development of energy production centers or energy parks within Imperial County. Alternative energy facilities will help California

[9] 2023 Imperial County Crop and Livestock Report

PC ORIGINAL PKG

meet its statutory and regulatory goals for increasing renewable power generation and use and decrease water demands in Imperial County. As a solar project, the Big Rock 2 project would provide renewable energy to the electric grid to meet increasing demand for in-state generation and provide energy storage that can be dispatched to the regional grid during times of greatest energy demand.

The IID Board has adopted the following policies and programs to address how to accommodate water demands under the terms of the QSA/ Transfer Agreements and minimize potential negative impacts on agricultural water uses:

Imperial Integrated Regional Water Management Plan (IRWMP): adopted by the board on December 18, 2012, and by the County of Imperial, to meet the basic requirement of California Department of Water Resources (CDWR) for an IRWM plan. In all, 14 local agencies adopted the 2012 Imperial IRWMP.

Interim Water Supply Policy for Non-Agricultural Projects: adopted by the board on September 29, 2009, to ensure sufficient water will be available for new development, in particular, anticipated renewable energy projects until the board selects and implements capital development projects such as those considered in the Imperial IRWMP.

Temporary Land Conversion Fallowing Policy: adopted by the board on May 8, 2012, and revised on March 29, 2016, to provide a framework for a temporary, long-term fallowing program to work in concert with the IWSP and IID's coordinated land use/water supply strategy.

Equitable Distribution Plan: final adoption by the board on July 26, 2023, to provide a mechanism for IID to administer apportionment of the district's quantified annual supply of Colorado River water.

In addition, water users within the IID service area are subject to the statewide requirement of reasonable and beneficial use of water under the California Constitution, Article X, section 2.

Imperial Integrated Regional Water Management Plan (October 2012)

The Imperial IRWMP serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the IID Board of Directors approved it in December 2012. Approval by these three (3) stakeholders met the basic requirement of California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.[10] As discussed herein, long term water supply augmentation is not anticipated to be necessary to meet proposed Project demands.

[10] October 2012 Imperial Integrated Regional Water Management Plan, Chapter 12.

PC ORIGINAL PKG

Chapter 5 of the 2012 Imperial IRWMP addresses water supplies (Colorado River and groundwater), demand, baseline and forecasted through 2050; and IID water budget. Chapter 12 addresses projects, programs and policies, and funding alternatives. Chapter 12 of the IRMWP lists, and Appendix N details, a set of capital projects that IID might pursue, including the amount of water that might result (AFY) and cost ($/AF) if necessary. These also highlight potential capital improvement projects that could be implemented in the future.

Imperial Valley historic 2015 and 2020 and the forecasted future for 2025 to 2055 non-agricultural water demand, are provided in **Table 5** in five-year increments. Total water demand for non-agricultural uses is projected to be 201.4 KAF in the year 2055. This is a forecasted increase in the use of non-agricultural water of 94 KAF from 107.4 KAF for the period of 2015 to 2055. These values were modified from Chapter 5 of the Imperial IRWMP to reflect updated conditions from the IID Provisional Water Balance for calendar year 2015 and 2020. Due to the recession in 2009, state policies affecting municipal water use in relation to the drought and other factors, non-agricultural growth projections have lessened since the 2012 Imperial IRWMP. Projections in **Table 5** have been adjusted (reduced by 3 percent for Municipal and Industrial uses and applied a flat 0.5 AF increase for Recreation use) to reflect IID 2015 and 2020 delivery data adjustments. Even with these adjustments, the Table 5 projections for non-agricultural water demand within the IID water service area continue to reflect an unlikely aggressive growth.

Table 5. Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Municipal	30.0	30.9	36.8	39.8	41.5	46.3	51.7	57.8	61.9
Industrial	26.4	28.7	39.8	46.5	53.2	59.9	66.6	73.3	80.0
Other	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Feedlots/Dairies	17.8	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Envr Resources	8.3	9.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Recreation	7.4	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Service Pipes	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Non Ag	**107.4**	**115.1**	**136.1**	**145.8**	**154.2**	**165.7**	**177.8**	**190.6**	**201.4**

Notes: 2015 non-agricultural water demands are from IID 2015 Provisional Water Balance rerun 01/25/2021; 2020-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2015 Provisional Water Balance; 2020 non-agricultural water demands are from IID 2020 Provisional Water Balance rerun on 01/31/2022; 2025-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2020 Provisional Water Balance. Industrial Demand includes geothermal, but not solar, energy production.

Agricultural evapotranspiration (ET) demand of approximately 1,476.4 KAF in 2015, decreased in 2020 to approximately 1,442.2 KAF. The termination of fallowing programs provided 103.5 KAF of water for Salton Sea mitigation in 2017. Forecasted agricultural ET remains constant, as reductions in water use are to come from efficiency conservation not reduction in agricultural production. Market forces and other factors may impact forecasted future water demand.

Table 6 provides the 2015 and 2020 historic and 2025-2055 forecasted agricultural consumptive use and delivery demand within the IID water service area. When accounting for agriculture ET, tailwater and tilewater, total agricultural consumptive use (CU) demand ranges from 2,157.9 KAF in 2015 to 2,208.5

PC ORIGINAL PKG

KAF in 2055. Forecasted total agricultural delivery demand is around 1 KAFY higher than the CU demand, ranging from 2,158.9 KAF in 2015 to 2,209.5 KAF in 2055.

Table 6 Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Ag ET from Delivered & Stored Soil Water	1,476.4	1,442.2	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5
Ag Tailwater to Salton Sea	282.9	312.9	268.0	218.0	218.0	218.0	218.0	218.0	218.0
Ag Tilewater to Salton Sea	398.6	410.2	423.0	423.0	423.0	423.0	423.0	423.0	423.0
Total Ag CU Demand	**2,157.9**	**2,165.4**	**2,258.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**	**2,208.5**
Subsurface Flow to Salton Sea	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
Total Ag Delivery Demand	**2,158.9**	**2,166.4**	**2,259.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**	**2,209.5**

Notes: 2015 record from IID 2015 Provisional Water Balance rerun 06/28/2019; 2020 record from IID 2020 Provisional Water Balance rerun 01/25/2021; 2020-2055 forecasts from spreadsheet used to develop Figure 19, et seq. in Imperial IRWMP Chapter 5 (Data provided by IID staff).

In addition to agricultural and non-agricultural water demands, system operation demand must be included to account for operational discharge, main and lateral canal seepage, including seepage along the All-American Canal (AAC); and for AAC seepage, river evaporation and phreatophyte ET from Imperial Dam to IID's measurement site at AAC Mesa Lateral 5. These system operation demands are shown in **Table 7** for 2020**.** IID measures system operational uses at All-American Canal Station 2900 just upstream of Mesa Lateral 5 Heading. Total system operational use for 2020 was 167.8 KAF, including 10 KAF of LCWSP input, 39 KAF of seepage interception input, and 40 KAF of unaccounted canal water input.

PC ORIGINAL PKG

Table 7. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2020

Delivery System Evaporation	24.4
Canal Seepage	90.8
Main Canal Spill	10.1
Lateral Spill	121.5
QSA & IID Seepage Interception	-39.0
Unaccounted Canal Water	-40.0
Total System Operational Use, In valley	167.8
Imperial Dam to AAC @ Mesa Lat 5 *(Dam-Mesa Lat 5)(2,552,674-2,546,152)*	9.2
LCWSP	-10.0
Total System Operational Use in 2020	167.0
Source: 2020 IID Water Balance rerun 01/25/2021	

IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009)

The IID IWSP provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP designates up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects. The IWSP provides a mechanism and process to develop a water supply agreement for any appropriately permitted project, and establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed to offset the new demand. [11]

The environmental impacts of conserving up to the 25,000 acre-feet of IWSP water were analyzed in the *Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects* Negative Declaration, State Clearinghouse No. 2009061103 dated June 25, 2009. The IID Board adopted this Negative Declaration on September 29, 2009.

Depending on the nature, complexity and water demands of the proposed project, new projects may be charged a one-time Reservation Fee and annual Water Supply Development Fees for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project. The 2025 IWSP fee schedule is shown in **Table 8.**

Table 8. Interim Water Supply Policy 2025 Annual Non-Agricultural Water Supply Development Fee Schedule

Annual Demand (AF)	Reservation Fee ($/AF)*	Development Fee ($/AF)*
0-500	$91.39	$365.54
501-1000	$128.67	$514.68
1001-2500	$161.57	$646.28
2501-5000	$199.59	$798.34

Adjusted annually in accordance with the Consumer Price Index (CPI).

[11] *IID website: Municipal, Industrial and Commercial Customers.*

PC ORIGINAL PKG

IID customers with new projects receiving water under the IWSP will be charged the appropriate water delivery rate based on measured deliveries, see IID Water Rate Schedules. As of March 2025, IID has issued two water supply agreement and one "Will-Serve Letter" under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP.

IID Temporary Land Conversion Fallowing Policy (May 2012)

Imperial County planning officials determined that renewable energy facilities were consistent with the county's agricultural zoning designation and began issuing conditional use permits (CUPs) for these projects with 30-year terms with a 10-year extension (40 years in total). These longer-term, but temporary, land use designations were not conducive to a coordinated land use/water supply policy as envisioned in the Imperial IRWMP, because temporary water supply assignments during a CUP term were not sufficient to meet the water supply verification requirements for new project approvals. Agricultural landowners also sought long-term assurances from IID that, at project termination, irrigation services would be available for them to resume their farming operations.

Based on these conditions, IID determined it had to develop a water supply policy that conformed to the local land use decision-making in order to facilitate new development and economic diversity in Imperial County which resulted in the IID Temporary Land Conversion Fallowing Policy (TLCFP).[12] IID concluded that certain lower water use projects could still provide benefits to local water users. The resulting benefits; however, may not be to the same categories of use (e.g., municipal, commercial and industrial) but to the district as a whole.

Water demands for certain non-agricultural projects are typically less than that required for agricultural production; this reduced demand allows conserved water to be made available for other users under IID's annual consumptive use cap. This allows the district to avail itself of the ability during the term of the QSA/Transfer Agreements under CWC Section 1013 to create conserved water through projects such as temporary land fallowing conservation measures. This conserved water can then be used to satisfy the district's conserved water transfer obligation and for environmental mitigation purposes.

Under the terms of the legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the TLCFP was adopted by the IID board on May 8, 2012 and revised on March 29, 2016 to update the fee schedule for 2016. This policy provides a framework for a temporary, long-term fallowing program to work in concert with the IWSP. While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce efficiency conservation and water use reduction demands on IID water users, thus providing district wide benefits.

[12] *IID website: Temporary Land Conversion Fallowing Policy (TLCFP), and The TLCFP are the sources of the text for this section.*

PC ORIGINAL PKG

IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS

The laws and regulations that influence IID's water supply are noted in this section. The Law of the River (as described below), along with the 2003 Quantification Settlement Agreement and Related Agreements serve as the laws, regulations and agreements that primarily influence the findings of this WSA. These agreements grant California the most senior water rights along the Colorado River and specify that IID has access to 3.1 MAF per year. These two components will influence future decisions in terms of water supply availability during periods of shortages.

California Law

IID has a longstanding right to divert Colorado River water, and IID holds legal titles to all of its water and water rights in trust for landowners within the district (CWC Sections 20529 and 22437; *Bryant v. Yellen*, 447 U.S. 352, 371 (1980), fn.23.). Beginning in 1885, a number of individuals, as well as the California Development Company, made a series of appropriations of Colorado River water under California law for use in the Imperial Valley. The rights to these appropriations were among the properties acquired by IID from the California Development Company.

Law of the River

Colorado River water rights are governed by numerous compacts, state and federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the "Law of the River." Together, these documents form the basis for allocation of the water, regulation of land use, and management of the Colorado River water supply among the seven basin states and Mexico.

Of all regulatory literature that governs Colorado River water rights, the following are the specifics that impact IID:

- Colorado River Compact (1922)
- Boulder Canyon Project Act (1928)
- California Seven-Party Agreement (1931)
- Arizona v. California US Supreme Court Decision (1964, 1979)
- Colorado River Basin Project Act (1968)
- Quantification Settlement Agreement and Related Agreements (2003)
- 2003 Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA)
- 1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs
- Annual Operating Plan (AOP) for Colorado River Reservoirs
- 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead (2007 Interim Guidelines)

PC ORIGINAL PKG

Colorado River Compact (1922)

With authorization of their legislatures and urging of the federal government, representatives from the seven Colorado River basin states began negotiations regarding distribution of water from the Colorado River in 1921. In November 1922, an interstate agreement called the "Colorado River Compact" was signed by the representatives giving the Lower Basin perpetual rights to annual apportionments of 7.5 million acre-feet (MAF) of Colorado River water (75 MAF over ten years). The Upper Basin was to receive the remainder, which based on the available hydrological record was also expected to be 7.5 MAF annually, with enough left over to provide 1.5 MAF annually to Mexico.

Boulder Canyon Project Act (1928)

Provisions in the 1928 Boulder Canyon Project Act made the compact effective and authorized construction of Hoover Dam and the All-American Canal, and served as the United States' consent to accept the Compact. Through a Presidential Proclamation on June 25, 1929, this act resulted in ratification of the Compact by six of the basin states and required California to limit its annual consumptive use to 4.4 MAF of the lower basin's apportionment plus not less than half of any excess or surplus water unportioned by the Compact. A lawsuit was filed by the State of Arizona after its refusal to sign. Through the implementation of its 1929 Limitation Act, California abided by this federal mandate. The Boulder Canyon Act authorized the Secretary of the Interior (Secretary) to "contract for the storage of water… and for the delivery thereof… for irrigation and domestic uses," and additionally defined the lower basin's 7.5 MAF apportionment split, with an annual allocation 0.3 MAF to Nevada, 2.8 MAF to Arizona, and 4.4 MAF to California. Even though the three states never formally settled or agreed to these terms, a 1964 Supreme Court decision (*Arizona v. California*, 373 U.S. 546) declared the three states' consent to be insignificant since the Boulder Canyon Project Act was authorized by the Secretary.

California Seven-Party-Agreement (1931)

Following implementation of the Boulder Canyon Project Act, the Secretary requested that California make recommendations regarding distribution of its apportionment of Colorado River water. In August 1931, under chairmanship of the State Engineer, the California Seven-Party Agreement was developed and authorized by the affected parties to prioritize California water rights. The Secretary accepted this agreement and established these priorities through General Regulations issued in September of 1931. The first four (4) priority allocations account for California's annual apportionment of 4.4 MAF, with agricultural entities using 3.85 MAF of that total. Additional priorities are defined for years in which the Secretary declares that excess waters are available.

Arizona v. California U.S. Supreme Court Decision (1964, 1979)

The 1964 Supreme Court decision settled a 25-year disagreement between Arizona and California that stemmed from Arizona's desire to build the Central Arizona Project to enable use of its full apportionment. California's argument was that as Arizona used water from the Gila River, which is a Colorado River tributary, it was using a portion of its annual Colorado River apportionment. An additional argument from California was that it had developed a historical use of some of Arizona's apportionment, which, under the

PC ORIGINAL PKG

doctrine of prior appropriation, precluded Arizona from developing the project. California's arguments were rejected by the U.S. Supreme Court. Under direction of the Supreme Court, the Secretary was restricted from delivering water outside of the framework of apportionments defined by law. Preparation of annual reports documenting consumptive use of water in the three lower basin states was also mandated by the Supreme Court. In 1979, present perfected water rights (PPRs) referred to in the Colorado River Compact and in the Boulder Canyon Project Act were addressed by the Supreme Court in the form of a Supplemental Decree.

In March of 2006, a Consolidated Decree was issued by the Supreme Court to provide a single reference to the conditions of the original 1964 decrees and several additional decrees in 1966, 1979, 1984 and 2000 that stemmed from the original ruling. The Consolidated Decree also reflects the settlements of the federal reserved water rights claim for the Fort Yuma Indian Reservation.

Colorado River Basin Project Act (1968)

In 1968, various water development projects in both the upper and lower basins, including the Central Arizona Project (CAP) were authorized by Congress. Under the Colorado River Basin Project Act, priority was given to California's apportionment over (before) the CAP water supply in times of shortage. Also under the act, the Secretary was directed to prepare long-range criteria for the Colorado River reservoir system in consultation with the Colorado River Basin States.

Quantification Settlement Agreement and Related Agreements (2003)

With completion of a large portion of the CAP infrastructure in 1994, creation of the Arizona Water Banking Authority in 1995, and the growth of Las Vegas in the 1990s, California encountered increasing pressure to live within its rights under the Law of the River. After years of negotiating among Colorado River Compact States and affected California water delivery agencies, a Quantification Settlement Agreement and Related Agreements and documents were signed on October 10, 2003, by the Secretary of Interior, IID, Coachella Valley Water District (CVWD), Metropolitan Water District of Southern California (MWD), San Diego County Water Authority (SDCWA), and other affected parties.

The Quantification Settlement Agreement and Related Agreements (QSA/Transfer Agreements) are a set of interrelated contracts that resolve certain disputes among the United States, the State of California, IID, MWD, CVWD and SDCWA, for a period of 35 to 75 years, regarding the reasonable and beneficial use of Colorado River water; the ability to conserve, transfer and acquire conserved Colorado River water; the quantification and priority of Priorities 3(a) and 6(a)[13] within California for use of Colorado River water; and the obligation to implement and fund environmental impact mitigation.

[13] *Priorities 1, 2, 3(b), 6(b), and 7 of current Section 5 Contracts for the delivery of Colorado River water in the State of California and Indian and miscellaneous Present Perfected Rights within the State of California and other existing surplus water contracts are not affected by the QSA Agreement.*

PC ORIGINAL PKG

Conserved water transfer agreements between IID and SDCWA, IID and CVWD, and IID and MWD are all part of the QSA/Transfer Agreements. For IID, these contracts identify conserved water volumes and establish transfer schedules along with price and payment terms. As specified in the agreements, IID will transfer nearly 415,000 AF annually over a 35-year period (or longer), as follows:

- to MWD 110,000 AF [modified to 105,000 AF in 2007],
- to SDCWA 205,000 AF,
- to CVWD and MWD combined 103,000 AF, and
- to certain San Luis Rey Indian Tribes up to 11,500 AFY of water.

All of the conserved water will ultimately come from IID system and on-farm efficiency conservation improvements. In the interim, IID has implemented a Fallowing Program to generate water associated with Salton Sea mitigation related to the impacts of the IID/SDCWA water transfer, as required by the State Water Resources Control Board, which is to run from 2003 through 2017. In return for its QSA/Transfer Agreements programs and deliveries, IID will receive payments totaling billions of dollars to fund needed efficiency conservation measures and to pay growers for conserved on-farm water, so IID can transfer nearly 14.5 MAF of water without impacting local productivity. In addition, IID will transfer to SDCWA 67,700 AFY annually of water conserved from the lining of the AAC in exchange for payment of lining project costs and a grant to IID of certain rights to use the conserved water. In addition to the 105,000 acre-feet of water currently being conserved under the 1988 IID/MWD Conservation Program, these more recent agreements define an additional 303,000 AFY to be conserved by IID from on-farm and distribution system conservation projects for transferred to SDCWA, CVWD, and MWD.

Colorado River Water Delivery Agreement (2003)[14]

As part of QSA/Transfer Agreements among California and federal agencies, the Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA) was entered into by the Secretary of the Interior, IID, CVWD, MWD and SDCWA. This agreement involves the federal government because of the change in place of diversion from Imperial Dam into the All-American Canal to Parker Dam into MWD's Colorado River Aqueduct.

The CRWDA assists California to meet its "4.4 Plan" goals by quantifying deliveries for a specific number of years for certain Colorado River entitlements so transfers may occur. In particular, for the term of the CRWDA, quantification of Priority 3(a) was effected through caps on water deliveries to IID (consumptive use of 3.1 MAF per year) and CVWD (consumptive use of 330 KAF per year). In addition, California's Priority 3(a) apportionment between IID and CVWD, with provisions for transfer of supplies involving IID, CVWD, MWD and SDCWA are quantified in the CRWDA for a period of 35 years or 45 years (assumes SDCWA does not terminate in year 35) or 75 years (assumes SDCWA and IID mutually consent to renewal term of 30 years).

Allocations for consumptive use of Colorado River water by IID, CVWD and MWD that will enable California to stay within its basic annual apportionment (4.4 MAF plus not less than half of any declared surplus) are

[14] *CRWDA: Federal QSA accessed 7 June 2017.*

PC ORIGINAL PKG

defined by the terms of the QSA/Transfer Agreements (**Table 9**). As specified in the QSA/Transfer Agreements, by 2026, IID's annual use within (Imperial Valley) is to be reduced to just over 2.6 MAF of its 3.1 MAF quantified annual apportionment. The remaining nearly 500,000 AF (which includes the 67,000 AF from AAC lining) are to be transferred annually to urban water users outside of the Imperial Valley.

Table 9. CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY)

User	Apportionment (AFY)
Palo Verde Irrigation District and Yuma Project*	420,000
Imperial Irrigation District	3,100,000
Coachella Valley Water District	330,000
Metropolitan Water District of Southern California*	550,000
Total:	**4,400,000**

* PVID and Yuma Project did not agree to a cap; value represents a contractual obligation by MWD to assume responsibility for any overages or be credited with any volume below this value.

Notes: All values are consumptive use at point of Colorado River diversion: Palo Verde Diversion Dam (PVID), Imperial Dam (IID and CVWD), and Parker Dam (MWD). Source: IID Annual Water Report

Quantification of Priority 6(a) was effected through quantifying annual consumptive use amounts to be made available in order of priority to MWD (38 KAF), IID (63 KAF), and CVWD (119 KAF) with the provision that any additional water available to Priority 6(a) be delivered under IID's and CVWD's existing water delivery contract with the Secretary.[15] The CRWDA provides that the underlying water delivery contract with the Secretary remain in full force and effect. (*Colorado River Documents 2008*, Chapter 6, pages 6-12 and 6-13). The CRWDA also provides a source of water to effect a San Luis Rey Indian Water Rights settlement. Additionally, the CRWDA satisfies the requirement of the 2001 Interim Surplus Guidelines (ISG) that a QSA be adopted as a prerequisite to the interim surplus determination by the Secretary in the ISG.

Inadvertent Overrun Payback Policy (2003)

The CRWDA Inadvertent Overrun Payback Policy (IOPP), adopted by the Secretary contemporaneously with the execution of the CRWDA, provides additional flexibility to Colorado River management and applies to entitlement holders in the Lower Division States (Arizona, California and Nevada).[16] The IOPP defines inadvertent overruns as "Colorado River water diverted, pumped, or received by an entitlement holder of the Lower Division States that is in excess of the water users' entitlement for the year." An entitlement holder is allowed a maximum overrun of 10 percent of its Colorado River water entitlement when operating under normal conditions.

In the event of an overrun, the IOPP provides a mechanism to payback the overrun. When the Secretary has declared a normal year for Colorado River diversions, a contractor has from one to three years to pay back its obligation, with a minimum annual payback equal to 20 percent of the entitlement holder's maximum allowable cumulative overrun account or 33.3 percent of the total account balance, whichever is greater. However, when Lake Mead is below 1125 feet on January 1, the terms of the IOPP require that the payment of the inadvertent overrun obligation be made in the calendar year after the overrun is

[15] When water levels in the Colorado River reservoirs are low, Priority 5, 6 and 7 apportionments are not available for diversion.
[16] *USBR, 2003 CRWDA ROD Implementation Agreement, IOPP and Related Federal Actions Final EIS. Section IX. Implementing the Decision A. Inadvertent Overrun and Payback Policy. Pages 16-19 of 34.*

PC ORIGINAL PKG

reported in the USBR Lower Colorado Region Colorado River Accounting and Water Use Report [for] Arizona, California, and Nevada (Decree Accounting Report).[17]

1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs

The 1970 Operating Criteria control operation of the Colorado River reservoirs in compliance with requirements set forth in the Colorado River Compact of 1922, the United States-Mexico Water Treaty of 1944, the Colorado River Storage Project Act of 1956, the Boulder Canyon Projects Act (Lake Mead) and the Colorado River Basin Project Act (Upper Basin Reservoirs) of 1968, and other applicable federal laws. Under these Operating Criteria, the Secretary makes annual determinations published in the USBR Annual Operating Plan for Colorado River Reservoirs (discussed below) regarding the release of Colorado River water for deliveries to the lower basin states. A requirement to equalize active storage between Lake Powell and Lake Mead when there is sufficient storage in the Upper Basin is included in these operating criteria. **Figure 5** identifies the major storage facilities at the upper and lower basin boundaries.

[17] *2003 CRWDA ROD. Section IX. A.6.c,, page 18 of 34.*

PC ORIGINAL PKG

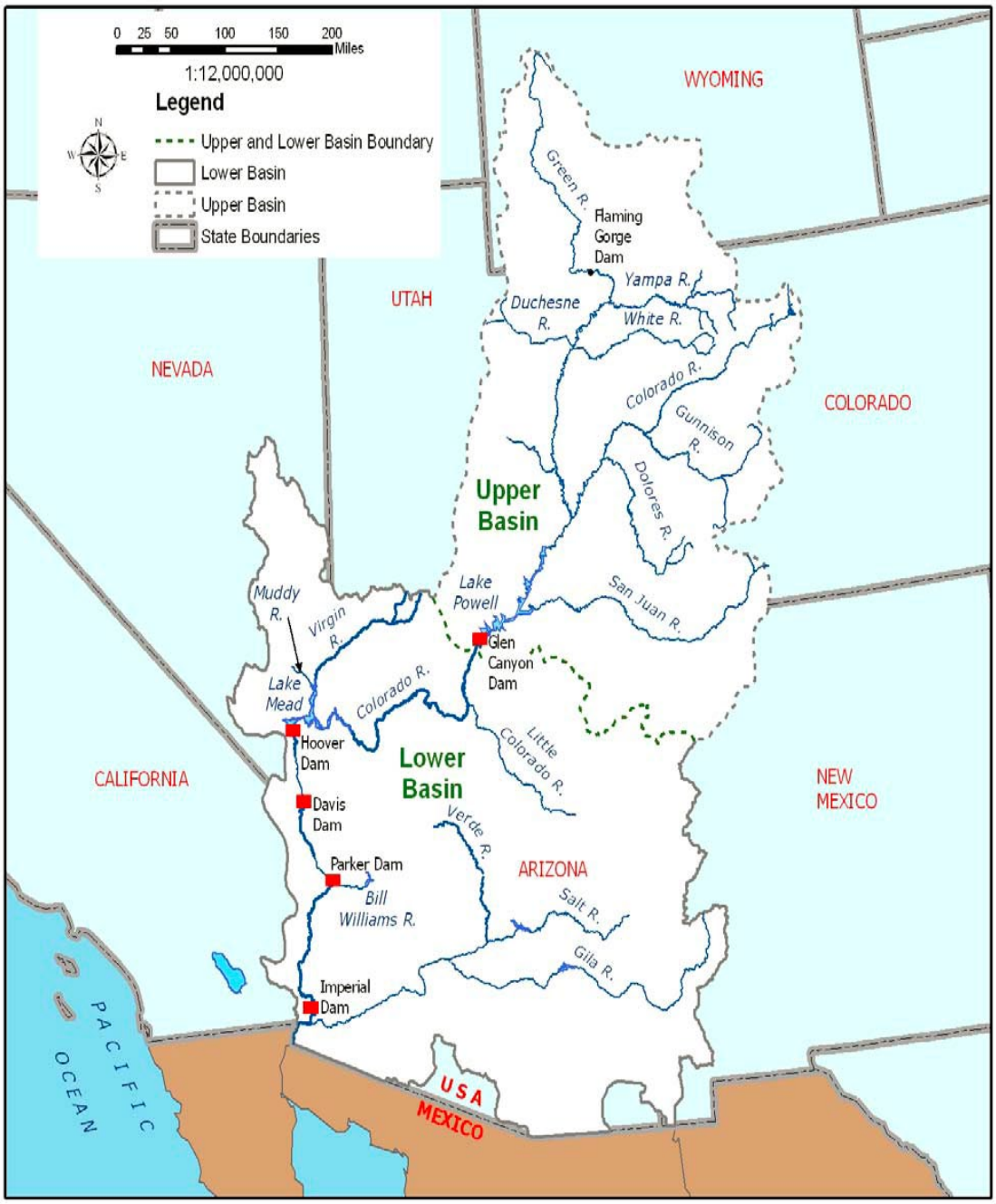


Figure 5. Major Colorado River Reservoir Storage Facilities and Basin Location Map

Source: **Final EIS – Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Volume 1 Chapter 1 Purpose and Need** , p I-10.

PC ORIGINAL PKG

Annual Operating Plan for Colorado River Reservoirs (*Applicable when Lake Mead Surplus/Shortage)*

The AOP is developed in accordance with Section 602 of the Colorado River Basin Project Act (Public Law 90-537); the Criteria for Coordinated Long-Range Operations of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of 1968, as amended, promulgated by the Secretary of the Interior; and Section 1804(c)(3) of the Grand Canyon Protection Act (Public Law 102-575). As part of the AOP process, the Secretary makes determinations regarding the availability of Colorado River water for deliveries to the lower basin states, including whether normal, surplus, and shortage conditions are in effect on the lower portion of the Colorado River.

2007 Colorado River Interim Guidelines for Lower Basin Shortages (2007 Interim Guidelines)

A multi-year drought in the Colorado River Upper Basin triggered the need for the 2007 Interim Shortage Guidelines. In the summer of 1999, Lake Powell was essentially full with reservoir storage at 97 percent of capacity. However, precipitation fell off starting in October 1999 and 2002 inflow was the lowest recorded since Lake Powell began filling in 1963.[18] By August 2011, inflow was 279 percent of average; however, drought resumed in 2012 and continued through calendar year 2022. Although 2023 experienced hydrological improvements, it was not sufficient to make a significant difference in lake elevation. Using the record in **Table 10,** average unregulated inflow to Lake Powell for water years 2000-2024 is 68 percent; or if 2011 is excluded, 64 percent of the historic average.

Table 10. Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2024

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
62%	59%	25%	51%	49%	105%	73%	68%	102%	88%	73%
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
136%	35%	49%	90%	83%	80%	101%	36%	111%	45%	33%
2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
52%	112%	66%	–	–	–	–	–	–	–	–

Source: UCR Water Operations: Historic Data (2000-2024)

In the midst of the drought period, USBR developed 2007 Interim Guidelines with consensus from the seven basin states, which selected the Draft EIS Preferred Alternative as the basis for USBR's final determination. The basin states found the Preferred Alternative best met all aspects of the purpose and need for the federal action. [19]

The 2007 Interim Guidelines Preferred Alternative highlights the following:

1. The need for the Interim Guidelines to remain in place for an extended period of time.
2. The desirability of the Preferred Alternative based on the facilitated consensus recommendation from the basin states.
3. The likely durability of the mechanisms adopted in the Preferred Alternative in light of the extraordinary efforts that the basin states and water users have undertaken to develop

[18] Water Year: October 1 through September 30 of following year, so water year ending September 30, 1999

[19] USBR *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* <http://www.usbr.gov/lc/region/programs/strategies.html>

PC ORIGINAL PKG

implementing agreements that will facilitate the water management tools (shortage sharing, forbearance, and conservation efforts) identified in the Preferred Alternative.

4. That the range of elements in the Preferred Alternative will enhance the Secretary's ability to manage the Colorado River reservoirs in a manner that recognizes the inherent tradeoffs between water delivery and water storage.

In June 2007, USBR announced that a preferred alternative for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead (Final Preferred Alternative) had been determined. The Final Preferred Alternative, based on the basin states' consensus alternative and an alternative submitted by the environmental interests called "Conservation Before Shortage," is comprised of four key operational elements which are to guide operations of Lake Powell and Lake Mead through 2026. These four operational elements are:

1. Shortage strategy for Lake Mead and Lower Division states: The Preferred Alternative proposed discrete levels of shortage volumes associated with Lake Mead elevations to conserve reservoir storage and provide water users and managers in the Lower Basin with greater certainty to know when, and by how much, water deliveries will be reduced during low reservoir conditions.
2. Coordinated operations of Lake Powell and Lake Mead: The Preferred Alternative proposed a fully coordinated operation of the reservoirs to minimize shortages in the Lower Basin and to avoid risk of curtailments of water use in the Upper Basin.
3. Mechanism for storage and delivery of conserved water in Lake Mead: The Preferred Alternative proposed the Intentionally Created Surplus (ICS) mechanism to provide for the creation, accounting, and delivery of conserved system and non-system water thereby promoting water conservation in the Lower Basin. Credits for Colorado River or non-Colorado River water that has been conserved by users in the Lower Basin creating an ICS would be made available for release from Lake Mead at a later time. The total amount of credits would be 2.1 MAF, but this amount could be increased up to 4.2 MAF in future years.
4. Modifying and extending elements of the Interim Surplus Guidelines (ISG). The ISG determines conditions under which surplus water is made available for use within the Lower Division states. These modifications eliminate the most liberal surplus conditions thereby leaving more water in storage to reduce the severity of future shortages.

With respect to the various interests, positions and views of the seven basin states, this provision adds an important element to the evolution of the legal framework for prudent management of the Colorado River. Furthermore, the coordinated operation element allows for adjustment of Lake Powell releases to respond to low reservoir storage conditions in either Lake Powell or Lake Mead. States found the Preferred Alternative best met all aspects of the purpose and need for the federal action.[20] The 2007

[20] *USBR Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.*

PC ORIGINAL PKG

Interim Guidelines are in place from 2008 through December 31, 2025 (through preparation of the 2026 Annual Operating Plan).

Lower Colorado Region Water Shortage Operations

The Colorado River Basin is experiencing a prolonged period of drought and record-low runoff conditions that have resulted in historically low reservoir levels in both Lake Powell (upper Basin) and Lake Mead (lower Basin). The period from 2000 through 2024 was the lowest 25-year inflow into Lake Powell in the historical record and has strained the Colorado River system, despite an increase in observed runoff in August 2011 when unregulated inflow to Lake Powell was 279 percent of the average. Since 2000, Lake Mead has been below the "average" level of lake elevations (see **Figure 6**). Such conditions have caused the activation of shortage plans for waters users in Arizona and Nevada, and in Mexico. By May of 2022 Lake Meads elevation had declined to 1,048 feet. These conditions resulted in the U.S. Secretary of the Interior declaring the first-ever Tier 2a Shortage on the Colorado River. The drought in the Colorado River watershed had lessened by mid 2023 after a winter of record-breaking rain and snow but not enough to take the Lower Basin out of a Tier 1 Shortage for 2024 operations.

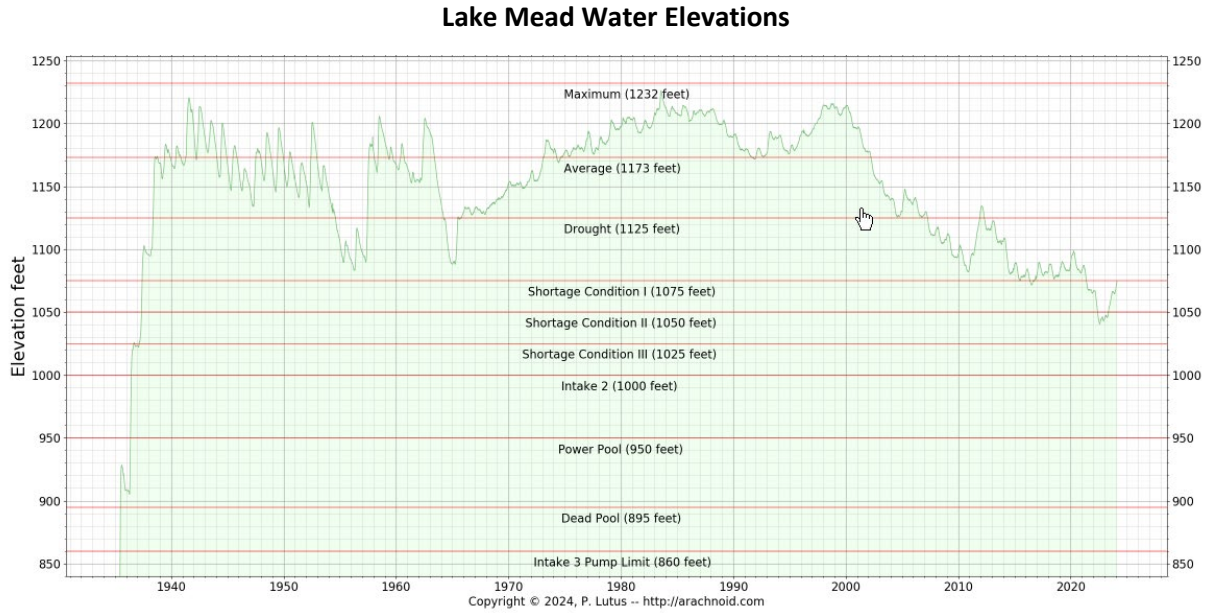


Figure 6. Lake Mead Water Elevation Levels 02.11.24.

According to guidelines put in place in 2007, Arizona and Nevada begin to take shortages when the water elevation in Lake Mead falls below 1,075 feet. The volumes of shortages increase as water levels fall to 1,050 feet and again at 1,025 feet. In 2012, Mexico agreed to participate in a 5-year pilot agreement to share specific volumes of shortages at the same elevations. The 2007 interim shortage guidelines contain no reductions for California, which has senior water rights to the Central Arizona Project water supply, through 2025 when the guidelines expire. If Lake Mead's elevation drops to 1,025 feet, a re-consultation process would be triggered among the basin states to address next steps. Consultation would start out within each state, then move to the three lower basin states, followed by all seven states and the USBR.

PC ORIGINAL PKG

Mexico will then be brought into the process unless they choose to participate earlier. In total, 721,000 acre-feet of reductions were implemented in the Lower Basin and Mexico in 2023 consistent with various agreements that dictate the operation of the Colorado River.

California has no stipulated reduction to its water supplies under a Tier 2a Shortage declaration. While not directly affected by the shortage reductions announced by Reclamation, the Shortage condition does prevent IID from overrunning its approved water order and, as stated earlier, contributions to address Lake Mead water elevation are anticipated by IID. IID has entered into a voluntary water conservation agreement for the benefit of Lake Mead, up to 250,000 AFY, through 2026.

IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND

SB 610 requires an analysis of a normal, single dry, and multiple dry water years to show that adequate water is available for the proposed Project in various climate scenarios. Water availability for this Project in a normal year is no different from water availability during a single-dry and multiple-dry year scenarios. This is due to the small effect rainfall has on water availability in IID's arid environment along with IID's strong entitlements to the Colorado River water supply. Local rainfall does have some impact on how much water is consumed (i.e. if rain falls on agricultural lands, those lands will not demand as much irrigation), but does not impact the definition of a normal year, a single-dry year or a multiple-dry year scenario.

WATER AVAILABILITY – NORMAL YEAR

IID is entitled to annual net consumptive use of 3.1 MAF of Colorado River, less its QSA/Transfer Agreement obligations. Imperial Dam, located north of Yuma, Arizona, serves as a diversion structure for water deliveries throughout southeastern California, Arizona and Mexico. Water is transported to the IID water service area through the AAC for use throughout the Imperial Valley. IID historic and forecast net consumptive use volumes at Imperial Dam from CRWDA Exhibit B are shown in **Table 11**. Volumes 2003-2024 are adjusted for USBR Decree Accounting historic records. Volumes for 2025-2077 are from CRWDA Exhibit B modified to reflect 2014 Letter Agreement changes to the 1988 IID/MWD Water Conservation Agreement.[21]

Due to limits on annual consumptive use of Colorado River water under the QSA/Transfer Agreements, IID's water supply during a normal year is best represented by the CRWDA Exhibit B Net Available for Consumptive Use **(Table 11**, Column 11). The annual volume is IID Priority 3(a) Quantified Amount of 3.1 million acre-feet (MAF) (**Table 11**, Column 2) less the IID transfer program reductions for each year (**Table**

[21] 2014 Imperial Irrigation District Letter Agreement for Substitution and Conservation Modifications to the IID/MWD Water Conservation Agreement - December 17, 2014.

PC ORIGINAL PKG

11, Columns 3-9). IID suggests **Table 11**, which assumes full use of IID's quantified water supply, be used in determining base normal year water availability.

Table 11. IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B)

IID Quantification and Transfers, Volumes in KAF at Imperial Dam [1]										
Col 1	2	3	4	5	6	7	8	9	10	11
	IID Priority 3(a)									
		IID Reductions								**IID Net [Available for] Consumptive Use (Col 2 - 10)**
Year	**IID 3(a) Quantified Amount**	**1988 MWD Transfer [2]**	**SDCWA Transfer**	**AAC Lining**	**Salton Sea Mitigation SDCWA Transfer [3]**	**Intra-Priority 3 CVWD Transfer**	**MWD Transfer w\ Salton Sea Restoration [4]**	**Misc. PPRs**	**IID Total Reduction (Σ Cols 3-9) [5]**	
2003	3,100	105.1	10.0	0.0	0.0	0.0	0.0	11.5	126.6	2978.2
2004	3,100	101.9	20.0	0.0	15.0	0.0	0.0	11.5	148.4	2743.9
2005	3,100	101.9	30.0	0.0	15.0	0.0	0.0	11.5	158.4	2756.8
2006	3,100	101.2	40.0	0.0	20.0	0.0	0.0	11.5	172.7	2909.7
2007	3,100	105.0	50.0	0.0	25.0	0.0	0.0	11.5	191.5	2872.8
2008	3,100	105.0	50.0	8.9	26.0	4.0	0.0	11.5	205.4	2825.1
2009	3,100	105.0	60.0	65.5	30.1	8.0	0.0	11.5	280.1	2566.7
2010	3,100	105.0	70.0	67.7	33.8	12.0	0.0	11.5	294.8	2540.5
2011	3,100	103.9	63.3	67.7	0.0	16.0	0.0	11.5	262.4	2915.8
2012	3,100	104.1	106.7	67.7	15.2	21.0	0.0	11.5	326.2	2,903.2
2013	3,100	105.0	100.0	67.7	71.4	26.0	0.0	11.5	381.6	2,554.9
2014	3,100	104.1	100.0	67.7	89.2	31.0	0.0	11.5	403.5	2,533.4
2015	3,100	107.82	100.0	67.7	153.3	36.0	0.0	11.5	476.3	2,480.9
2016	3,100	105.0	100.0	67.7	130.8	41.0	0.0	11.5	456.0	2,504.3
2017	3,100	105.0	100.0	67.7	105.3	45.0	0.0	9.9	432.9	2,667.1
2018	3,100	105	130.0	67.7	0.1	63	0.0	9.7	375.5	2,724.5
2019 [6]	3,100	105	160.0	67.7	46.55	68	0.0	6.9	454.2	2,645.8
2020	3,100	105	192.5	67.7	0.0	73	0.0	9.1	448.0	2,652.0
2021	3,100	105	205.0	67.7	0.0	78	0.0	9.3	465.0	2,635.0
2022	3,100	105	202.5	67.7	0	83	0.0	9.8	468.0	2,632.0
2023 [7]	3,100	105	150.0	67.7	0	88	0.0	11.5	420.6	2,679.4
2024	3,100	105	150	67.7	0	93	0.0	11.5	427.2	2672.8
2025	3,100	105	200	67.7	0	98	0.0	11.5	482.2	2,617.8
2026	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2027	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2028	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2029-37	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2038-47 [8]	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2048-77 [9]	3,100	105	200	67.7	0	50	0.0	11.5	434.2	2,665.8

1. 2003 through 2024, volumes are adjusted for actual USBR Decree Accounting values; IID Total Reduction and Net Available for Consumptive Use may not equal Col 2 minus Col 10, if IID conservation/use was not included in Exhibit B.
2. 2014 Letter of Agreement provides that, effective January 2016 total amount of conserved water available is 105 KAFY
3. Salton Sea Mitigation volumes may vary based on conservation volumes and method of conservation.
4. *This transfer is not likely given lack of progress on Salton Sea restoration as of 2018; shaded entries represents volumes that may vary..*
5. Reductions include conservation for 1988 IID/MWD Transfer, IID/SDCWA Transfer, AAC Lining; SDCWA Transfer Mitigation, MWD Transfer w/Salton Sea Restoration (if any); Misc. PPRs. Amounts are independent of increases and reductions as allowed by the IOPP. *Reductions do not reflect additional reduced volumes for temporary SCIA commitments to Lake Mead which initiated in 2023 with a sunset schedule of 2026.*
6. In order to resolve the outstanding 2010 Salton Sea mitigation water pre-delivery issue, IID left 46,546 AF of extraordinary conservation in Lake Mead. See IID's December 19, 2019 revised 2019 water order and Reclamation's March 10, 2020 approval letter.
7. In 2023 and 2024, 50 KAF of ICS was foregone by SDCWA for the benefit of Lake Mead under the Drought Response Plan by Reclamation.
8. Assumes SDCWA does not elect termination in year 35.
9. Assumes SDCWA and IID mutually consent to renewal term of 30 years.
10. Modified from 100 KAFY in CRWDA Exhibit B; stating in 2018 MWD will provide CVWD 50 KAFY of the 100 KAFY.

PC ORIGINAL PKG

Source: CRWDA: Federal QSA Exhibit B, p 13; updated values from 2023 Annual Water & QSA Implementation Report

PC ORIGINAL PKG

CRWDA Exhibit B Net Available for Consumptive Use volumes less system operation demand represents the amount of water available for delivery by IID Water Department to its customers each year. In a normal year, perhaps 50,000 to 100,000 AF of effective rainfall would fall in the IID water service area. However, rainfall is not evenly distributed throughout the IID water service area and is not taken into account by IID in the submittal of its Estimate of Diversion (annual water order) to the USBR.

EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS

Historically, when drought conditions exist within the IID water service area, as has been the case for the past two decades, the water supply available to meet agricultural and non-agricultural water demands remains the same as normal year water supply because IID historically relied solely on its entitlement for Colorado River water. Due to the priority of IID water rights and other agreements, drought conditions affecting Colorado River water supplies cause shortages for Arizona, Nevada and Mexico, before impacting California and IID. Accordingly, the Net Available for Consumptive Use volumes in **Table 11**, Column 11 represents the water supply at Imperial Dam available for diversion by IID in single-dry year and multiple-dry year scenarios, consistent with IID's senior water rights. The runoff declines in the upper basin and prolonged drought conditions throughout the west have resulted, for the first time, in the Colorado River operating under a Tier 2a Shortage Condition in 2023, creating long-term water supply uncertainties throughout the Basin states. The expiration of the 2007 Guidelines add to the uncertainty of operations post 2026.

Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP)

Under normal operating conditions, the CRWDA Inadvertent Overrun Payback Policy (IOPP), provided IID with some flexibility to manage its water use. When the water level in Lake Mead is above 1,125 feet, an overrun of its USBR approved annual water order was permissible, and IID had up to three years to pay water use above the annual water order. When Lake Mead's water level is at or below 1,125 feet on January 1 in the calendar year after the overrun is reported in the USBR Lower Colorado Region Decree Accounting Report, the IOPP prohibits additional overruns and requires that outstanding overruns be paid back in the subsequent calendar year rather than in three years as allowed under normal conditions; that is, the payback is to be made in the calendar year following publication of the overrun in the USBR Decree Accounting Report. The IOPP is suspended during shortage conditions. For historic IID annual rainfall, net consumptive use, transfers and IID underrun/overrun amounts, see **Table 12.**

PC ORIGINAL PKG

Table 12. IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024

Year	IID Total Annual Rainfall	IID Water Users	IID/MWD Transfer	IID/ SDCWA Transfer	SDCWA Transfer Salton Sea Mitigation	IID Underrun / Overrun	IID/CVWD Transfer	AAC Lining
1988		2,947,581						
1989		3,009,451						
1990	91,104	3,054,188	6,110					
1991	192,671	2,898,963	26,700					
1992	375,955	2,575,659	33,929					
1993	288,081	2,772,148	54,830					
1994	137,226	3,048,076	72,870					
1995	159,189	3,070,582	74,570					
1996	78,507	3,159,609	90,880					
1997	64,407	3,158,486	97,740					
1998	100,092	3,101,548	107,160					
1999	67,854	3,088,980	108,500					
2000	29,642	3,112,770	109,460					
2001	12,850	3,089,911	106,880					
2002	12,850	3,152,984	104,940					
2003	116,232	2,978,223	105,130	10,000	0	**6,555**		
2004	199,358	2,743,909	101,900	20,000	15,000	-166,408		
2005	202,983	2,756,846	101,940	30,000	15,000	-159,881		
2006	19,893	2,909,680	101,160	40,000	20,000	**12,414**		
2007	64,580	2,872,754	105,000	50,000	25,021	**6,358**		
2008	63,124	2,825,116	105,000	50,000	26,085	-47,999	4,000	8,898
2009	30,0354	2,566,713	105,000	60,000	30,158	-237,767	8,000	65,577
2010	189,566	2,545,593	105,000	70,000	33,736	-207,925	12,000	67,700
2011	109,703	2,915,784	103,940	63,278	0	**82,662**	16,000	67,700
2012	133,526	2,903,216	104,140	106,722	15,182	**134,076**	21,000	67,700
2013	134,497	2,554,845	105,000	100,000	71,398	-64,981	26,000	67,700
2014	53,517	2,533,414	104,100	100,000	89,168	-797	31,000	67,700
2015	97,039	2,480,933	107,820	100,000	153,327	-90,025	36,000	67,700
2016	90,586	2,504,258	105,000	100,000	130,796	-62,497	41,000	67,700
2017	105,919	2,548,171	105,000	100,000	105,311	-30,591	45,000	67,700
2018	63,318	2,625,422	105,000	130,000	0	0	63,000	67,700
2019	146,384	2,558,136	105,000	160,000	46,555	-34,215	68,000	67,700
2020	130,275	2,493,623	105,000	192,500	0	-98,073	73,000	67,700
2021	81,901	2,552,674	105,000	205,000	0	-37,737	78,000	67,700
2022	61,377	2,577,164	105,000	202,500	0	-6,470	83,000	67,700
2023	68,122	2,417,024	105,000	150,000	0	-146.8	88,000	67,700
2024	**88,063**	**2,311,905**	105,000	150,000[1]	0	**-93,255**	93,000	67,700

Notes: Volumes in acre-feet and except Total Annual Rainfall are USBR Decree Accounting Report record at Imperial Dam.

IID Total Annual Rainfall from IID Provisional Water Balance, first available calculations are for 1990

Not all IID QSA programs are shown on this table.

Source: USBR Decree Accounting reports, except IID Total Rainfall and IID Overrun/Underrun is a separate calculation

Source: 2023 IID Annual Water & QSA Implementation Report and 2024 IID SWRCB Report; IID Total Rainfall and IID Overrun/ Underrun is a separate calculation

PC ORIGINAL PKG

On August 16, 2021, the water level in Lake Mead was 1,060 feet and for the first time since the IOPP came into effect, the Secretary of the Interior declared the first-ever, Tier 1 shortage condition for Colorado River operations, with elevations reaching 1,045 as of mid 2022 (**Figure 7**). For IID, this meant that no overruns would be allowed to IID's approved water order which continues in effect through 2024.

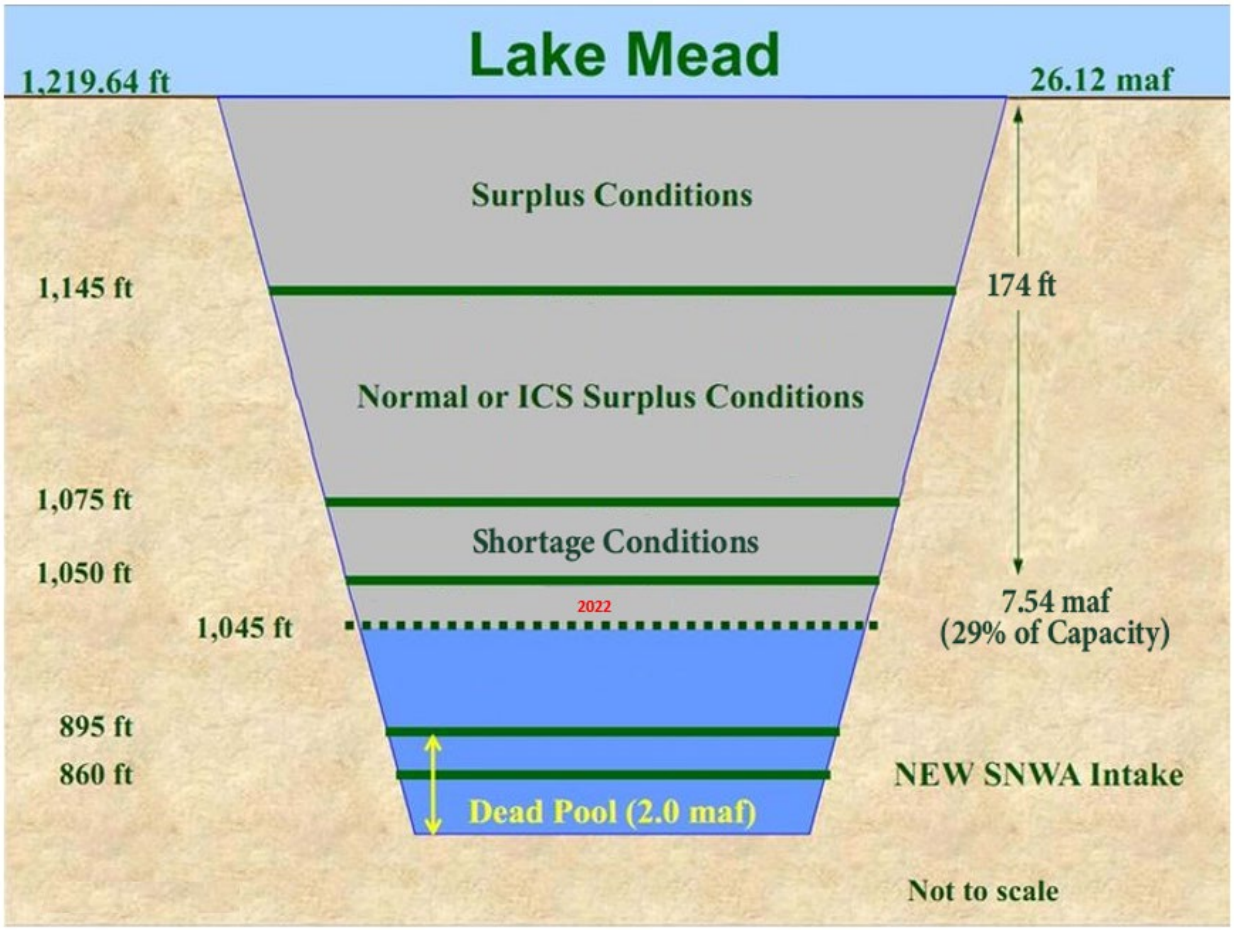


Figure 7. Lake Mead Schematic (June 15, 2022)

The flexibility that IID was allowed in 2013 and 2014 is no longer available to the district. Under the terms of the IOPP, no overruns are allowed in a year when payback is required. IID has not experienced any overrun pay back since 2014 as noted in **Table 13**. Under shortage conditions, IID would use any conserved water stored in a non-System reservoir, if available, to prevent any overrun.

Table 13. IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024

Calendar Year of Payback	2011 Overrun Payback (AF)	2012 Overrun Payback (AF)	Payback Total for Calendar Year (AF)
2013	55,710	-	55,710
2014	20,662	134,076	154,738
Total Payback	**76,372**	**134,076**	**210,448**

Notes: All values are consumptive use volumes at Imperial Dam (AF).
2013 Payback Total was 62 KAF, but in 2012 IID had 6,290 AF of early payback, reducing volume to 55,710 AF

PC ORIGINAL PKG

The 2013 IOPP payback obligation, prohibition on overruns in payback years, and suspension of this flexibility during shortage conditions led the IID Board to implement an apportionment program pursuant to the 2007 EDP, which has been subsequently revised and modified over the years. The 2023 EDP is a version approved and adopted by the IID Board on July 26, 2023 (see Attachment B). The Revised 2023 EDP also establishes a water exchange clearinghouse to facilitate the movement of water supply between all water users and within water user categories. The established water user categories are 1) agricultural water users, 2) industrial/commercial water users and 3) potable water users. As designed, the clearinghouse will allow IID and its water customers to balance water demands with the water supplies that are available to all users.

Generally, the EDP Apportionment, as discussed in the proceeding section, is not expected to impact potable water uses or industrial/commercial uses. However, given the certainty of continuing drought on the Colorado River through 2026 and other stressors, provisions such as the 2012 IWSP Water Agreement sections 3.7 and 3.8 as well for dry and multiple dry year water assessment may come into effect. IID has agreed to work with public and private treatment water purveyors and Project proponents to ensure to the extent possible that the IWSP Water Supply Agreement terms will not adversely impact Project operation. For purposes of this WSA, years with a shortage condition that impacts non-agricultural projects such as an IOPP payback obligation constitute “dry” years for IID. For single-dry year and multiple-dry water year assessments, IID’s EDP shall govern.

Equitable Distribution Plan (EDP) History

A 2006 study by Hanemann and Brookes suggested that overrun conditions were likely to occur 40-50 percent of the years during the decade following the report. Under such conditions a supply/demand imbalance would occur resulting in a need to apportion water consistent with state law. Under California state law, water must be distributed equitably as determined by the IID Board of Directors.

On November 28, 2006, the IID Board of Directors adopted Resolution No 22-2006 approving development and implementation of an Equitable Distribution Plan to address times when customers’ demand would exceed IID’s Colorado River supply. The EDP, adopted in 2007 allowed the IID Board to institute an apportionment program. As part of this resolution, the IID Board directed the General Manager to prepare the rules and regulations necessary or appropriate to implement the plan within the district. The EDP Regulations were created to enable IID to implement a water management tool (apportionment) to address years in which water demand is expected to exceed supply.

It was expected that an annual EDP Apportionment would be established for each of the next several years, if not for the duration of the QSA. However, the implementation of the EDP apportionment was legally challenged in 2013 with litigation ensuing through 2017 when a statement of decision was issued by the trial court, followed by a writ of mandate and a declaratory judgment later that year. The writ of mandate directed IID to repeal the EDP. On February 6, 2018, the IID board approved a resolution repealing the EDP while the case was on appeal. On July 16, 2020, the appellate court reversed the writ of mandate and declaratory judgment on almost all grounds, including declaratory relief on the water rights issue and IID’s

PC ORIGINAL PKG

discretion to determine the method of apportionment except for a provision as to how water was prioritized among water user categories. The court ruled that the district is required to distribute water equitably for all categories of users.

On June 21, 2022, IID adopted a revised EDP to address the single outstanding legal issue with respect to prioritization of apportionments among categories of water users. The revised EDP also updated certain operational provisions and most importantly, to the extent feasible, provides for a defined quantity of available, annual water supply apportioned to each water user to prevent cumulative demands from exceeding IID's available, authorized annual Colorado River supply (Appendix B-Equitable Distribution Plan). In July 2023 the EDP was revised again to allow for direct transfer of water through the IID Clearinghouse and among the respective water user categories. Implementation of the EDP resumed in January 1, 2023 and will continue annually thereafter consistent with the latest adopted EDP. For details regarding the EDP and its implementation, including related forms, please visit IID's website at Equitable Distribution | Imperial Irrigation District (iid.com).

Projected Water Supplies

The projected and continued decline in runoff and prolonged drought conditions in the West are expected to contribute to even lower water elevation levels at Lakes Powell and Mead. The Department of the Interior made the decision in early 2022 to protect critical Lake Powell elevations above Glen Canyon Dam by adding 500,000 AF of water from Flaming Gorge reservoir and temporarily reducing the 2022 annual operational release to Lake Mead by 480,000 AF. These conditions resulted in a reduced water apportionment to most of the Lower Division States and Mexico for 2022 through 2024, but did not affect IID's water supply available for consumptive use. However, IID's voluntary commitments for Lake Mead have been in effect since 2023 and will continue through 2026 at the maximum conservation volume of 300,000 AFY.

Despite the Department's extraordinary actions, the hydrological forecasts and reservoir elevations would have continued to decline if not for the Basin state contributions, particularly California's commitments. California reductions, or the potential for regulatory reductions by the Secretary of the Interior post 2026 remain undefined as of the date of this water supply assessment for the Big Rock 2 Solar project.

IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community. In this vein, IID recognizes the need for significant response actions to protect the long-term water supply certainty for the Imperial Valley as the Colorado River operates under these unprecedented conditions. On October 5, 2022 the Colorado River Board of California, in partnership with representatives of the four primary California Section 5 contractors (IID, Palo Verde Irrigation District, Coachella Valley Water District and Metropolitan Water District of Southern California) submitted a letter to the Department of Interior proposing for California to conserve up to an additional 400,000 AF of water in Lake Mead each year, beginning in 2023 and extending through 2026, to assist with stabilizing Colorado River reservoir elevations. IID has entered into an agreement with Reclamation for its share of the California proposal that would not exceed 300,000 AFY. IID proposes to conserve its contribution to Lake

PC ORIGINAL PKG

Mead via system and on-farm efficiency conservation and short-term, deficit irrigation (seasonal fallowing).

PC ORIGINAL PKG

PROJECT WATER AVAILABILITY FOR A 30-YEAR PERIOD TO MEET PROJECTED DEMANDS

The proposed Project will not require potable (drinking) water for operational purposes.

Untreated Colorado River water will be supplied to the project via the adjacent Westside Main Canal under a water agreement with IID under IID's General Industrial Services rate schedule (Schedule No. 7). The Project parcels consist of individual parcels zoned for general agriculture (A-2), general agriculture/rural (A-2-R), general agriculture/rural/renewable energy (A-2-R-RE), heavy agricultural (A-3), and heavy agriculture/renewable energy (A-3-RE). Current land use of the Project parcels includes cropland, dryland grain crops, irrigated grain and hayfields, row crops, orchards, and pastureland. The Project would use approximately 1,569 acres of "new lands" that have not previously been entitled, in addition to up to 867 acres of lands that are currently entitled under active CUPs known as Laurel Cluster 3 (587 acres), Laurel Cluster 2 North (120 acres), and Laurel Cluster 2 South (160 acres) totaling 2,436 acres of available land for development. 90FI 8me LLC (the Applicant) is seeking approval of four (4) CUPs associated with the construction and operation of the Big Rock 2 solar facility. Water would be supplied by IID via the Westside Main canal and delivery gates listed in Table 15 which are all assumed to be in adequate working condition

The proposed amortized 125 AFY water demand for the Project represents an estimated 98.3 percent reduction in historical water demand from the calculated historical 7,348 AFY water demand on the Project parcels.[22]

As noted previously, under the terms of California legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the IID board adopted the TLCFP to address how to deal with any temporary reduction of water use by projects such as solar projects that are developed under a CUP.

While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce the need for efficiency conservation and other water use reduction practices on the part of IID and its water users providing the district with wide benefits. One of the considerations in developing the TLCFP was to provide agricultural land owners with long-term assurances from IID that, at Project termination, irrigation service would be available for them to resume farming operations.

IWSP Water

The IWSP, provided herein as Attachment A, designates up to 25,000 AFY of water for potential conservation for Non-Agricultural Projects within IID's water service area. As of March 2025, IID has up to 18,620 AFY that it may make available for conservation under the IWSP for new projects such as the proposed Project. The IWSP establishes a schedule for Processing Fees, Reservation Fees, and Development Fees that change each year for all non-agricultural projects, and annual Water Supply

[22] The 20 year average demand includes a 2 year construction period and 18 years of operation.

PC ORIGINAL PKG

Development fees for some non-agricultural projects. The proposed Project's water use will be subject to the annual Water Supply Development fee if IID determines that water for the Project is to be supplied under the IWSP.

Given the Colorado River conditions, the likelihood that IID will not receive its annual 3.1 MAF apportionment less QSA/Transfer Agreement obligations of Colorado River water is no longer low despite the high priority of the IID entitlement relative to other Colorado River contractors, see IID's Water Rights section on page 26 and projected water supplies. Given the prolonged drought conditions and recent communication from the Department of the Interior, reductions to all basin contractors, including IID, are increasingly likely. If such obligatory reductions were to come into effect within the 30-year Project life, the Applicants are to work with IID to ensure any anticipated reduction can be managed.

The County of Imperial as the lead agency has a responsibility to determine if the current and projected demands and water supply conditions, including projected uncertainties of Colorado River hydrology are sufficient to enable the County to make the findings necessary to approve this WSA. IID, like any water provider, has jurisdiction to manage the water supply within its service area and impose conservation measures during a period of temporary water shortage, such as the one we are experiencing now.

Furthermore, with the proposed Project's replacement of agricultural land with the Big Rock 2 solar facility , IID's task of managing water supply under the QSA/Transfer Agreements and any other voluntary contributions to Lake Mead would be lighter, because agricultural water use on the proposed Project site would be significantly higher than the proposed water demand for the proposed Project as explained in the Expected Water Demands for the Proposed Project on the section that follows.

Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for MCI temporary water use.[23] Water would be picked up from a nearby canal or lateral and delivered to the construction location by a water truck capable of carrying approximately 4,000 gallons per load. To obtain water delivery service, the Project proponent will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which allows the Water Department to provide the district with information needed to manage the district apportioned water supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe accounts. If water is to be provided under IWSP in addition to the established delivery charges, the Applicant may also need to enter into a IWSP Water Supply Agreement.

[23] *Complete the Application for Temporary Water Use and submit to Division office. Complete encroachment permit through Real Estate – non-refundable application fee of $250, se. IID website: Real Estate / Encroachments, Permissions, and Other Permitting. Fee for temporary service water: Schedule No. 7 General Industrial Use / Temporary Service Minimum charge for up to 5 AF, pay full flat fee for 5 AF at General Industrial Use rate ($425); use more than 5 AF, pay fee for actual use at General Industrial Rate ($85/AF).*

PC ORIGINAL PKG

EXPECTED WATER DEMANDS FOR THE PROPOSED PROJECT

Water for the proposed Project will be needed on-site for operational demands including the O&M building, fire flow storage, and panel washing (no water for dust suppression during operation required). Untreated Colorado River water will be supplied to the project via the adjacent Westside Main canal from the gates listed in Table 15 which are assumed to be good condition. As noted above, the Project is estimated to require up to 10 AFY over a 30 year, which is a 99.9 percent decrease from the historical Project site demand of 7,348 AFY.

Projected water use by Big Rock 2 are summarized in **Table 14**.

Table 14. Project Operational Water Uses (AFY)

Use	Acre-Feet per Year	Total AF Over 30-Year Period
Water for Landscape Irrigation	0	0
Water for Dust Control	0	0
Water for Operation and Maintenance (30 years)	10	300
TOTAL RAW WATER USAGE	10	300

As of the date of this WSA, IID delivers untreated Colorado River water to the proposed Project site for agricultural uses through the following gates and laterals. The 10-year record for 2015-2024 of water delivery accounting is shown in **Table 15.** The data documents a 10-year 7,348 AFY average.

PC ORIGINAL PKG

Table 15. Ten-Year Historic Delivery (AFY), 2015-2024

Canal/Gate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Westside Main 14A (Brundy)	319.7	219.7	81.7	372.2	431.2	345.8	280.3	429.1	398.1	546.9
Foxglove 3 (Brundy)	507.3	322.6	530.9	585.1	527.9	502.5	395.6	525.8	477.9	582
Foxglove 1 (Downs)	437	444.7	393.4	391.4	310.8	396.3	401.4	395.2	423.3	437.5
Foxglove 2 (Downs)	426.4	462.5	394.6	386.3	316.3	347.2	413.2	398.1	404.5	465.7
Fern 15 (Gabrych/Kuhn)	431.5	232.1	380.9	310.9	288.5	304.8	356.7	330.4	228.6	243.2
Fern 22 (Gabrych/Kuhn)	793.5	0	0	408.5	993.6	1,029.4	1182.7	838.5	949.5	902.6
Fig 6 (Gabrych/Kuhn)	249.8	221.3	261	287	311.2	177.5	108.6	0	0	255.5
Fig 7 (Gabrych/Kuhn)	430.9	393.4	491	411.3	457.1	450.4	436.4	502.8	365.3	347.4
Fig 12A (Gabrych/Kuhn)	1,133.8	855.4	264	219.1	450.6	760.9	308.6	989.6	264	141.5
Fig 13 (Gabrych/Kuhn)	395.1	268.2	299.4	142.1	142.1	98.8	203.6	487	518.6	587
Fig 18 (Gabrych/Kuhn)	0	0	0	0	0	0	0	0	0	0
Westside Main 13 (LaValle Sabbia)	1,325.8	1,314.1	1,155.7	1,302.3	1,206.9	903.1	1,310.7	1,620.2	1,258.2	936.6
Westside Main 13A (LaValle Sabbia)	0	544.7	914.1	887.5	719.2	771.6	953.7	931.7	888.8	648.7
Fern 17 (Tomlinson)	243.1	290.8	373.5	386.4	165.2	253.2	333	329	230.5	48.1
Fern 18 (Tomlinson)	27.9	69.6	113	52.8	37.9	43	46.8	47.4	131	8
Fern 20 (Tomlinson)	148.6	149.7	248.2	192.2	150.1	126.1	203.5	204.8	132.8	29.9
Fern 23 (Tomlinson)	638.4	603.1	827.6	811	817.6	603.1	680.4	778.8	209.4	0

PC ORIGINAL PKG

Fern 29 (Tomlinson)	155	178.6	251.1	203.6	220.2	173.6	234.8	250.9	134.4	34.9
Fern FSM 12A (Whitmer)	0	0	0	0	0	0	0	0	0	0
TOTAL	7,663.8	6,570.5	6,980.1	7,349.7	7,546.4	7,287.3	7,778	9,059.3	7,014.9	6,215.5

Source: *IID Staff, 2025, Marian Gabrych, Randal Whitmer, Tom Brundy, Susan Downs, Will Tomlinson, and La Valle Sabia, received in February 2025.*

PC ORIGINAL PKG

The proposed Project has an estimated total water demand of up to 300 AF or 10 AFY for the 30-year operational period. Thus, the proposed Project demand is a decrease of 7,338 AFY from the historical 10-year average (7,348 AFY) or 99.9 percent less than the historic 10-year average annual delivery for agricultural uses at the proposed Project site. The proposed Project's estimated operational water demand of up to10 AFY represents only 0.054 percent of the 18,620 AFY balance of water supply that may be available for contracting under the IWSP.

PC ORIGINAL PKG

IID's Ability to Meet Demands With Water Supply

Under normal operating conditions, non-agricultural water demands for the IID water service area are projected for 2025-2055 in **Table 5**, and IID agricultural demands including system operation are projected for 2025-2055 in **Table 6**, all volumes within the IID water service area. IID water supplies available for consumptive use after accounting for mandatory transfers are projected to 2077 in **Table 11** Column 11), volumes at Imperial Dam.

To assess IID's ability to meet future water demands, IID historic and forecasted demands are compared with CRWDA Exhibit B net availability under its water supply entitlement, volumes at Imperial Dam **Table 11** (Column 11). The analysis requires accounting for system operation consumptive use within the IID water service area, from AAC at Mesa Lateral 5 to Imperial Dam, and for water pumped for use by the USBR Lower Colorado Water Supply Project (LCRWSP), an IID consumptive use component in the USBR Decree Accounting Report. IID system operation consumptive use for 2020 is provided in **Table 16** to show the components to be included in the calculation of 2024 volumes in comparison to 2020.

Table 16. IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024

	2020 Operational Consumptive Use (KAF)	2024 Operational Consumptive Use (KAF)
IID Delivery System Evaporation	24.4	24.9
IID Canal Seepage	90.8	94.9
IID Main Canal Spill	10.1	8.4
IID Lateral Canal Spill	121.5	112.9
IID Seepage Interception	-39.0	-8.9
IID Unaccounted Canal Water	-40.0	TBD
Total IID System Operational Use, within water service area	167.8	**TBD**
"Losses" from AAC @ Mesa Lat 5 to Imperial Dam (Station 1117-2900)	9.2	TBD
LCWSP pumpage	-10	-10.0
Total System Operational Use in 2020 and 2024	167.0	**TBD**

Sources: 2024 IID Water Balance Ran 03/27/2024

Notwithstanding any regulatory water supply cuts from the Secretary of Interior, IID's ability to meet customer water demands through 2055 as shown in **Table 17** is based on the following:

- Non-agricultural use from **Table 5.**
- Agricultural and Salton Sea mitigation uses from **Table 6**.
- CRWDA Exhibit B net available for IID consumptive use from **Table 11**.
- System operation consumptive use from **Table 16** for 2020.

PC ORIGINAL PKG

Table 17. IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2025

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Non-Ag Delivery	107.4	113.2	133.1	142.9	151.4	163.2	175.4	188.4	199.3
Ag Delivery	2,158.9	2,165.4	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5
QSA SS Mitigation Delivery	153.3	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
System Op CU in IID & to Imperial Dam	61.3	167.0	230.5	225.4	225.4	225.4	225.4	225.4	225.4
IID CU at Imperial Dam	**2,488.2**	**2,503.6**	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Conservation in Excess of Exhibit B	**45.5**	**51.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total IID CU	**2,533.6**	**2,554.6**	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Exhibit B IID Net Available for CU at Imperial Dam (adjusted PPR's 2015/2020)	**2,623.7**	**2,652.7**	**2,617.8**	**2,612.8**	**2,612.8**	**2,612.8**	**2,612.8**	**2,665.8**	**2,665.8**
2015 & 2020 Actual and 2025-2055 Projected IID Underrun (-)/Overrun at Imperial Dam	**-90.02**	**-98.07**	5.30	-35.00	-26.50	-14.70	-2.50	-42.50	-31.60

Notes: 2015 and 2020 have been updated to reflect actual consumptive use with respective USBR decree accounting adjustments
Non-Ag Delivery CI 15.0%, Ag Delivery CI 3.0%, QSA SS mitigation CI 15%
QSA Salton Sea Mitigation Delivery terminated on 12/31/2017
Underrun /Overrun = IID CU at Imperial Dam minus CRWDA Exhibit B Net Available
Notes: Ag Delivery for 2025-2055 does not take into account land conversion for solar use nor reduction in agricultural land area due to urban expansion.

As shown above, IID forecasted demand has the potential to exceed CRWDA Exhibit B Net Consumptive Use volumes during several time intervals through the lifespan projection for the Project. However, due to temporary land conversion for solar use and urban land expansion that will reduce agricultural acres in the future, a water savings of approximately 217,000 AFY will likely be generated into the future and for the lifetime of the proposed Project, assuming no regulatory cutbacks are enforced upon IID.

In addition, USBR 2020 Decree Accounting Report states that IID Consumptive Use was 2,493.7 KAF (excludes 1,579 AF of ICS for storage in Lake Mead and an additional 49,444 AF of conserved water left on the Colorado River system) with an underrun of -98.1 KAF, as reported by IID in 2020 Annual SWRCB Report per WRO 2002-2013; that is, IID uses less than the amount in its approved Water Order (2,615,300 AF).

Table 18. 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam

IID Approved Water Order	2,625.3 less 10 supplied by LCWSP and less 26 of additional conserved water
IID Consumptive Use	2,493.7
IID **Underrun** /Overrun	**-98.1**
Sources: *2020 IID Revised Water Order, approved on March 10, 2020, 2020 Decree Accounting Report, and* *2020 Annual Report of IID Pursuant to SWRCB Revised Order WRO 2002-2013*	

PC ORIGINAL PKG

As reported in the 2023 Annual Water & QSA Implementation Report and 2024 SWRCB Report and presented in **Table 12**, from 2013 to 2024 IID consumptive use (CU) resulted in underruns; i.e., annual CU was less than the district's QSA Entitlement of 3.1 MAFY minus QSA/Transfer Agreements obligations. This would indicate that even though **Table 17** shows IID Overrun/Underrun at Imperial Dam not exceeding CRWDA Exhibit B Net Available for CU, for the 30-year life of the proposed Project, IID consumptive use may be less than forecasted.

Meanwhile, forecasted Ag Delivery reductions presented in **Table 6** are premised on implementation of on-farm practices that will result in efficiency conservation. These reductions do not take into account land conversion for solar projects nor reduction in agricultural land area due to urban expansion; that is to say, the forecasted Ag Delivery is for acreage in 2003 with reduction for projected on-farm conservation efficiency. Thus, Ag Delivery demand may well be less than forecasted in **Table 6**. In any case, the proposed Project will use less water than the historical agricultural demand of proposed Project site, so the proposed Project will ease rather than exacerbate overall IID water demands.

In the event that IID has issued water supply agreements that exhaust the 25 KAFY IWSP set aside for conservation, and it becomes apparent that IID delivery demands due to non-agriculture use are going to cause the district to exceed its quantified 3.1 MAFY entitlement less QSA/Transfer Agreements obligations, IID has identified options to meet these new non-agricultural demands. These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing conservation strategies and projects to expand the size of the district's water supply portfolio.

These factors will be discussed in the next two sections, Tracking Water Savings from Growth of Non-Agricultural Land Uses and Expanding Water Supply Portfolio**.**

Tracking Water savings from Growth of Non-Agricultural Land Uses

The Imperial County Board of Supervisors has targeted up to 25,000 acres of agricultural lands, about 5 percent of the farmable acreage served by IID, for temporary conversion to solar farms; because the board found that this level of reduction would not adversely affect agricultural production. As reported for IID's Temporary Land Conversion Fallowing Program, existing solar developments at the end of 2024 have converted 13,307 acres of farmland. Solar projects had a total yield at-river of 72,320 AF of water in 2024. The balance of the 25,000-acre agriculture-to-solar policy is 11,693 acres. On average, each agricultural acre converted reduces agricultural demand by 5.1 AFY, which results in a total at-river yield (reduction in consumptive use) of 127,500 AFY.

However, due to the nature of the conditional use permits under which solar farms are developed, IID cannot rely on this supply being permanently available. In fact, should a solar project decommission early, that land may go immediately back to agricultural use (it remains zoned an agricultural land). Nevertheless, during their operation, the solar farms do ameliorate pressure on IID to implement projects to meet demand from new non-agricultural projects.

PC ORIGINAL PKG

Unlike the impact of solar projects, other non-agricultural uses are projected to grow, as reflected in the nearly 85.6 percent increase in non-agricultural water demand from 107.4 KAF in 2015 to 199.3 KAF in 2055 reflected herein in **Table 17**. Although state mandated water conservation goals to municipalities has curtailed the upward trend, Table 17 continues to depict a conservative scenario. This increase in demand of 92 KAFY is likely to be offset by reductions in agricultural lands; however, as the land remains zoned as agricultural land, that source is not reliable to be permanently available to IID.

The amount of land developed for residential, commercial, and industrial purposes is projected to grow by 55,733 acres from 2015 to 2050[24] within the sphere of influence of the incorporated cities and specific plan areas in Imperial County. A conservative estimate is that such development will displace at least another 24,500 acres of farmland based on the Imperial Local Agency Formation Commission (LAFCO) sphere of influence maps and existing zoning and land use in Imperial County. At 5.13 AFY yield at-river, there would be a 125,000 AFY reduction IID net consumptive use. However, the total acreage from actual annexations that have resulted in reductions to agricultural acreage between 2015 and 2024 has been 2,224 acres, according to IID's annual inventory of total farmable land which is consistent with the acreage gain to non-agricultural land uses (2,224 acres) and based off of annexation records obtained through the Imperial County Local Agency Formation Commission. This shift in acreage documents a growth rate of approximately 50 percent of the originally projected rate.

The total foreseeable solar project temporary yield at-river (91,800 AFY) and municipal development permanent yield at-river, conservatively adjusted (65,000 AFY) is to reduce forecasted IID net consumptive use at-river 156,800 AFY, which is more than enough to meet the forecast demand minus Exhibit B Net Available volumes shown in **Table 17.** This yield at-river is sufficient to meet the forecasted excess of non-agricultural use over Net Available supply within the IID service area for the next 20 years, as is required for SB 610 analysis (assuming there are no regulatory cuts to IID's full entitlement).

Farmland retirement associated with municipal development would reduce IID agricultural delivery requirements beyond the efficiency conservation projections shown **Table 6.** Therefore, in the event that Schedule 7 General Industrial Use water has exhausted its apportioned amount, the Applicants will rely on IID IWSP water to supply the Project, as discussed above in the Projected Water Availability section.

Expanding Water Supply Portfolio

The proposed Project, as a new non-agricultural development, may need to enter into a water supply agreement with IID. Upon agreement, the District will procure or develop a water supply for the Project at its sole discretion, which may include policy changes, construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the

[24] IRWMP, Chapter 5, Table 5-14.

PC ORIGINAL PKG

corresponding water supply agreement, along with other terms and conditions including the requisite environmental permitting.

While forecasted long-term annual yield-at-river from the reduction in agricultural acreage due to municipal development in the IID service area may be sufficient to meet the forecasted excess of non-agricultural use over CRWDA Net Available supply (**Table 17**) without regulatory cuts and without expanding IID's Water Supply Portfolio, IID has also evaluated the feasibility of a number of capital projects to increase its water supply portfolio.

As reported in 2012 Imperial IRWMP Chapter 12, IID contracted with GEI Consultants, Inc. to identify a range of capital project alternatives that the district could implement. Qualitative and quantitative screening criteria and assumptions were developed in consultation with IID staff. Locations within the IID water service area with physical, geographical, and environmental characteristics most suited to implementing short- and long-term alternatives were identified. Technical project evaluation criteria included volumes of water that could be delivered and/or stored by each project, regulatory and permitting complexity, preliminary engineering components, land use requirements, and costs.

After preliminary evaluation, a total of 27 projects were configured:

- 17 groundwater or drain water desalination
- 2 groundwater blending
- 6 recycled water
- 1 groundwater banking
- 1 IID system conservation (concrete lining)

Projects were assessed at a reconnaissance level to allow for comparison of project costs. IID staff and the board identified key factors to categorize project alternatives and establish priorities. Lower priority projects were less feasible due to technical, political, or financial constraints. Preferential criteria were features that increased the relative benefits of a project and grant it a higher priority. Four criteria were used to prioritize the IID capital projects:

1. **Financial Feasibility.** Projects whose unit cost was more than $600/AF were eliminated from further consideration.
2. **Annual Yield.** Project alternatives generating 5,000 AF or less of total annual yield were determined not to be cost-effective and lacking necessary economies of scale.
3. **Groundwater Banking.** Groundwater banking to capture and store underruns is recognized as a beneficial use of Colorado River water. Project alternatives without groundwater banking were given a lower priority.
4. **Partnering.** Project alternatives in which IID was dependent on others (private and/or public agencies) for implementation were considered to have a lower priority in the IID review; this criterion was reserved for the IRWMP process, where partnering is a desirable attribute.

PC ORIGINAL PKG

Based on these criteria, the top ten included six desalination, two groundwater blending, one system conservation, and one groundwater storage capital projects. These capital projects are listed in **Table 19** which follows. Some of these project alternatives have proven to longer be feasible due to technical and/or environmental constraints and have been stricken, as noted.

PC ORIGINAL PKG

Table 19. IID Capital Project Alternatives and Cost (May 2009 price levels $)

Name	Description	Capital Cost	O&M Cost	Equivalent Annual Cost	Unit Cost ($/AF)	In-Valley Yield (AF)
~~**GW 18**~~	~~Groundwater Blending E. Mesa Well Field Pumping to AAC~~	~~$39,501,517~~	~~$198,000~~	~~$2,482,000~~	~~$99~~	~~25,000~~
~~**GW 19**~~	~~Groundwater Blending: E. Mesa Well Field Pumping to AAC w/Percolation Ponds~~	~~$48,605,551~~	~~$243,000~~	~~$3,054,000~~	~~$122~~	~~25,000~~
WB 1	Coachella Valley Groundwater Storage	$92,200,000	$7,544,000	$5,736,746	$266	50,000
DES 8	E. Brawley Desalination with Well Field and Groundwater Recharge	$100,991,177	$6,166,000	$12,006,000	$480	25,000
AWC 1	IID System Conservation Projects	$56,225,000	N/A	$4,068,000	$504	8,000
DES 12	East Mesa Desalination with Well Field and Groundwater Recharge	$112,318,224	$6,336,000	$12,831,000	$513	25,000
DES 4	Keystone Desalination with IID Drainwater/ Alamo River	$147,437,743	$15,323,901	$23,849,901	$477	50,000
~~**DES 14**~~	~~So. Salton Sea Desalination with Alamo River Water and Industrial Distribution~~	~~$158,619,378~~	~~$15,491,901~~	~~$24,664,901~~	~~$493~~	~~50,000~~
~~**DES 15**~~	~~So. Salton Sea Desalination with Alamo River Water and MCI Distribution~~	~~$182,975,327~~	~~$15,857,901~~	~~$26,438,901~~	~~$529~~	~~50,000~~
DES 2	Keystone Desalination with Well Field and Groundwater Recharge	$282,399,468	$13,158,000	$29,489,000	$590	50,000

Source: Imperial IRWMP, Chapter 12; see also Imperial IRWMP Appendix N, IID Capital Projects

[1] Pumping on the East Mesa via Well Fields was assessed by IID and it was determined that the area is not condusive of groundwater recovery due to the geological conditions in the area and/or environmental challenges.

[2] It has been demonstrated over time that any reduction in Salton Sea water could result in environmental impacts related to existing biological resources, air quality and other potential adverse community impacts. Salton Sea water desalination for redistribution to industrial and/or municipal use is not being persued at any level.

IID Near Term Water Supply Projections

As mentioned above, IID's quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID's use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including seepage recovery from IID canals and the All-American Canal (ACC) and measures to reduce operational discharge. As the IID website Water Department states:

> Through the implementation of extraordinary conservation projects, the development of innovative efficiency measures and the utilization of progressive management tools, the IID Water Department is working to ensure both the long-term viability of agriculture and the continued protection of water resources within its service area.

PC ORIGINAL PKG

Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including this Project for the next 20 years and for the life of the proposed Project under a water supply consistent with the district's full entitlement.

PC ORIGINAL PKG

COUNTY OF IMPERIAL FINDINGS

IID serves as the regional wholesale water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, industrial, environmental and recreational water users within its water service area. Imperial County serves as the responsible agency with land use authority over the proposed project. Imperial County Water Assessment findings are summarized as follows, based on the information contained herein and as supported by IID water supply data:

1. IID's annual entitlement to consumptive use of Colorado River water is capped at 3.1 MAF less water transfer obligations, pursuant to the QSA and Related Agreements. Under the terms of the CRWDA, IID is implementing efficiency conservation measures to reduce net consumptive use of Colorado River water needed to meet its QSA/Transfer Agreements obligations while retaining historical levels of agricultural productivity.
2. In 2024 IID consumptively used 2311905 AF of Colorado River water (volume at Imperial Dam); 2,103,768 AF were delivered to customers (including recreational and environmental water deliveries) of which 1,991,796 AF, or 95 percent, went to agricultural users as per IID's Provisional Water Balance of Selective Flow Paths run on March 2025.
3. Reduction of IID's net consumptive use of Colorado River water under the terms of the Colorado River Water Delivery Agreement is to be the result of efficiency conservation measures. Crop water use in the Imperial Valley will not decline under these conditions, however IID operational spill and tailwater from field runoff will decline as efficiency conservation measures are implemented, impacting the Salton Sea.
4. The dependability of IID's water rights, Colorado River flows, and Colorado River storage facilities for Colorado River water alone are not sufficient to assure water availability for the Project. The prolonged drought conditions on the Colorado River Basin have made it increasingly likely that the water supply of IID may be disrupted, in dry years or/and under shortage conditions. Mexico, Arizona and Nevada, which have lower priority than IID, have already experienced Tier 1 and/or Tier 2a reductions in 2022, 2023, and 2024 as a result of the declared Colorado River water shortage.
5. Due to ongoing Colorado River drought conditions, Lake Mead's declining elevation, reduced inflows from Lake Powell, and the suspension of the federal Inadvertent Overrun and Payback Policy, which eliminates IID's ability to overrun its 3.1 MAF annual entitlement during water shortage conditions, the IID Board has implemented an annual apportionment program (otherwise known as the Equitable Distribution Plan or EDP).
6. IID's EDP apportions the available water supply among all its water users equitably and among three water user categories based on historical use: 1) agricultural water users, 2) commercial/industrial water users, and 3) potable water users. Apportionment into these categories as a whole is initiated after deducting from the available water supply water for operational system needs, system conservation yields, environmental mitigation requirements,

PC ORIGINAL PKG

recreational uses, and similar unmeasured small pipe account water uses. See Attachment B - Equitable Distribution Plan.

7. Historically, IID has never been denied the right to use the annual volume of water it has available for its consumptive uses under its entitlement. Nevertheless, IID is participating in discussions for possible actions in response to continued extreme drought on the Colorado River.
8. The proposed Project has an estimated operational water demand of 300 AF or 10 AFY over a 30-year period. Thus, the proposed Project demand is a decrease of 7,338 AFY from the historical 10-year average or 99.9 percent decrease from the historical 10-year average annual delivery for agricultural uses at the proposed Project site.
9. The Project's water delivery will be covered under the Schedule 7 General Industrial Use. In the event that IID determines that the proposed Project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. In which case, the proposed Project would use 0.054 percent of the 18,620 AFY of IWSP water.
10. The Project is required to enter into a Water Supply Agreement with IID for the 10 AFY of projected water demand. Under any fully executed water supply agreement, IID has the capacity to procure or develop water supplies for the Project through the implementation of policies, the construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions, including the requisite environmental permitting.
11. Based on the Environmental Impact Report (EIR) prepared for this proposed Project pursuant to the CEQA, California Public Resources Code sections 21000, *et seq*. (SCH No. 2024090063), the County of Imperial hereby finds that the IID projected water supply, together with water conservation measures required, is sufficient to satisfy the demands of this proposed Project in addition to existing and planned future uses, including agricultural and non-agricultural uses for a 30-year Water Supply Assessment period.

PC ORIGINAL PKG

ASSESSMENT CONCLUSION

This Water Supply Assessment has determined that IID water supply is adequate for the Big Rock 2 solar facility (proposed Project). The Imperial Irrigation District's IWSP for Non-Agricultural Projects may dedicate up to 25,000 AF of IID's annual conserved water supply to serve new projects. As of March 2025, a total of 18,620 AFY remain available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID. Imperial County estimates a cumulative, non-agricultural project water supply demand increase of up to 63,243 AFY within the foreseeable 30-year planning period, within its jurisdiction. However, all new non-agricultural projects, including Big Rock 2 solar, are required to mitigate their respective water supply demand via conservation programs or conservation projects in order to receive future water apportionments.

New, non-agricultural projects may be susceptible to delivery cutbacks when an EDP Apportionment is exhausted, thus all approved projects require best management practices and water use efficiency at all times. Given the prolonged drought conditions and recent communication to IID from the Department of the Interior, reductions to all basin contractors, including IID and its water customers, are increasingly likely. If such reductions were to come into effect within an approved project's operation, the County of Imperial is to work with IID to ensure any anticipated reduction can be managed via the means identified herein or other equivalent measures.

Under an authorized water supply agreement, Big Rock 2 solar will be required to acknowledge and accept as a condition of water service that to the extent that IID receives an order or directive from a governmental authority, having appropriate jurisdiction, that reduces the total volume of water available to IID from the Colorado River during all or any part of their water service agreement, IID may reduce the water service agreement amount, as directed by the IID Board, as a proportionate reduction of the total volume of water available to IID. This reduction is separate from and in addition to any allocation authorized pursuant to the EDP.

The Project's operational water demand of approximately 10 AFY represents 0.054 percent of the unallocated supply that may be set aside for additional conservation and contracting under the IWSP for non-agricultural projects, and approximately 0.016 percent of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed Project represents a 99.9 percent decrease from the 10-year historical average agricultural water use for 2015-2024 at the proposed Project site.

For all the reasons described herein, the historical stability of the IID water supply, the amount of foreseeable water available, along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers suggest that Big Rock 2 solar 's water needs will be reasonably met for the next 20 years as assessed for compliance under SB-610.

PC ORIGINAL PKG

RESOURCES AND REFERENCES

1. California Department of Water Resources. (2003). Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001 to assist water suppliers, cities, and counties in integrating water and land use planning.

2. Imperial County Planning and Development Services. (2008). Imperial County General Plan 2008 Update. El Centro, CA. General Plan | Imperial County Planning & Development Services (icpds.com), retrieved, 2021

3. Imperial Irrigation District. Website: Equitable Distribution Plan.

4. Imperial Irrigation District Website: 2021 Water Conservation Plan. (2025). Imperial Irrigation District 2021 Water Conservation Plan. Imperial, CA.

5. Imperial Irrigation District. (2024). IID Interactive GIS Water Service Area Map. Imperial, CA.

6. Imperial Irrigation District. (2009). Interim Water Supply Policy for Non-Agricultural Projects. Imperial, CA

7. Imperial Irrigation District. (2012). Temporary Land Conversion Fallowing Policy (TLFCP) for Water Conservation Yield Water conservation yield attributable to land removed from agricultural production and temporarily fallowed. Updated March 27, 2018.

8. Imperial Irrigation District Water Department. (2013). Colorado River Water Accounting and. Conservation Commitments Update. Tina Anderholt Shields, PE. Colorado River Resources Manager Imperial, CA.

9. Imperial Irrigation District. (2023). 2023 Water & QSA Implementation Report, Imperial, CA

10. Imperial Irrigation District. (2021). Consultation with Justina Gamboa-Arce., Water Conservation Planner. Imperial, CA.

11. Imperial Irrigation District. (2021). Temporary Land Fallowing Conversion Policy. (TLFCP).

12. Imperial Irrigation District. (2024). 2023 IID SWRCB Report.

13. Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., and Macknick, J. 2013. Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States. July 2013. http://large.stanford.edu//courses/2020/ph240/multani2/docs/sand-2013-5238.pdf

PC ORIGINAL PKG

14. Macknick, J., Newmark, R., Heath, G., and Hallet, KC. 2011. A Review of Operational Water Consumption and Withdrawal Factors for Electricity Generating Technologies. March 2011. https://www.nrel.gov/docs/fy11osti/50900.pdf

15. United States Bureau of Reclamation Lower Colorado Region Website: Boulder Canyon Operations Office – Programs and Activities, Lower Colorado River Water Accounting, Water Accounting Reports (1964 - 2015). Compilation of Records in Accordance with Article V of the Decree of the Supreme Court of the United States in Arizona v. California Dated March 9, 1964: Calendar Years 1964 - 2015 Boulder City, NV.

PC ORIGINAL PKG

ATTACHMENTS

PC ORIGINAL PKG

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects

Attachment B: IID 2023 Equitable Distribution Plan, revised July 26, 2023

PC ORIGINAL PKG

(This page intentionally left blank)

PC ORIGINAL PKG

ATTACHMENT A: IID INTERIM WATER SUPPLY POLICY FOR NON-AGRICULTURAL PROJECTS[25]

1.0 Purpose.

Imperial Irrigation District (the District) is developing an Integrated Water Resources Management Plan (IWRMP) [26] that will identify and recommend potential programs and projects to develop new water supplies and new storage, enhance the reliability of existing supplies, and provide more flexibility for District water department operations, all in order to maintain service levels within the District's existing water service area. The first phase of the IWRMP is scheduled to be completed by the end of 2009 and will identify potential projects, implementation strategies and funding sources. Pending development of the IWRMP, the District is adopting this Interim Water Supply Policy (IWSP) for Non-Agricultural Projects, as defined below, in order to address proposed projects that will rely upon a water supply from the District during the time that the IWRMP is still under development. It is anticipated that this IWSP will be modified and/or superseded to take into consideration policies and data developed by the IWRMP.

2.0 Background.

The IWRMP will enable the District to more effectively manage existing water supplies and to maximize the District's ability to store or create water when the available water supplies exceed the demand for such water. The stored water can be made available for later use when there is a higher water demand. Based upon known pending requests to the District for water supply assessments/verifications and pending applications to the County of Imperial for various Non-Agricultural Projects, the District currently estimates that up to 50,000 acre feet per year (AFY) of water could potentially be requested for Non-Agricultural Projects over the next ten to twenty years. Under the IWRMP the District shall evaluate the projected water demand of such projects and the potential means of supplying that amount of water. This IWSP currently designates up to 25,000 AFY of water for potential Non-Agricultural Projects within IID's water service area. Proposed Non-Agricultural projects may be required to pay a Reservation Fee, further described below. The reserved water shall be available for other users until such Non-Agricultural projects are implemented and require the reserved water supply. This IWSP shall remain in effect pending the approval of further policies that will be adopted in association with the IWRMP.

3.0 Terms and Definitions.

3.1 Agricultural Use. Uses of water for irrigation, crop production and leaching.

[25] IID Board Resolution 31-2009. Interim Water Supply Policy for New Non-Agricultural Projects. September 29, 2009. < IID Interim Water Supply Policy for Non-Agricultural Projects>

[26] The 2009 Draft IID IWRMP has been superseded by the October 2012 Imperial IRWMP, which incorporates the conditions of the IWSP by reference.

PC ORIGINAL PKG

3.2 Connection Fee. A fee established by the District to physically connect a new Water User to the District water system.

3.3 Industrial Use. Uses of water that are not Agricultural or Municipal, as defined herein, such as manufacturing, mining, cooling water supply, energy generation, hydraulic conveyance, gravel washing, fire protection, oil well re-pressurization and industrial process water.

3.4 Municipal Use. Uses of water for commercial, institutional, community, military, or public water systems, whether in municipalities or in unincorporated areas of Imperial County.

3.5 Mixed Use. Uses of water that involve a combination of Municipal Use and Industrial Use.

3.6 Non-Agricultural Project. Any project which has a water use other than Agricultural Use, as defined herein.

3.7 Processing Fee. A fee charged by the District Water Department to reimburse the District for staff time required to process a request for water supply for a Non-Agricultural Project.

3.8 Reservation Fee. A non-refundable fee charged by the District when an application for water supply for a Non-Agricultural Project is deemed complete and approved. This fee is intended to offset the cost of setting aside the projected water supply for the project during the period commencing from the completion of the application to start-up of construction of the proposed project and/or execution of a water supply agreement. The initial payment of the Reservation Fee will reserve the projected water supply for up to two years. The Reservation Fee is renewable for up to two additional two-year periods upon payment of an additional fee for each renewal.

3.9 Water Supply Development Fee. An annual fee charged to some Non-Agricultural Projects by the District, as further described in Section 5.2 herein. Such fees shall assist in funding IWRMP or related water supply projects,

3.10 Water User. A person or entity that orders or receives water service from the District.

4.0. CEQA Compliance.

4.1 The responsibility for CEQA compliance for new development projects within the unincorporated area of the County of Imperial attaches to the County of Imperial or, if the project is within the boundaries of a municipality, the particular municipality, or if the project is subject to the jurisdiction of another agency, such as the California Energy Commission, the particular agency. The District will coordinate with the County of Imperial, relevant municipality, or other agency to help ensure that the water supply component of their respective general plans is comprehensive and based upon current information. Among other things, the general plans should assess the direct, indirect and cumulative potential impacts on the environment of using currently available water supplies for new industrial, municipal, commercial and/or institutional uses instead of the historical use of that water for agriculture. Such a change in land

PC ORIGINAL PKG

use, and the associated water use, could potentially impact land uses, various aquatic and terrestrial species, water quality, air quality and the conditions of drains, rivers and the Salton Sea.

4.2 When determining whether to approve a water supply agreement for any Non-Agricultural Project pursuant to this IWSP, the District will consider whether potential environmental and water supply impacts of such proposed projects have been adequately assessed, appropriate mitigation has been developed and appropriate conditions have been adopted by the relevant land use permitting/approving agencies, before the District approves any water supply agreement for such project.

5.0. Applicability of Fees for Non-Agricultural Projects.[27]

5.1 Pursuant to this Interim Water Supply Policy, applicants for water supply for a Non-Agricultural Project shall be required to pay a Processing Fee and may be required to pay a Reservation Fee as shown in Table A. All Water Users shall also pay the applicable Connection Fee, if necessary, and regular water service fees according to the District water rate schedules, as modified from time to time.

5.2 A Non-Agricultural Project may also be subject to an annual Water Supply Development Fee, depending upon the nature, complexity, and water demands of the proposed project. The District will determine whether a proposed Non-Agricultural Project is subject to the Water Supply Development Fee for water supplied pursuant to this IWSP as follows:

5.2.1. A proposed project that will require water for a Municipal Use shall be subject to an annual Water Supply Development Fee as set forth in Table B if the projected water demand for the project is in excess of the project's estimated population multiplied by the District-wide per capita usage. Municipal Use projects without an appreciable residential component will be analyzed under sub-section 5.2.3.

5.2.2. A proposed project that will require water for an Industrial Use located in an unincorporated area of the County of Imperial shall be subject to an annual Water Supply Development Fee as set forth in Table B.

5.2.3. The applicability of the Water Supply Development Fee set forth in Table B to Mixed Use projects, Industrial Use projects located within a municipality, or Municipal Use projects without an appreciable residential component, will be determined by the District on a case-by-case basis, depending upon the proportion of types of land uses and the water demand proposed for the project.

5.3. A proposed Water User for Non-Agricultural Projects may elect to provide some or all of the required water supply by paying for and implementing some other means of providing water in a manner approved by the District, such as conservation projects, water storage projects and/or use of an alternative source of supply, such as recycled water or some source of water other than from the District water supply. Such election shall require consultation with the District regarding the details of such alternatives and a determination by the District, in its reasonable discretion, concerning how much credit,

[27] The most recent fee schedules can be found in a link at IID/Water/ Municipal, Industrial and Commercial Customers; or visit by URL at Imperial Irrigation District : Water Rate Schedules

PC ORIGINAL PKG

if any, should be given for such alternative water supply as against the project's water demand for purposes of determining the annual Water Supply Development Fee for such project.

5.4 The District Board shall have the right to modify the fees shown on Tables A and B from time to time.

6. Water Supply Development Fees collected by the District under this IWSP shall be accounted for independently, including reasonable accrued interest, and such fees shall only be used to help fund IWRMP or related District water supply projects.

7. Any request for water service for a proposed Non-Agricultural Project that meets the criteria for a water supply assessment pursuant to Water Code Sections 10910-10915 or a water supply verification pursuant to Government Code Section 66473.7 shall include all information required by Water Code Sections 10910 –10915 or Government Code Section 66473.7 to enable the District to prepare the water supply assessment or verification. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

8. Any request for water service for a proposed Non-Agricultural Project that does not meet the criteria for a water supply assessment pursuant to Water Code Section 10910-10915 or water supply verification pursuant to Government Code Section 66473.7 shall include a complete project description with a detailed map or diagram depicting the footprint of the proposed project, the size of the footprint, projected water demand at full implementation of the project and a schedule for implementing water service. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

9. All other District rules and policies regarding a project applicant or Water User's responsibility for paying connection fees, costs of capital improvements and reimbursing the District for costs of staff and consultant's time, engineering studies and administrative overhead required to process and implement projects remain in effect.

10. Municipal Use customers shall be required to follow appropriate water use efficiency best management practices (BMPs), including, but not limited to those established by the California Urban Water Conservation Council BMP's (see http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx) [https://calwep.org/our-work/conservation/bmp-guidebooks/], or other water use efficiency standards, adopted by the District or local government agencies.

11. Industrial Use customers shall be required to follow appropriate water use efficiency BMP's, including but not limited to those established by the California Urban Water Conservation Council and California Energy Commission, as well as other water use efficiency standards, adopted by the District or local government agencies.

PC ORIGINAL PKG

12. The District may prescribe additional or different BMPs for certain categories of Municipal and Industrial Water Users.

PC ORIGINAL PKG

(This page intentionally left blank)

PC ORIGINAL PKG

ATTACHMENT B: IID EQUITABLE DISTRIBUTION PLAN[28]

Adopted December 11, 2007
Revised November 18, 2008
Revised April 07, 2009
Revised April 23, 2013
Revised May 14, 2013
Revised October 28, 2013
Revised June 21, 2022
Revised July 26, 2023

[28] Equitable Distribution Plan documents. July 26, 2023 https://www.iid.com/water/rules-and-regulations/equitable-distribution

PC ORIGINAL PKG